CORPORATE CRIMINAL LIABILITY

HEARINGS
BEFORE THE
SUBCOMMITTEE ON CRIME
OF THE
COMMITTEE ON THE JUDICIARY
HOUSE OF REPRESENTATIVES
NINETY-SIXTH CONGRESS
FIRST AND SECOND SESSION
ON
H.R. 4973
Corporate Criminal Liability

NOVEMBER 15, DECEMBER 13, 1979, FEBRUARY 4, MARCH 14, 24, AND APRIL 22, 1980

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CORPORATE CRIMINAL LIABILITY

THURSDAY, NOVEMBER 15, 1979

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON CRIME,
COMMITTEE ON THE JUDICIARY,
Washington, D.C.

The subcommittee met at 1:45 p.m., in room 2237, Rayburn House Office Building, Hon. John Conyers, Jr. (chairman of the subcommittee) presiding.

Present: Representatives Conyers, Ashbrook, Gudger, and Sensenbrenner.

Staff present: Hayden Gregory, counsel; Steven Raikin, assistant counsel; Diane Clarke, assistant counsel; Linda Hall, and Phyllis Henderson, secretaries.

Mr. CONYERS. The subcommittee will come to order.

The Chair has received a request to cover this hearing in whole or in part on television broadcast, radio broadcast, still photography, and by other similar methods. In accordance with rule V(a), permission will be granted unless there is objection.

[No response.]

Mr. CONYERS. Hearing no objection, so granted; coverage is permitted.

Today the Subcommittee on Crime begin its hearings on H.R. 4973, a bill to amend title 18 of the United States Code to impose criminal penalties for knowing nondisclosure by business entities of dangerous products and business practices.

This bill is sponsored by our distinguished colleague from California, Congressman George Miller, and it brings a significant number of cosponsors. The bill addresses an extremely serious problem of growing proportions: A business discovers a serious danger associated with one of its products or business practices and fails to take action to warn the public and notify the appropriate Federal authority.

[A copy of H.R. 4973 follows:]

96TH CONGRESS
1ST SESSION

H. R. 4973

To amend title 18 of the United States Code to impose penalties with respect to certain nondisclosure by business entities as to dangerous products.

IN THE HOUSE OF REPRESENTATIVES

JULY 26, 1979

Mr. MILLER of California (for himself, Mr. CONYERS, Mr. GORE, Mr. BEARD of Rhode Island, Mr. BEDELL, Mr. BEILENSON, Mr. BONIOR of Michigan, Mr. BROWN of California, Mr. BUCHANAN, Mr. CARR, Mrs. CHISHOLM, Mr. DELLUMS, Mr. DIXON, Mr. DORNAN, Mr. DOWNEY, Mr. ECKHARDT, Mr. EDGAR, Mr. EDWARDS of California, Mr. GLICKMAN, Mr. GRAY, Mr. GUARINI, Ms. HOLTZMAN, Mr. LENT, Mr. LONG of Maryland, Mr. MAGUIRE, Mr. MARKEY, Mr. MCHUGH, Mr. MITCHELL of Maryland, Mr. NEAL, Mr. NOLAN, Mr. OTTINGER, Mr. PEPPER, Mr. SIMON, Mr. SOLARZ, Mrs. SPELLMAN, Mr. STARK, Mr. STOKES, Mr. VENTO, Mr. WAXMAN, Mr. WEAVER, Mr. WEISS, and Mr. WOLPE) introduced the following bill; which was referred to the Committee on the Judiciary

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A BILL

To amend title 18 of the United States Code to impose penalties with respect to certain nondisclosure by business entities as to dangerous products.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That chapter 89 of title 18 of the United States Code is amended by adding at the end the following new section:

"§ 1822. Nondisclosure of certain matters by certain business entities and personnel

"(a) Whoever—

"(1) is an appropriate manager with respect to a product or business practice;

"(2) discovers in the course of business as such manager a serious danger associated with such product (or a component of that product) or business practice; and

"(3) knowingly fails to so inform each appropriate Federal agency in writing, if such agency has not been otherwise so informed, and warn affected employees in writing, if such employees have not been so warned, before the end of thirty days after such discovery is made;

shall be fined not less than $50,000 or imprisoned not less than two years, or both, but if the convicted defendant is a corporation, such fine shall be not less than $100,000.

"(b) As used in this section—

"(1) the term 'appropriate manager' means a person having management authority in or as a business entity with respect to a particular product or business practice, if such authority extends to informing Federal agencies and such business entity's personnel about serious dangers associated with such product (or

any component of such product) or such business practice;

"(2) the term 'product' means a product of the business entity with respect to which the relevant accused person is the appropriate manager;

"(3) the term 'business practice' means a business practice with respect to which the relevant accused person is the appropriate manager;

"(4) the term 'discovers', used with respect to a serious danger, means obtains information that would convince a reasonable person in the circumstances in which the discoverer is situated that it is probable the serious danger exists;

"(5) the term 'serious danger', used with respect to a product or business practice, means that the normal or reasonably foreseeable use of, or the exposure of human beings to, such product or such business practice will cause death or serious bodily injury to an individual;

"(6) the term 'serious bodily injury' means an impairment of physical condition, including physical pain, that creates a substantial risk of death or which causes serious permanent disfigurement, unconsciousness, extreme pain, or permanent or protracted loss or impairment of the function of any bodily member or organ;

"(7) the term 'warn affected employees', used with respect to a serious danger, means give sufficient description of the danger to all individuals working for or in the business entity who are likely to be subject to the serious danger in the course of that work; and

"(8) the term 'appropriate Federal agency' means a Federal agency having regulatory authority with respect to the product or business practice and dangers of the sort discovered.".

SEC. 2. The table of sections for chapter 89 of title 18 of the United States Code is amended by adding at the end the following new item:

"1822. Nondisclosure of certain matters by certain business entity personnel."

O

Mr. CONYERS. We welcome the leadoff witness for this part of our continuation of hearings on white-collar crime, our distinguished colleague from California who has served with great distinction on the Education and Labor Committee, the Interior and Insular Affairs, and other ad hoc committees. We know his work on the Education and Labor Committee has resulted in this legislation that he brings before this subcommittee. It is our pleasure to welcome George Miller, incorporate his prepared remarks in the record, and allow him to proceed in his own way.

[The prepared statement of Hon. George Miller follows:]

STATEMENT OF CONGRESSMAN

GEORGE MILLER

BEFORE THE SUBCOMMITTEE ON CRIME

HOUSE JUDICIARY COMMITTEE

November 15, 1979

on

H.R. 4973

MR. CHAIRMAN, I APPRECIATE YOUR SCHEDULING THESE HEARINGS THIS AFTERNOON ON MY BILL, H.R. 4973, WHICH WOULD ESTABLISH CRIMINAL PENALTIES FOR CERTAIN CORPORATE OFFICIALS WHO KNOWINGLY CONCEAL PRODUCT OR MANUFACTURING PROCESS HAZARDS FROM THEIR EMPLOYEES OR THE PUBLIC. AS A MAJOR INVESTIGATOR OF WHITE COLLAR CRIME, AND AS THE LEAD COSPONSOR OF THIS LEGISLATION, YOU HAVE SHOWN GREAT LEADERSHIP IN ALERTING AMERICANS TO THE FACT THAT CRIME DOES NOT OCCUR MERELY IN BACK ALLEYS AND GHETTOS, BUT ALSO IN THE BOARDROOMS OF SOME OF THE GREAT CORPORATIONS OF THIS COUNTRY.

YOU WILL HEAR OF ASBESTOS MANUFACTURERS WHO CONCEALED SCIENTIFIC DATA WHICH SHOWED THAT EXPOSURE TO ASBESTOS, EVEN IN SMALL QUANTITIES, GREATLY INCREASED A WORKER'S RISK OF CANCER.

YOU WILL HEAR THAT WORKERS WERE NOT TOLD OF CATASTROPHIC HEALTH PROBLEMS WHICH COMPANY PHYSICIANS HAD DETECTED ON X-RAYS.

YOU WILL HEAR THAT CHEMICAL COMPANIES DECIDED TO DUMP POISONOUS WASTES ILLEGALLY, EVEN THOUGH OFFICIALS KNEW WATER WELLS WERE BEING POLLUTED.

YOU WILL HEAR OF A DECISION BY ONE OF THE LARGEST CORPORATIONS IN THIS NATION TO SELL A DEFECTIVE AUTOMOBILE WHICH COMPANY OFFICIALS KNEW WOULD RESULT IN DOZENS OF NEEDLESS AND PREVENTABLE DEATHS.

AND YOU WILL HEAR MANY, MANY MORE CASES.

IN SHORT, YOU WILL FIND THAT, IN MORE CASES THAN YOU MIGHT WISH TO IMAGINE, THE VERY HIGHEST CORPORATE LEADERS IN OUR NATION HAVE CONSCIOUSLY DECIDED TO CONCEAL A WORKPLACE

HAZARD, OR TO MARKET AN UNSAFE PRODUCT, BECAUSE THEY VALUED PROFIT OVER PEOPLE. I THINK THAT KIND OF CONDUCT IS A CRIME.

THE LEGISLATION BEFORE YOU TODAY WOULD ESTABLISH SEVERE PENALTIES FOR KNOWINGLY CONCEALING HAZARDS.

SOME MAY BELIEVE THAT THIS BILL IS AN ASSAULT ON INDUSTRY. IT IS NOT. I BELIEVE THAT MOST BUSINESSMEN FIND THESE COVER-UPS AS REPULSIVE AS ANYONE ELSE.

SOME MAY BELIEVE THAT THIS BILL IS A CALL FOR INCREASED GOVERNMENT INTERVENTION AND REGULATION. IT IS NOT.

INSTEAD, IT IS A CHALLENGE TO INDUSTRY TO TAKE PERSONAL RESPONSIBILITY FOR SAFETY, AND TO PERSONALLY BEAR THE SEVERE CONSEQUENCES OF INDIFFERENCE.

"IF WE ASSUME THAT CORPORATE MANAGERS ARE AT LEAST AS MORAL AS THE REST OF US," WILLIAM GREIDER OF THE WASHINGTON POST HAS WRITTEN, "THE PRESENCE OF CRIMINAL LIABILITY MAKES IT EASIER FOR THEM TO DO THE RIGHT THING, JUST AS THE OCCASIONAL INCOME TAX PROSECUTIONS MAKE IT EASIER FOR ALL OF US TO PAY OUR TAXES. THE GOOD WILL PROSPER; ONLY THE SCOUNDRELS NEED HIDE FROM THE LIGHT."

THIS IS REALLY THE INTENT OF THE LEGISLATION. IF INDUSTRY WANTS LESS GOVERNMENT INTRUSION, WHICH MAY WELL BE DESIRABLE, THEN LET INDUSTRY TAKE THE FULL RESPONSIBILITY FOR THE HAZARDS IT CREATES.

BUT TODAY, WE SEE THE CHEMICAL COMPANIES RUNNING TO GOVERNMENT, ASKING FOR FEDERAL ASSISTANCE TO CLEAN UP HAZARDOUS WASTE SITES.

WE SEE THE ASBESTOS INDUSTRY RUNNING TO GOVERNMENT, ASKING FOR FEDERAL ASSISTANCE IN PAYING COMPENSATION CLAIMS.

WE SEE FORD RUNNING TO GOVERNMENT, ASKING FOR CHANGES IN THE TAX LAW TO ALLOW LONGER PERIODS TO WRITE OFF LIABILITY PAYMENTS.

SOMEONE ONCE PUT IT VERY SUCCINCTLY: IF INDUSTRY WANTS GOVERNMENT OFF THEIR BACKS, THEY SHOULD GET THEIR HANDS OUT OF OUR POCKETS. ULTIMATELY, THE TAXPAYERS--INCLUDING THE VICTIMS OF INDUSTRY NEGLECT--ARE CALLED UPON TO BEAR THE

THE IRONY IS THAT CRIMES OF A CORPORATE NATURE, UNLIKE INDIVIDUAL ACTS OF VIOLENCE, OFTEN AFFECT MANY THOUSANDS, OR EVEN MILLIONS OF VICTIMS. THE RECENT STUDY, ILLEGAL CORPORATE BEHAVIOR, BY THE LAW ENFORCEMENT ASSISTANCE ADMINISTRATION, NOTED --

> Corporate crime costs run into billions of dollars. These costs involve not only large financial losses but also injuries and health hazards to workers and consumers.

TODAY, WE ARE FOCUSING ON A SPECIFIC ASPECT OF ILLEGAL CORPORATE BEHAVIOR--THOSE SITUATIONS IN WHICH A CALCULATED DECISION IS MADE TO EXPOSE WORKERS OR CONSUMERS TO A KNOWN HEALTH OR SAFETY DANGER WITHOUT ADEQUATE WARNING.

IT SHOULD BE POINTED OUT THAT 75 PERCENT OF ALL CORPORATE CRIMES ARE IN THE ENVIRONMENTAL/LABOR PROTECTION AREA, AND ACCORDING TO LEAA, PENALTIES AGAINST CORPORATE OFFICIALS ARE FAR LESS SEVERE THAN THOSE AGAINST ORDINARY LAWBREAKERS; FINES ARE NOMINAL, PRISON SENTENCES ARE FREQUENTLY SUSPENDED, AND PROBATION IS EASILY GRANTED.

BEFORE I ILLUSTRATE SOME OF THE SITUATIONS WHICH I BELIEVE MANDATE THE ENACTMENT OF H.R. 4973, I WANT TO RAISE SOME PHILOSOPHICAL AND POLITICAL POINTS WHICH UNDERLIE THE LEGISLATION.

I BELIEVE THAT THE INTENT OF THIS LEGISLATION EXTENDS FAR BEYOND INDIVIDUAL CASES OF CORPORATE COVER-UP, TRAGIC AND INCREDIBLE AS THOSE INDIVIDUAL CASES MAY BE. THIS LEGISLATION ADDRESSES THE ISSUES OF CORPORATE ETHICS, INDIVIDUAL RESPONSIBILITY, AND BUSINESS MORALITY. IT RAISES THE FUNDAMENTALLY DISTURBING QUESTION OF WHETHER OUR ECONOMIC, POLITICAL OR ETHICAL SYSTEMS HAVE SOMEHOW BECOME SO SKEWERED THAT WE WORSHIP PROFIT AS MORE IMPORTANT THAN PEOPLE.

I FIND IT VERY DISCONCERTING, FOR EXAMPLE, TO READ THE COMMENTS OF A FORMER HIGH-RANKING OFFICIAL OF THE GENERAL MOTORS CORPORATION WHO REPORTEDLY SAID RECENTLY THAT NEVER, IN ALL THE TIME HE WORKED FOR THE WORLD'S LARGEST COMPANY, DID ANYONE RAISE THE QUESTION OF THE IMPACT OF THE PRODUCTS HIS COMPANY MANUFACTURED ON THE AMERICAN PEOPLE. "THE SYSTEM OF

AMERICAN BUSINESS OFTEN PRODUCES WRONG AND IMMORAL DECISIONS," HE SAID, AND AS A RESULT "WILLFULLY PRODUCES INEFFECTIVE OR DANGEROUS PRODUCTS."

THE KEY CONCEPT IS "WILLFULLNESS," A CONSCIOUS DECISION TO MARKET A PRODUCT OR TO OVERLOOK A WORKPLACE HAZARD. IT IS SIGNIFICANT THAT LAST YEAR, NEARLY ONE-THIRD OF ALL WORKPLACE SAFETY VIOLATIONS WERE DETERMINED TO BE "SERIOUS, WILLFUL, OR REPEAT" OFFENSES. YET THE AVERAGE FINE FOR SERIOUS OFFENSES WAS UNDER $500. IN MY HOME STATE OF CALIFORNIA, THE AVERAGE FINE FOR A "SERIOUS" VIOLATION IS ONLY $239--AND TAX DEDUCTIBLE.

WHILE INDUSTRY MAY NOT APPROVE OF GOVERNMENT REGULATION OR INTERVENTION INTO THE PRIVATE WORLD OF CORPORATE AND INDUSTRIAL ACTIVITY, THERE WAS PRECIOUS LITTLE EVIDENCE THAT BUSINESS WAS INCLINED TO CONDUCT THE NECESSARY TESTING AND TO REMEDY WORKPLACE DANGERS ON ITS OWN PRIOR TO THESE FEDERAL PROTECTIONS.

CORPORATE INDIFFERENCE TO WORKER AND CONSUMER SAFETY HAS NOT BEEN ELIMINATED THROUGH REGULATION, NOR WILL IT, PARTLY BECAUSE THE PENALTIES FOR VIOLATIONS ARE SO MINIMAL. THERE ARE STILL THOSE WHO PLACE A HIGHER REGARD ON PROFITS THAN ON PEOPLE. THE FACT THAT WE EVEN CONSIDER THE NECESSITY FOR THIS KIND OF LEGISLATION SUGGESTS A KIND OF BANKRUPTCY FAR MORE SERIOUS THAN THE FINANCIAL KIND.

COVERING UP KNOWN HAZARDS FROM WORKERS AND THE GENERAL PUBLIC ILLUSTRATES A MORAL AND ETHICAL PROBLEM WHICH APPEARS WITH ALARMING FREQUENCY, NOT JUST IN ONE INDUSTRY, BUT THROUGHOUT INDUSTRY AND IN OUR SOCIETY AS A WHOLE. CONCERN FOR ONESELF, EITHER IN AN INDIVIDUAL OR A CORPORATE SENSE, HAS REPLACED OUR TRADITIONAL MORAL AND LEGAL CONCERN FOR THE GENERAL GOOD. THIS LEGISLATION SEEKS TO PLACE SOME RESPONSIBILITY ON THE INDIVIDUAL.

I WANT NOW TO TAKE A FEW MINUTES TO DISCUSS SOME EXAMPLES WHICH I BELIEVE MANDATE THE ENACTMENT OF H.R. 4973.

LET ME MAKE ONE POINT, HOWEVER, WHICH APPLIES TO EACH CASE: NEITHER I, NOR ANYONE ELSE, HAS MANUFACTURED THIS INFORMATION; THE SHOCKING EVIDENCE, IN MOST CASES, BEARS THE LETTERHEAD OF THE COMPANY INVOLVED.

ASBESTOS

THE NUMBER OF ILLUSTRATIONS OF PURPOSEFUL COVER-UPS IN THE ASBESTOS INDUSTRY ARE SO EXTENSIVE THAT WE COULD NOT POSSIBLY HOPE TO DETAIL THEM ALL THIS AFTERNOON. LET ME CITE A FEW EXAMPLES:

BY THE EARLY 1930's, OFFICIALS OF THE ASBESTOS INDUSTRY HAD BEEN WARNED THAT INHALATION OF ASBESTOS DUST WOULD CAUSE THE SERIOUS LUNG DISEASE, ASBESTOSIS. ON OCTOBER 1, 1935, THE PRESIDENT OF THE RAYBESTOS-MANHATTEN COMPANY, ONE OF THE NATION'S LARGE ASBESTOS PRODUCERS, WROTE TO HIS COUNTERPART AT THE LARGEST COMPANY, JOHNS-MANVILLE, "I THINK THE LESS SAID ABOUT ASBESTOS, THE BETTER OFF WE ARE." J-M'S PRESIDENT RESPONDED, "I QUITE AGREE WITH YOU THAT OUR INTERESTS ARE BEST SERVED BY HAVING ASBESTOSIS RECEIVE THE MINIMUM OF PUBLICITY."

THROUGHOUT THE 1930's AND 1940's, NUMEROUS MEDICAL AND SCIENTIFIC JOURNALS ADDRESSED THE HEALTH PROBLEMS CAUSED BY ASBESTOS. DEATH RATES FROM LUNG CANCER AMONG ASBESTOS WORKERS WERE FOUND TO BE 9 TIMES THAT OF THE OVERALL POPULATION. AN ASBESTOS WORKER WHO SMOKED HAD 90 TIMES THE CHANCE OF DEVELOPING THE DISEASE AS THE AVERAGE NON-SMOKING PERSON. MESOTHELIOMA, A RARE LUNG ILLNESS AMONG THE GENERAL POPULATION, OCCURS WITH DISTURBING FREQUENCY AMONG ASBESTOS WORKERS.

THE ASBESTOS INDUSTRY WOULD HAVE YOU BELIEVE THAT ITS LEADERS WERE UNAWARE OF THESE HEALTH PROBLEMS, AND ALSO THAT THEY TOOK ALL PRECAUTIONS TO MINIMIZE RISK TO THEIR EMPLOYEES WHEN THEY BECAME AWARE. THIS WAS NOT THE CASE. INSTEAD, THE ASBESTOS INDUSTRY REJECTED MANY INVESTIGATIONS INTO THE RELATIONSHIPS BETWEEN ASBESTOS EXPOSURE AND ILLNESS, AND IGNORED WARNINGS, EVEN FROM THEIR OWN MEDICAL ADVISORS.

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IN 1952, JOHNS-MANVILLE'S MEDICAL DIRECTOR, DR. KENNETH SMITH, HAD URGED HIS SUPERIORS TO PLACE A WARNING LABEL ON ASBESTOS PRODUCTS; HIS PLEA WAS IGNORED. FOUR YEARS LATER, DR. SMITH URGED THE ASBESTOS TEXTILE INSTITUTE TO UNDERTAKE A STUDY OF THE RELATIONSHIP BETWEEN ASBESTOS EXPOSURE AND DISEASE; AFTER A YEAR OF CONSIDERATION, THE STUDY WAS REJECTED, PARTIALLY BECAUSE "THERE IS A CERTAIN FEELING AMONG CERTAIN MEMBERS THAT SUCH AN INVESTIGATION WOULD STIR UP A HORNET'S NEST AND PUT THE WHOLE INDUSTRY UNDER SUSPICION."

THE INDUSTRY CLAIMS TO HAVE BEEN UNAWARE OF THE DANGER TO LIGHTLY EXPOSED WORKERS UNTIL DR. IRVING SELIKOFF'S PIONEER STUDY OF INSULATION WORKERS IN 1964. HOWEVER, NEARLY TWENTY YEARS EARLIER, BRITISH INSULATION WORKERS HAD BEEN NOTIFIED OF POSSIBLE HEALTH EFFECTS OF WORKING WITH ASBESTOS.

CLOSER TO HOME, JOHNS-MANVILLE WAS WARNED OF HAZARDS TO WORKERS BY THE DIRECTOR OF THE SARANAC LABORATORY, DR. ARTHUR VORWALD. THE ASBESTOS INDUSTRY OFTEN CITES ITS FINANCIAL SUPPORT OF THE SARANAC LAB AS EVIDENCE OF ITS CONCERN FOR WORKER SAFETY. WHAT THEY DON'T TELL YOU IS THAT THE GOOD ADVICE OF THAT LABORATORY WAS OFTEN IGNORED.

ON AUGUST 13, 1948, H.M. JACKSON, A SAFETY ENGINEER FOR J-M, WROTE TO DR. VORWALD FOLLOWING THE DEATH OF A J-M WORKER WHOSE "DEGREE OF EXPOSURE WAS RELATIVELY SLIGHT." JACKSON ASKED WHETHER OTHERS, SIMILARLY EXPOSED TO GENERAL CONDITIONS, MIGHT BE AT RISK.

WHILE ACKNOWLEDGING THAT SOME INDIVIDUAL FACTORS MAY PLAY A ROLE IN DETERMINING SUSCEPTIBILITY, VORWALD RESPONDED ON AUGUST 19: "I CAN SEE NO OTHER ALTERNATIVE THAN TO ANTICIPATE OTHERS WITH SIMILAR EXPOSURES TO BE SIMILARLY AFFECTED."

YET FOR NEARLY 20 MORE YEARS, THE INDUSTRY CONTINUED TO ARGUE THAT ONLY THE MOST HEAVILY AFFECTED WORKERS WERE AT RISK, AND TODAY STILL DISCLAIMS THE RISK TO LIGHTLY EXPOSED PEOPLE.

OTHER WARNINGS WENT IGNORED. IN 1948, SARANAC SCIENTISTS WARNED THE OWENS-ILLINOIS GLASS COMPANY THAT THEIR PRODUCT, "KAYLO," WAS "CAPABLE OF PRODUCING ASBESTOSIS." THE REPORT ON KAYLO UNDERSCORED THE DANGER TO LIGHTLY EXPOSED PEOPLE, NOTING THAT "A SEEMINGLY NEGLIGIBLE PROPORTION OF FIBROUS ASBESTOS IS SUFFICIENT TO PRODUCE THE CHARACTERISTIC /MEDICAL/ REACTION."

A CONFIDENTIAL 1963 REPORT AUTHORED BY DR. THOMAS MANCUSO WARNED OFFICIALS THAT THE PHILIP CAREY COMPANY FACED A WIDE VARIETY OF LEGAL PROBLEMS BECAUSE OF ITS MANUFACTURE OF ASBESTOS CONTAINING MATERIALS. WHY HAD THESE MEDICAL PROBLEMS BEEN UNRECOGNIZED FOR SO LONG, HE WAS ASKED. MANCUSO REPLIED, "ACTUALLY, THEY WERE RECOGNIZED, BUT THE ASBESTOS INDUSTRY CHOSE TO IGNORE AND DENY THEIR EXISTENCE." HE RECOMMENDED THAT THE COMPANY UNDERTAKE A WIDE RANGING SERIES OF MEDICAL AND LEGAL STEPS.

AS RECENTLY AS AUGUST OF THIS YEAR, THE SUCCESSOR TO CAREY MANUFACTURING, CELOTEX, DENIED THAT MANCUSO'S REPORT WAS EVER FORWARDED TO THE COMPANY, AND QUESTIONED WHETHER OR NOT HE HAD AUTHORED IT. THEY COULD PROVIDE NO INFORMATION AS TO WHETHER OR NOT HIS RECOMMENDATIONS HAD BEEN CARRIED OUT.

OTHER REPORTS WARNING THAT ALL ASBESTOS WORKERS, REGARDLESS OF EXPOSURE, ARE AT RISK WERE LIKEWISE IGNORED. IN FACT, THE WARNINGS OF DR. WILLIAM HUEPER, OF THE NATIONAL CANCER INSTITUTE, WERE DENOUNCED BY THE ASBESTOS TEXTILE INSTITUTE MEMBERS AS "DEROGATORY LITERATURE" AND "DAMAGING INFORMATION," ALTHOUGH NO EVIDENCE TO REFUTE HIS FINDINGS WAS OFFERED.

ASBESTOS OFFICIALS NOT ONLY COVERED UP SCIENTIFIC FINDINGS, BUT MEDICAL INFORMATION WHICH SHOWED THAT WORKERS WERE AT RISK OF SERIOUS, AND PERHAPS FATAL, LUNG DISEASE.

WILBUR RUFF, THE FORMER MANAGER OF THE JOHNS-MANVILLE PLANT IN PITTSBURG, CALIFORNIA (WHICH IS IN THE DISTRICT I REPRESENT) TOLD ATTORNEYS IN A DEPOSITION EARLIER THIS YEAR THAT THERE WAS A COMPANY POLICY NOT TO TELL WORKERS ABOUT IRREGULARITIES ON CHEST X-RAYS BECAUSE "THE COMPANY

DID NOT WANT TO . . . GET EMPLOYEES UPSET, UNTIL SUCH TIME AS WE KNEW OUR GROUND." COMPANY POLICY PRECLUDED THE COMPANY PHYSICIAN FROM RECOMMENDING AN OUTSIDE DOCTOR OR TREATMENT FOR AFFECTED WORKERS, ACCORDING TO MR. RUFF.

MINUTES OF THE HEALTH REVIEW COMMITTEE OF JOHNS-MANVILLE BACK UP THIS INFORMATION. ALTHOUGH J-M OFFICIALS CLAIM THAT A POLICY OF NOTIFYING ALL WORKERS OF IRREGULAR X-RAYS WAS ESTABLISHED IN 1956, COMMITTEE MINUTES FROM 1957 SHOW A STEADY POLICY OF NOT TELLING THEM, IN ONE CASE BECAUSE AN AFFECTED WOMAN "WILL GET HYSTERICAL AND I AM SURE YOU WILL HAVE A /COMPENSATION/ CLAIM ON YOUR HANDS."

OTHER CASE RECORDS INDICATE THAT WHERE WORKERS HAD BEEN "HEALTH COUNSELLED" ABOUT THEIR X-RAYS, YEARS HAD GONE BY AFTER THE ILLNESS WAS DETECTED BEFORE THEY WERE INFORMED. DURING THIS TIME, THEY OFTEN REMAINED EXPOSED TO ASBESTOS. IN TESTIMONY EARLIER THIS YEAR, J-M OFFICIALS ACKNOWLEDGED THAT THEY HAVE NO WAY TO BE SURE THAT THE NOTIFICATION POLICY WAS REALLY CARRIED OUT. EVIDENCE WOULD APPEAR TO INDICATE IT WAS NOT, AND THAT AFFECTED WORKERS WERE NOT TOLD OF THEIR ILLNESSES OR RELOCATED SWIFTLY TO SAFER SETTINGS.

EVEN WHEN THE HAZARDS WERE BROUGHT TO LIGHT IN RECENT YEARS, INDIFFERENCE WAS OFTEN THE RESPONSE BY MANAGEMENT. JOHN MARSH, THE ENVIRONMENTAL DIRECTOR FOR RAYBESTOS-MANHATTAN, WROTE A MEMO IN WHICH HE NOTED THAT COMPANY'S SUBSTANTIAL LEGAL LIABILITY PROBLEMS, AND STATED, "I THOUGHT THE MEETING IN JUNE 1973 AT WHICH MORTALITY AND MORBIDITY DATA WAS REVIEWED IN DETAIL WOULD BE MORE THAN SUFFICIENT TO SHOCK PEOPLE INTO ACTION. THIS HAS NOT HAPPENED." MARSH CALLED RAYBESTOS' POLICIES "INDEFENSIBLE . . . AND NOT GETTING BETTER."

WHEN CONSIDERING WHETHER TO "COOPERATE WITH SCIENTISTS," MARSH NOTED, "WE HAVE VALUABLE INFORMATION GOING BACK TO 1930," AND HE ADMIRABLY POINTED OUT THEIR COMPANY'S "OBLIGATION TO EMPLOYEES" AND THE "LEGAL IMPLICATIONS OF WITHHOLDING INFO."

LEST ANYONE BELIEVE THAT THE ASBESTOS INDUSTRY HAS BEEN SHAMED INTO RESPONSIBLE BEHAVIOR, IT SHOULD BE NOTED THAT ONLY

ONE YEAR AGO, AT A MEETING OF THE ASBESTOS INTERNATIONAL ASSOCIATION, MEMBERS DISCUSSED WAYS TO CONCEAL PRODUCT HAZARDS. MINUTES OF THE MEETING, WHICH I HAVE ACQUIRED, SHOW THAT MEMBERS OBJECTED TO PLACING A WARNING ON EUROPEAN-BOUND PRODUCTS "BECAUSE OF A POSSIBLE NEGATIVE INFLUENCE ON SALES." AIA OFFICIALS HAVE REFUSED MY REQUEST FOR A LIST OF ASSOCIATION MEMBERS AND THE COMPLETE TRANSCRIPT OF THAT MEETING.

LET ME MOVE TO ANOTHER AREA OF GROWING CONCERN--CHEMICAL POLLUTION.

OCCIDENTAL CHEMICAL

OCCIDENTAL MANUFACTURES PESTICIDES AND OTHER CHEMICAL PRODUCTS AT ITS LATHROP, CALIFORNIA, PLANT. CALIFORNIA LAW REQUIRES ANY DUMPING WHICH MIGHT AFFECT GROUNDWATER TABLES TO BE FILED WITH THE STATE WATER RESOURCES CONTROL BOARD. OCCIDENTAL PURPOSEFULLY IGNORED THE LAW, AS INDICATED BY INTERNAL MEMOS, AND AS A RESULT POLLUTED GROUNDWATER TABLES WITH POISONOUS WASTES.

"FOR YEARS WE HAVE DUMPED WASTEWATER CONTAINING PESTICIDES AND OTHER AGCHEM PRODUCTS," WROTE R. EDSON IN A JUNE 25, 1977, MEMO TO A. OSBORN. "FORTUNATELY FOR THE MANAGEMENT OF THIS COMPANY NO PESTICIDE HAS YET BEEN DETECTED" IN A NEIGHBOR'S WELL. "I PERSONALLY WOULD NOT DRINK FROM HIS WELL," EDSON WROTE.

EDSON PROVIDES ONE OF THE MOST FRIGHTENING EXAMPLES OF CORPORATE INDIFFERENCE TO HUMAN HEALTH AND SAFETY.

"NO OUTSIDERS ACTUALLY KNOW WHAT WE DO AND THERE HAS BEEN NO GOVERNMENT PRESSURE ON US," HE WROTE, "SO WE HAVE HELD BACK TRYING TO FIND OUT WHAT TO DO WITHIN FUNDS WE HAVE AVAILABLE." EDSON MADE CLEAR THAT THE COST OF CLEANING UP THE HAZARDOUS DISCHARGES WOULD BE VERY DIFFICULT FOR THE COMPANY TO PAY.

"FRANKLY, I DON'T BELIEVE ANY OF US WILL BECOME T.V. PERSONALITIES ANSWERING QUESTIONS ON THESE CONTAMINANTS," HE WROTE. "THE NEXT DROP OF PESTICIDE THAT PERCOLATES TO

THE GROUND IS A MANAGEMENT DECISION WHICH I DON'T FEEL WE CAN AFFORD . . . I BELIEVE THAT WE HAVE FOOLED AROUND LONG ENOUGH AND ALREADY OVERPRESSED OUR LUCK."

ALMOST A YEAR LATER, THE PROBLEM WAS NOT YET BEING SOLVED. IN A MEMO TO J. H. LINDLEY, EDSON ADMITTED "THAT WE HAVE DESTROYED THE USABILITY OF SEVERAL WELLS IN OUR AREA. IF ANYONE SHOULD COMPLAIN, WE COULD BE THE PARTY NAMED IN AN ACTION BY THE WATER QUALITY CONTROL BOARD . . . THE BASIC DECISION IS THIS. DO WE CORRECT THE SITUATION BEFORE WE HAVE A PROBLEM [SIC], OR DO WE HOLD OFF UNTIL ACTION IS TAKEN AGAINST US."

EDSON ADMITTED THAT HE MISLED THE WATER BOARD CONCERNING THE COMPANY'S POLLUTING ACTIVITIES. "THIS REPORT ISN'T EXACTLY ACCURATE EVEN THOUGH THE INACCURACY IS DUE TO OMISSION RATHER THAN OUTRIGHT FALSEHOOD," HE WROTE. "HOWEVER, I DON'T THINK IT WOULD BE WISE TO EXPLAIN THE DISCREPANCY TO THE STATE AT THIS TIME." EDSON ADMITS THAT HE HAD BEEN WARNING THE COMPANY OF THE POLLUTION PROBLEM "FOR THE LAST THREE OR FOUR YEARS."

THE LATHROP WELL POISONINGS WERE NOT THE ONLY CASES OF COVER-UPS BY THE CHEMICAL INDUSTRY. THE SITUATION INVOLVING ONE OF OCCIDENTAL'S SUBSIDIARIES, HOOKER CHEMICAL, IS WELL KNOWN TO MOST PEOPLE. EARLIER THIS YEAR, A HIGH RANKING OFFICIAL ADMITTED THAT RESIDENTS IN THE VICINITY OF LOVE CANAL, A HOOKER DUMP SITE, WERE NOT WARNED OF THE HEALTH HAZARDS FROM LEAKING CHEMICALS EVEN THOUGH THE COMPANY WAS AWARE OF THEM.

AS LONG AGO AS JUNE 18, 1958, A MEMO NOTED THAT "THE ENTIRE AREA IS BEING USED BY CHILDREN AS A PLAYGROUND." THE COMPANY TOOK NO ACTION, ALTHOUGH THE PROBLEM WAS DISCUSSED BY COMPANY OFFICIALS. LOCAL RESIDENTS WERE NOT WARNED, ACCORDING TO THE MEMO'S AUTHOR, BECAUSE "WE DID NOT FEEL WE COULD DO IT [NOTIFY THEM] WITHOUT INCURRING A SUBSTANTIAL LEGAL LIABILITY FOR CURRENT OWNERS OF THE PROPERTY."

RESIDENTS OF LOVE CANAL, AFFECTED BY THE CHEMICAL WASTE LEAKS, HAVE COMPLAINED OF HEADACHES, BIRTH DEFECTS, MENTAL ILLNESS AND A VARIETY OF HEALTH PROBLEMS.

CONSUMER PRODUCTS

CARCINOGENS AND CHEMICAL POLLUTANTS HAVE RECEIVED MUCH OF THE RECENT PUBLICITY ABOUT PRODUCT AND INDUSTRIAL HAZARDS, BUT SOMETIMES THE DANGERS ARE MECHANICAL IN NATURE. LIKE THE OTHER SITUATIONS, HOWEVER, MANY LIVES MAY BE JEOPARDIZED BY A SINGLE CORPORATE DECISION TO MARKET AN UNSAFE PRODUCT.

IN 1971, A MEMO WITHIN THE FORD MOTOR COMPANY WARNED THAT THE DESIGN OF THE PINTO AUTOMOBILE MADE THE CAR SUSCEPTIBLE TO FUEL LEAKAGE AND EXPLOSION FOLLOWING EVEN RELATIVELY SLIGHT REAR-END COLLISIONS. THE MEMO CONCLUDED THAT A $6 OR $8 PART COULD SOLVE THE PROBLEM. COMPANY OFFICIALS, HOWEVER, DECIDED TO FOREGO ANY CHANGES UNTIL 1976, EXPECTING THAT THE DELAY COULD SAVE FORD ABOUT $20 MILLION.

IN 1973 A MORE DETAILED MEMO OUTLINED THE SEVERITY OF THE HAZARD BY EVALUATING THE COSTS OF MODIFYING PRODUCTION EQUIPMENT OR INSTALLING A PART TO REDUCE THE RISK TO PASSENGERS. THIS COST WAS THEN COMPARED TO THE "VALUE" OF THE LIVES WHICH WOULD BE LOST IF NO CORRECTIONS WERE UNDERTAKEN.

FORD ESTIMATED THE VALUE OF A HUMAN LIFE TO BE $200,000, AND THE VALUE OF A SERIOUS INJURY AT $67,000. MULTIPLYING THIS BY THE ESTIMATED 180 DEATHS WHICH COULD BE ANTICIPATED, AND A COMPARABLE NUMBER OF SERIOUS INJURIES, THE COMPANY DECIDED THAT THE COSTS OF PERMITTING THE DEATHS AND INJURIES TO OCCUR--ABOUT $50 MILLION--WAS CONSIDERABLY LESS THAN THE COST OF RETROFITTING THE CARS WITH SAFETY DEVICES--$137 MILLION, OR ABOUT $11 PER VEHICLE. TO DATE, 23 PEOPLE HAVE LOST THEIR LIVES IN BLAZING INFERNOS INSIDE FORD PINTOS.

WHEN WE DISCUSS "CRIME," WE WOULD DO WELL TO PLACE THIS CORPORATE CRIME IN ITS PROPER PERSPECTIVE. THE LARGEST WELFARE FRAUD IN HISTORY AMOUNTED TO ABOUT $240,000. THE TYPICAL BURGLARY INVOLVES ABOUT $350. BY COMPARISON, SENATOR PHILIP HART'S SUBCOMMITTEE ON ANTI-TRUST AND MONOPOLY ESTIMATED A FEW YEARS AGO THAT CORPORATE CRIME--MONOPOLISTIC PRACTICES, FAULTY GOODS, AND THE LIKE--COST CONSUMERS BETWEEN $174 AND $231 BILLION A YEAR, NOT INCLUDING INJURIES TO WORKERS AND DAMAGE TO THE ENVIRONMENT.

IN REVIEWING THE ENORMOUS PROBLEM OF WHITE COLLAR CRIME, THE LEAA STUDY RECOMMENDED A MASSIVE INCREASE IN THE NUMBER OF GOVERNMENT INVESTIGATORS AND LAWYERS, WHICH MEANS GREATER INTRUSIONS AND MORE GOVERNMENT COSTS. PERHAPS THIS WILL BE NECESSARY; MOST STUDIES INDICATE THAT PEOPLE SUPPORT ENVIRONMENTAL AND LABOR SAFETY LAWS, EVEN IF THEY COST MONEY.

BUT I WOULD HOPE TO THROW MORE OF THE RESPONSIBILITY ONTO THE SHOULDERS OF INDUSTRY TO POLICE ITSELF, AND THEN TO HOLD IT ACCOUNTABLE WHEN IT FAILS TO DO SO.

HOPEFULLY, INDUSTRY WILL ACCEPT THIS BURDEN. I WAS HEARTENED TO READ IN "FORTUNE" MAGAZINE THAT THE PRESIDENT OF OCCIDENTAL HAS SENT A MEMO TO HIS MANAGERS ON THE SUBJECT OF ENVIRONMENTAL HAZARDS. UNLIKE PAST HOOKER MEMOS, THIS ONE WARNS THAT FAILURE TO COMPLY WITH SAFEGUARDS WILL RESULT IN DISMISSAL.

IF INCREASED PROFITS IS THE REASON FOR CONCEALING HAZARDS, THEN STIFF FINANCIAL PENALTIES WILL HOPEFULLY REDUCE THE INCENTIVE FOR CONCEALMENT.

IF PROBATION AND SUSPENDED SENTENCES FAIL TO INTIMIDATE CORPORATE OFFICIALS CONCERNING SERIOUS HEALTH AND SAFETY VIOLATIONS, PERHAPS MANDATORY JAIL TERMS WILL FORCE GREATER ACCOUNTABILITY.

TESTIMONY OF HON. GEORGE MILLER REPRESENTATIVE IN THE CONGRESS OF THE UNITED STATES FROM THE SEVENTH DISTRICT OF THE STATE OF CALIFORNIA

Mr. MILLER. Thank you, Mr. Chairman. I certainly appreciate the opportunity to appear before this committee and lend my effort to its ongoing concern with crime in America, and also with a particular concern as the chairman of white-collar crime.

H.R. 4973, which would establish criminal penalties for certain corporate officials who knowingly conceal product or manufacturing process hazards from their employees or the public. As a major investigator of white collar crime, and as the lead coauthor of this legislation, you, Mr. Chairman, have shown great leadership in alerting Americans to the fact that crime does not occur merely in the back alleys and the ghettos, but also in the boardrooms of some of the great corporations of this country.

You will hear of asbestos manufacturers who concealed scientific data which showed that the exposure from asbestos, even in small quantities, greatly increased a worker's risk of cancer.

You will hear that workers were not told of catastrophic health problems which company physicians had detected on X-rays.

You will hear that chemical companies decided to dump poisonous wastes illegally, even though officials knew water wells were being polluted.

You will hear of a decision by one of the largest corporations in this Nation to sell a defective automobile which company officials knew would result in dozens of needless and preventable deaths.

And you will hear many, many more cases.

In short, you will find that in more cases than you might want to imagine, the very highest corporate leaders of our Nation have consciously decided to conceal a workplace hazard, or to market an unsafe product because they valued profit over people. And I think that kind of conduct is a crime.

The legislation before you today would establish severe penalties for knowingly concealing hazards.

Some may believe that this bill is an assault on industry. It is not. I believe that most businessmen find these coverups as repulsive as anyone else.

Some may believe that this bill is a call for increased Government intervention and regulation. It is not. Instead, it is a challenge to industry to take personal responsibility for the safety, and to personally bear the severe consequences of indifference.

"If we assume that corporate managers are at least as moral as the rest of us," William Greider of the Washington Post has written, "the presence of criminal liability makes it easier for them to do the right thing, just as the occasional income tax prosecutions make it easier for all of us to pay our taxes. The good will prosper, and only the scoundrels need hide from the light."

This is really the intent of the legislation. If industry wants less Government intrusion, which may well be desirable, then let industry take the full responsibility for the hazards it creates.

But today, we see the chemical companies running to the Government, asking for Federal assistance to clean up hazardous waste sites.

We see the asbestos industry running to the Government, asking for Federal assistance in paying compensation claims.

We see Ford Motors running to the Government, asking for changes in the tax law to allow longer periods to write off liability payments.

Someone once put it very succinctly: If industry wants Government off their backs, they should get their hands out of our pockets. Ultimately, the taxpayers—including the victims of industry neglect—are called upon to bear the burden of industry's failures and indifference.

The irony is that the crimes of a corporate nature, unlike the individual acts of violence, often affect many thousands, or even millions of victims. The recent study, "Illegal Corporate Behavior," by the Law Enforcement Assistance Administration, noted: "Corporate crime costs run into billions of dollars. These costs involve not only large financial losses but also injuries and health hazards to workers and consumers."

Today we are focusing on a specific aspect of illegal corporate behavior, those situations in which a calculated decision is made to expose workers or consumers to a known health or safety danger without adequate warning.

It should be pointed out that 75 percent of all the corporate crimes are in the environmental and labor protection area, and according to LEAA, penalties against corporate officials are far less severe than those against ordinary lawbreakers; fines are nominal, prison sentences are frequently suspended, and probation is easily granted.

Before I illustrate some of the situations which I believe mandate the enactment of H.R. 4973, I want to raise some philosophical and political points which underlie the legislation.

I believe that the intent of this legislation extends far beyond the individual cases of corporate coverup, tragic and incredible as those individual cases may be. This legislation addresses the issues of corporate ethics, individual responsibility, and business morality. It raises the fundamentally disturbing question of whether our economic, political, or ethical systems have somehow become so skewered that the worship of profit is more important than people.

I find it very disconcerting, for example, to read the comments of a former high ranking official of the General Motors Corp. who reportedly said recently that never, in all the time he worked for the world's largest company, did anyone raise the question of the impact of the products his company manufactured on the American people. To quote: "The system of American business often produces wrong and immoral decisions," he said, and as a result "willfully produces ineffective or dangerous products."

The key concept is "willfullness," a conscious decision to market a product or to overlook a workplace hazard. It is significant that last year nearly one-third of all the workplace safety violations were determined to be "serious, willful, or repeat" offenses, yet the average fine for serious offenses was under $500. In my home State of California, the average fine for a serious violation is only $239, and tax deductible.

While industry may not approve of Government regulation or intervention into the private world of corporate and industrial

activity, there was precious little evidence that business was inclined to conduct the necessary testing and to remedy the workplace dangers on its own prior to these Federal protections.

Corporate indifference to worker and consumer safety has not been eliminated through regulation, nor will it; partly because the penalties for violations are so minimal and there are still those places with high regard for profits rather than people. The fact is that even if we consider the necessity for this kind of legislation suggests a kind of bankruptcy far more serious than the financial kind.

Covering up known hazards from workers and the general public illustrates a moral and ethical problem which appears with alarming frequency, not just in one industry, but throughout industry and in our society as a whole. Concern for oneself, either as an individual or in a corporate sense, has replaced our traditional moral and legal concern for the general good. This legislation seeks to place some of that responsibility on the individual.

I want to take a few minutes to discuss examples which I believe mandate the enactment of H.R. 4973. Let me make one point, however, which applies to each case: neither I, nor anyone else, has manufactured this information; the shocking evidence, in most of these cases, bears the letterhead of the companies involved.

First of all, the asbestos industry, where I might add, parenthetically, as a result of activities here which I will outline, hundreds of thousands of people in an around my congressional district now suffer debilitating diseases because they lent their effort to the war effort in the shipyards of the San Francisco Bay area only to find that their reward was cancer.

The number of illustrations of purposeful coverups in the asbestos industry are so extensive that we could not possibly hope to detail them all this afternoon. But let me cite a few of these examples.

By the early 1930's, officials of the asbestos industry had been warned that the inhalation of asbestos dust could cause the serious lung disease, asbestosis. On October 1 1935, the president of the Raybestos-Manhattan Co., one of the Nation's large asbestos producers, wrote to his counterpart at the largest company, Johns-Manville, and I quote, "I think the less said about asbestos, the better off we are." Johns-Manville's president responded, "I quite agree with you that our interests are best served by having asbestosis receive the minimum publicity."

Throughout the 1930's and 1940's, numerous medical and scientific journals addressed the health problems caused by asbestos. Deaths rates from lung cancer among asbestos workers were found to be nine times that of the overall population. An asbestos worker who smoked had 90 times the chance of developing the disease as the average nonsmoking person. Mesothelioma, a rare lung illness among the general population, occurs with disturbing frequency among asbestos workers.

The asbestos industry would have you believe that its leaders were unaware of these health problems, and also that they took precautions to minimize the risk to their employees when they became aware. That simply is not the case. Instead, the asbestos industry rejected many investigations into the relationships be-

tween asbestos exposure and illness, and ignored warnings, even from their own medical advisers. In addition, they neglected to tell workers and purchasers of the potential hazards which studies had disclosed.

In 1952, the Johns-Manville medical director, Dr. Kenneth Smith, had urged his superiors to place a warning label on asbestos products; his plea was ignored. Four years later, Dr. Smith urged the asbestos textile institute to undertake a study of the relationship between asbestos exposure and disease; after a year of consideration, the study was rejected partially because, quote, "there is a certain feeling among certain members that such an investigation would stir up a hornet's nest and put the whole industry under suspicion."

The industry claims to have been unaware of the dangers to lightly exposed workers until Dr. Irving Selikoff's pioneer study of insulation workers in 1964. However, nearly 20 years earlier, British insulation workers had been notified of the possible health effects of working with asbestos.

Closer to home, Johns-Manville was warned of the hazards to workers by the director of the Saranac Laboratory, Dr. Arthur Vorwald. The asbestos industry often cites its financial support of the Saranac Lab as evidence of its concern for worker safety. What they don't tell you is that the good advice of the laboratory was often ignored.

On August 13, 1948, H. M. Jackson, a safety engineer for Johns-Manville, wrote to Dr. Vorwald following the death of a J-M worker whose, quote, "degree of exposure was relatively light," unquote. Jackson asked whether others, similarly exposed to the general conditions, might be at risk.

While acknowledging that some individual factors may play a role in determining susceptibility, Vorwald responded on August 19: "I can see no other alternative than to anticipate others with similar exposures to be similarly affected." Yet for nearly 20 more years the industry continued to argue that only the most heavily affected workers were at risk, and today still disclaims the risk to lightly exposed people.

Other warnings were ignored. In 1948, Saranac scientists warned the Owens-Illinois glass company that their product, "Kaylo," was "Capable of producing asbestosis." The report on Kaylo underscored the dangers to lightly exposed people, noting that "a seemingly negligible proportion of fibrous asbestos is sufficient to produce the characteristic"—medical—"reaction."

A confidential 1963 report authored by Dr. Thomas Mancuso warned officials that the Philip Carey Co. faced a wide variety of legal problems because of its manufacture of asbestos-containing materials. Why had these medical problems been unrecognized for so long, he asked Mancuso, Mancuso replied, "Actually, they were recognized, but the asbestos industry chose to ignore it and deny their existence." He recommended that the company undertake a wide ranging series of medical and legal steps.

As recently as August of this year, the successor to Carey Manufacturing, Celotex, denied that Mancuso's report was ever forwarded to the company, and questioned whether or not he had authored

it. They could provide no information as to whether or not his recommendations had been carried out.

Other reports warning that all asbestos workers, regardless of exposure, are at risk were likewise ignored. In fact, the warnings of Dr. William Hueper of the National Cancer Institute were denounced by the Asbestos Textile Institute members as "derogatory literature" and "damaging information," although no evidence to refute his findings was offered.

Asbestos officials not only have covered up scientific findings, but medical information which showed that workers were at risk of serious, and perhaps fatal, lung disease.

Wilbur Ruff, the former manager of the Johns-Manville plant in Pittsburg, Calif., which is the district I represent, told attorneys in a deposition earlier this year that there was a company policy not to tell workers about irregularities on chest X-rays because, quote, "the company did not want to get employees upset until such time as we knew our ground." Company policy precluded company physicians from recommending an outside doctor or treatment for affected workers, according to Dr. Ruff.

Minutes of the health review committee of the Johns-Manville back up this information. Although Johns-Manville officials claim that the policy of notifying all workers of irregular X-rays was established in 1956, committee minutes from 1957 show a steady policy of not telling them, in one case because an affected woman "will get hysterical and I am sure you will have a compensation claims on your hands." So, she was not told.

Other case records indicate that where workers had been "health counseled" about their X-rays, years had gone by after the illness was detected before they were informed of their disability. During this time they often remained exposed to asbestos. In testimony earlier this year, J-M officials acknowledged that they have no way to be sure that that notification policy was ever carried out. Evidence would appear to indicate that it was not, and that affected workers were not told of their illnesses or relocated swiftly to safer settings.

Even when the hazards were brought to light in recent years, indifference was often the response by management. John Marsh, the environmental director for Raybestos-Manhattan, wrote a memo in which he noted that company's substantial legal liabilities and stated, "I thought the meeting in June 1973, at which mortality and morbidity data was reviewed in detail, would be more than sufficient to shock people into action. This has not happened." Marsh called Raybestos' policies "indefensible and not getting better."

When considering whether to "cooperate with scientists," Marsh noted, "we have valuable information going back to 1930;" and he admirably pointed out their company's "obligation to employees" and the "legal implications of withholding information."

Lest anyone believe that the asbestos industry has been shamed into responsible behavior, it should only be noted that only a year ago, at a meeting of the Asbestos International Association, members discussed ways to conceal product hazards. Minutes of the meeting, which I have acquired, show that members objected to placing a warning on European-bound products "because of a possi-

ble negative influence on sales." The AIA officials have refused my request for a list of association members and the complete transcript of that meeting.

But let us move on to another area of growing concern, that is of chemical pollution.

Occidental Chemical manufactures pesticides and other chemical products at its Lathrop, Calif., plant. California law requires any dumping which might affect groundwater tables to be filed with the State water resources control board. Occidental purposely ignored the law, as indicated by the internal memos, as a result polluted groundwater tables with poisonous wastes.

"For years we have dumped wastewater containing pesticides and other AgChem products," wrote R. Edson in a June 25, 1977, memo to A. Osborn. "Fortunately for the management of this company, no pesticide has yet been detected" in a neighbor's well. "I personally would not drink from his well," Edson wrote.

Edson provides one of the most frightening examples of corporate indifference to human health and safety.

"No outsiders actually know what we do and there has been no Government pressure on us," he wrote, "so we have held back trying to find out what to do within funds we have available." Edson made clear that the cost of cleaning up the hazardous discharge would be very difficult for the company to pay.

"Frankly, I don't believe any of us will become TV personalities answering questions on these contaminants," he wrote. "The next drop of pesticide that percolates to the ground is a management decision which I don't feel we can afford. I believe that we have fooled around long enough and already overpressed our luck."

Almost a year later, the problem was not yet being solved. In a memo to J. H. Lindley, Edson admitted "that we have destroyed the usability of several wells in our area. If anyone should complain, we could be the party named in an action by the Water Quality Control Board. The basic decision is this, do we correct the situation before we have a problem, or do we hold off until action is taken against us."

Edson admitted that he mislead the Water Board concerning the company's pollution activities. "This report isn't exactly accurate even though the inaccuracy is due to omission rather than outright falsehood," he wrote. "However, I don't think it would be wise to explain the discrepancy to the State at this time." Amazing amount of judgment shown by this individual. Edson admits that he had been warning the company of the pollution problem "for the last 3 or 4 years."

The Lathrop well poisonings were not the only cases of coverups by the chemical industry. The situation involving one of Occidental's subsidiaries, Hooker Chemical, is well known to most people. Earlier this year, a high ranking official admitted that residents in the vicinity of Love Canal, a Hooker dump site, were not warned of the health hazards from leaking chemicals even though the company was aware of them.

As long ago as June 18, 1958, a memo noted that "the entire area is being used by children as a playground." The company took no action, although the problem was discussed by company officials. Local residents were not warned, according to the memo's author,

because "we did not feel we could do it"—that is notify them—"without incurring a substantial legal liability for current owners of the property."

Residents of Love Canal affected by the chemical waste leaks have complained of headaches, birth defects, mental illness, and a variety of problems.

In the area of consumer products, carcinogens and chemical pollutants have received much of the recent publicity about product and industrial hazards, but sometimes the dangers are mechanical in nature. Like the other solutions, however, many lives may be jeopardized by a single corporate decision to market an unsafe product.

In 1971, a memo within the Ford Motor Co. warned that the design of the Pinto automobile made the car susceptible to fuel leakage and explosion following even relatively slight rear-end collisions. The memo concluded that a $6 or $8 part could solve the problem. The company officials, however, decided to forego any changes until 1976, expecting that the delay could save Ford about $20 million.

In 1973 a more detailed memo outlined the severity of the hazard by evaluating the costs of modifying production equipment or installing a part to reduce the risk to passengers. This cost was then compared to the value, if you will, of the lives which would be lost if no corrections were undertaken.

Ford estimated the value of a human life to be $200,000, and the value of a serious injury at $67,000. Multiplying this by the estimated 180 deaths which could be anticipated, the comparable number of serious injuries, the company decided that the cost of permitting the deaths and injuries to occur—about $50 million—was considerably less than the cost of retrofitting the cars with safety devices, $137 million, or about $11 per vehicle. To date, 23 people have lost their lives in blazing infernos inside the Ford Pintos.

When we discuss crime, we would do well to place this corporate crime in its proper perspective. The largest welfare fraud in history amounted to about $240,000. The typical burglary involves about $350. By comparison, Senator Philip Hart's Subcommittee on Antitrust and Monopoly estimated a few years ago that corporate crime—monopolistic practices, faulty goods, and the like—cost consumers between $174 billion and $231 billion a year, not including injuries to workers and damage to the environment.

In reviewing the enormous problem of white collar crime, the LEAA study recommended a massive increase in the number of Government investigators and lawyers, which means greater intrusions and more Government costs. Perhaps this will be necessary. Most studies indicate that people support environmental and labor safety laws, even if they cost money.

But I would hope to throw more responsibility onto the shoulders of industry to police itself, and then to hold it accountable if it failed to do so. Hopefully, industry will accept this burden.

I was heartened to read in Fortune magazine that the president of Occidental has sent a memo to his managers on the subject of environmental hazards. Unlike past Hooker memos, this one warns that the failure to comply with safeguards will result in dismissal.

If increased profits is the reason for concealing hazards, then stiff financial penalties will hopefully reduce the incentive for concealment.

If probation and suspended sentences fail to intimidate corporate officials concerning serious health and safety violations, perhaps mandatory jail terms will force greater accountability.

I wish to thank the committee for taking the time to allow me to testify on this matter of concern.

Mr. CONYERS. You have made a powerful statement, and apparently you have done a great deal of detailed research.

I want to thank you very much as our leadoff witness and as the author of the legislation.

I want to recognize as many members for this discussion as possible, so I'll be brief.

What is proposed in your legislation is, essentially, a law prohibiting corporate and executive concealment of knowing about the act complained of a criminal offense. That being the case, you proceed on to set a penalty that establishes a minimum for the corporate executive that fails to notify the company and the Federal Government, and a penalty for the executive as well as the corporation, but no maximum. This, apparently, is to allow the court, in passing a sentence, to recover any ill-gotten gains and avoid some of the almost ludicrous penalties that obtain in the few other areas in which corporate liability exists.

You also attached as a possible penalty a maximum 2-year sentence for individuals that would be so found guilty.

Now, in your judgment, where do you come down on this debate that goes on in the Judiciary Committee constantly about whether white collar criminals should go to jail?

Mr. MILLER. Well, Mr. Chairman, I think that we have got to make the determination that when a knowing decision, a conscious decision, is made to not take actions, to cover up hazards, you have set in motion the same types of actions that a person does when they take a gun into a public place. We say, "You must go to jail," to that person. At least in California we say, "You must go to jail." If you're caught with a gun in the commission of a crime, we're not going to give you any leeway, because you set into motion a series of actions.

When people set into motion through their decision, actions which release a dangerous product into society, it is no different in my mind than when a person fires a gun into a crowd. That activity, on its face, a reasonable man would have known, is known to be hazardous and reckless.

I understand, on the Senate side, there is another determination as to the standard of reckless endangerment of another individual, which is a lesser standard than knowingly. But I think when you're dealing with corporate decisions—and maybe you want both standards—you've got to be able to pierce the corporate veil. A middle-level manager or section head of General Motors, of Ford Motors, cannot be allowed to make a decision with the comfort that the corporation will pay the fine and he personally will be insulated. We've got to make people take responsibility for their own decisions.

The reason for the mandatoriness of the penalties and the maximums, and the minimums in this bill is because it obviously is very difficult for a judge in a community which relies upon employment by a plant or an economic entity to sentence the pillar of that community to jail or to a harsh fine. He may be traveling in the same social circles as that corporate manager. But, in the privacy of the corporate boardroom, that person made a decision to cause millions of dollars worth of health damage to individuals, to maybe even kill individuals, and to place into commerce a very, very dangerous product.

I think that we have got to treat that as a criminal action. It has many of the components that we learn in law school about forethought, premeditation, calculation, knowingly. All of those things that we ascribe to criminals who lie in wait in the alleys can be ascribed to some of these decisions I've referred to in my testimony.

Mr. CONYERS. Would you have objection if a subsection were added to cover reckless conduct?

Mr. MILLER. I wouldn't have an outright objection. I think it is one of the things that we should consider. I would assume that, if I remember correctly, the standard of reckless conduct may be against the surrounding in which you made that decision. You should have known that to do such a thing is reckless, and you should be held to a standard at that point.

And I think, in many cases, it would be very helpful, because it may cause industry to recheck corporate decisions in terms of what can be expected of a product or whether the workplace is safe. So, I think it may be helpful as a lesser standard.

Mr. CONYERS. We are going to have some legal experts join in this discussion with us, but it just seems to me that if a person's reckless driving can make him criminally liable, that you can do things that are so obviously endangering to those around you that the act itself becomes a crime, it would seem that in this particular area the same analogy may hold. So, we want to examine that, and I'm glad that you leave it open for further consideration.

I would like to yield now to the gentleman from Ohio, Mr. Ashbrook.

Mr. ASHBROOK. Thank you, Mr. Chairman. Like you, I will try to be brief, and maybe we can get in a second round of questions.

George, I was very much impressed with your testimony. I became interested in this when you brought up the issue in the Education-Labor Committee with respect to a number of schools where children are exposed to the same risk.

I certainly do not want in any way to discount anything you have said, because I think it is very powerful testimony. But, I do think in the area of shipyards and schools we have basically the same fundamental problem: I know of no school that has been built anywhere in my State that is not under the regulation of the State, and to some degree, the Federal Government. I understand that several thousand suits have been filed by former World War II shipyard workers, quite a few of them, obviously, in your area. But isn't it true that in almost every one of those cases, they worked in a Government work area, under Government standards, and in a Government-controlled environment for the most part?

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Mr. MILLER. That is going to be a very interesting point. In the litigation that is now starting is the question of what the Government knew about these products, and what was concealed from them. And we are starting to see now that the Government is filing cross complaints to defend itself, because in the case of shipyards, and maybe in the case of schools, people are going to say this was under the control of the Government.

There is substantial thinking in the legal community that many of the people who made the decisions for the Government to buy products were never told when, in fact, the company wishing to sell the product knew of hazards. School boards that made the decision to insulate ceilings were never told that this may be a hazardous material. They went ahead and used it, and now we find out it is a health hazard.

So, I think that is one that is going to have to be played out in the courts. And this legislation, unfortunately, cannot go back and redo history. It is a question of looking forward as we dump thousands of new chemicals and products a year into the marketplace. Somebody has to say, "I'm going to be liable."

You know, in the old days, I guess, Mr. Smuckers had his name on the jam and if food poisoning occurred he was liable to his neighbors; but today most people don't know the company that makes the product. That distance allows you to be a little bit more cavalier than you should be. Because when you turn out now hundreds of millions of a product, you have really got to be concerned about the impact of that.

And, so, the question of governmental involvement is going to be fought in the courts, not in this legislation.

Mr. ASHBROOK. Let me follow up on a specific point. You mentioned two or three times in your very fine testimony certain data going back to 1930. Is it your testimony that this data was known to industry, but not to the Government?

Mr. MILLER. I know that it was clearly known to industry who was manufacturing the product. I personally believe industry clearly took steps to conceal much of their data that they developed and others developed from the consumers, and, in that case, Government.

Now, whether or not the public health organizations that go back to that time, knew or did not know is not clear yet.

Mr. ASHBROOK. I wonder if that could be reached through the Freedom of Information Act. We seem to be able to get just about everything else.

In considering white-collar crime, complicity and conspiracy, if it were known that the health officials or Government officials were aware of this risk, at least to some degree, or to a reasonably equal degree with the industry people, would it be your feeling that they would be as guilty of that white-collar crime? Maybe it would be an even higher responsibility, I suppose, because they hold themselves out as if they speak for all of us, whereas I do not know of any corporation that ever did that.

If the Surgeon General's Office, for example, knew or had the same information dating back to 1930, the date you mentioned, would it be your feeling that they would be as culpable or guilty of complicity? What would be your position with respect to them?

Mr. MILLER. I hate to play lawyers' hour in the middle of lawyers, but I think it is a question of duties. And I think a person who manufactures the product has one duty; I think the Government official has another. Certainly, if a Government official knowingly covered up this kind of information about a product, or a process, if you will, I would think that that person is a criminal in the same sense.

But don't forget, under this legislation all the company or all the individual has to do is notify the Government entity and they are off. It doesn't mean they can't manufacture.

And also, on that side, access by the Government to much of this information which is proprietary information that is developed in a fiduciary relationship between scientific organizations and a corporate entity, or in their own labs, is not accessible to the Government. Again, much of that is going to be fought in the major litigation cases involving the asbestos people, Electric Boat, General Dynamics, the Government. I think we have the kind of legal talent involved and the money, the potential liability involved, that we will get to the bottom of some of these concerns.

Mr. ASHBROOK. I've used up my 5 minutes. If we get a second round, I think the difference between the Ford case and the chemical case, as distinguished from asbestos, where it did appear to be in a controlled government area, is something that ought to be studied.

Mr. Chairman, I've had my 5 minutes.

Mr. CONYERS. Mr. Gudger.

Mr. GUDGER. Thank you, Mr. Chairman.

Congressman Miller, I have read your bill with a great deal of interest, and I have noticed that the burden of compliance falls upon someone called, quote, "an appropriate manager;" and the appropriate manager is defined as "the person having management authority in or as a business entity with respect to a particular product or business practice."

Now, in each instance within your statement, you have dealt with a situation which appears to be conduct on behalf of the company which was known to its board of directors, and yet it seems from the draft of your bill that you are putting the responsibility on the general manager rather than upon the board of directors.

In a bank fraud case or any other type of practice where there is a clear violation of a State statute, all members of the board having knowledge would be guilty and not just the bank manager. Could you explain to me why you put the burden on the general manager and not upon the board, where the conduct that you complained of seems to be board conduct?

Mr. MILLER. First of all, it was an effort to protect that person lower down, if you will, from liability—the line worker. It is not an effort to protect those from what I call the appropriate manager and upward, the board of directors and the chairman of the board, the chief executive officer.

But in answer to your question, I think one has to be cognizant of intimidation in the workplace. Those people who are personally aware of hazard at some point have got to know that if they continue their activities without reporting them to responsible offi-

cials, that they are engaging in activity that could cause a severe legal liability.

I say that because in many instances we're talking about a very highly trained, highly educated, technical person who understands the dangers and should not assume that the corporate veil or the liability of the board will protect them from their own activities. They cannot go along suggesting that they were only following orders. They have an obligation to speak up.

I think in some cases the appropriate manager under this definition, in fact, may include a member of the top level management—a president of the Chevrolet division, or of, you know, in a car company a president of a subsidiary. And a board of directors, as we all know, are on different levels of duty based upon notice. In this case they all wrote one another.

Mr. GUDGER. Thank you very much.

Now, you establish a 30-day period for disclosure and warning to employees. You say that this appropriate manager will be guilty and punishable if he knowingly fails to inform the appropriate Federal agency and warn employees in writing.

Now, let me ask you this. Suppose we deal with the situation where this appropriate manager is operating a nuclear plant on Three Mile Island in Pennsylvania. Is he to have 30 days to give warning to his employees to get out of the way when he has knowledge that they have exposure to nuclear radiation? Doesn't your bill have the effect of excusing him if he fails to give timely warning and allowing him to defer that warning for 30 days?

Mr. MILLER. I think you make a very good point, that the issue of timeliness may really be the reasonable test and not something that could be used later to escape the exact liability which we wish to put on that individual.

Mr. GUDGER. And third—and this will be my last question, Mr. Chairman—we have dealt with some of these problems in my State of North Carolina. For example, we had an instance fairly recently, within the past year, in which some PCP was dumped beside the highway in eastern North Carolina. And I believe the district attorney down there determined that whoever was responsible for that, whether it was the manager of the company or the driver of the truck, whoever made the decision to make that deposit, could be found guilty of crimes for which, perhaps, an aggregate State sentence of up to 20 years could have been imposed.

Don't you see this, really, as something that the State should deal with as in that instance in eastern North Carolina,

Mr. MILLER. Well, I think in this instance, Mr. Gudger, that it is a little bit like the argument we heard on the House floor last night. Some people were arguing that the States take care of the funeral director because it's not interstate commerce. But in this case, a corporate decision made in the same office, or a subsidiary plant, can have ramifications that run far beyond the borders of that State. I think that in order to determine liability, the Federal Government must have jurisdiction, because the actions which occurs and the resultant criminal liability, may go far beyond people in the home State. The product may have left that State and not even been used in that State.

So, I think that the jurisdiction is properly Federal in this circumstance, given the interstate commerce of toxic materials that you have suffered in your own State.

Mr. GUDGER. Thank you very much. It has been very interesting testimony and I appreciate your observations.

Mr. CONYERS. Mr. Sensenbrenner.

Mr. SENSENBRENNER. Thank you.

Congressman Miller, from the beginning of your testimony, I got the impression that you think that existing deterrents are not sufficient to stop the kind of behavior that you have discussed, and that the new deterrents of a $50,000 minimum individual fine and a $100,000 minimum corporate fine are necessary to plug the loophole.

Looking at the issue through the eyes of the guilty corporate executive, purely from a profit-and-loss standpoint, which do you think would be the stronger deterrent: the $50,000 fine or, in the example of the *Ford Pinto* case, the $128 million judgment that was entered by the jury, which included punitive damages?

Mr. MILLER. Hopefully, the $50,000 individual fine would have prevented the $128 million judgment. I think that a person who aspires to be a leader in corporate America would not want to have a résumé with a criminal conviction on it. I think that is the deterrent.

The economic wane will continue whether it is on the table saw or the Ford Pinto cases, that kind of economic disencounter will continue; but I think that in the case of individual corporate decisions—and in this case it may have been the designer of the assembly of part of the automobile—maybe a person will say, "I'm setting myself up here because I know that this is preventable." Or the people at the test track, where they filmed tests showing that rear end collisions caused liquid to go into the passenger compartment and explode, maybe those engineers would have said, "I'm setting myself up, I'm notifying the Government that this thing has got problems."

And, so, I think it is a preventative action here, so that the $128 million judgment, hopefully, does not happen and the tens of people who were burned up in those cars doesn't happen. Maybe the possibility of a criminal conviction will discourage that kind of action. A criminal indictment is not one of the great pleasures in our society.

Mr. SENSENBRENNER. Let us take this one step further. Your bill provides a fine which, if levied, would go into the Treasury of the United States. I am sure that would not provide very much compensation to the severely injured victim. By contrast, our present system of torts, through either product liability actions or class action suits, does provide such compensation. Do you think that the Government fine approach is one that would be preferable, given the fact that the victim goes, essentially, uncompensated?

Mr. MILLER. No. I think, as we know that this is not an effort to preclude legal action by the victim. Those people who sued in the *Ford Motor* case, if this was the law, would still be able to sue. The State of North Carolina is, I am sure, going to sue for cleanup costs as New York has in Love Canal. They would still be allowed to recover those.

But, the people who made those decisions would become if you will, the victims of their own criminal activity if it is so determined that they meet the standards under this law. So, I think it, in fact, takes care of all parties.

But what all too often happens is that individuals in corporations who make these decisions by themselves or jointly with others are insulated because the corporation reaches into their deep pocket, if you will, pays out, comes to Congress, gets the tax laws changed, so that they can write if off—these fines are deductible in the case of California law—and they mitigate the real impact.

Well, I don't think you can ever assess General Motors enough of a fine that this Congress will pass. Make the fine a million dollars; in terms of the cost of the Ford Pinto, it's minimal.

But the issue is, is somebody there going to have to risk going to jail for making those decisions?

We're never going to have enough Government inspectors. OSHA is never going to have enough people to do the job. And they can't really determine these kinds of activities if we did have enough. So, let's start having people in the corporate world to take onto themselves the responsibility that you and I have as we walk down the street, as we drive our car, as we drink alcohol, as we take actions toward another person. And I think that is the test. And I think that will be a deterrent, to answer your question.

Mr. SENSENBRENNER. I have one final question. As we all know, the standard of proof in a criminal case is that the defendant must be guilty beyond a reasonable doubt. The standard of proof in a civil case, however, is substantially less. The jury must find that something happened by a preponderance of the evidence.

Now, looking at this entire situation from the viewpoint of providing compensation for the victim, so that hopefully they will not have to depend on public assistance to pay their medical bills or to live out the rest of their lives, what effect do you feel that an acquittal in a criminal case, where the standard is beyond a reasonable doubt, will have on a subsequent civil case, where the preponderance of the evidence standard prevails?

Mr. MILLER. That is an age-old problem that you have under current law. The interplay between a civil trial and a criminal trial has either been a burden or a benefit, depending upon what the outcome has.

Let me say that the kinds of cases I recited to you today, certainly on the civil side, I believe they meet the reasonable doubt test so that these people would be convicted under the criminal standard. On the civil side, there is enough corporate letterhead floating around in documents that I am sure that a jury would make the determination as to liability in these cases, and, in fact, they have.

I think, if I remember correctly, one of the compelling pieces of evidence in the *Pinto* case was the test films of the company which were shown to the jury that showed, in this case it was water, not flaming gasoline but water, in a number of these rear-end collisions that at the test track flew into the passenger compartment. The injuries which were suffered therefore, were reasonably foreseeable.

Mr. SENSENBRENNER. Yes, but that is a case where you would probably get a guilty verdict under your legislation. I am more

concerned about the case where the guilt is not as clear, and since criminal cases have priority on most of our State and Federal court calendars, there might be an acquittal on the same facts on which a civil case would be brought to provide compensation for the victims. I am certain that the acquittal in a criminal case would be used to influence the jury in the civil case even though the jurors might not be as attuned to legal issues as you and I would be—specifically, that there are two different standards of proof that are like the difference between night and day.

Don't you think that in this case, where there would be an acquittal in the first criminal trial, you would actually be harming the victims' right to compensation in civil action brought against the responsible corporate manufacturer?

Mr. MILLER. My answer would be that I don't think, for that reason, that we ought to preclude the criminal action. I don't think that that will happen. I think that that situation is parallel in a number of other areas. The question of assault and battery and criminal activity, time and again where torts border on the criminal, you have overlapping prosecutions; and you may have an acquittal in one and a conviction in the other, and sometimes it helps you, sometimes not. That is the roll of the dice.

But let's not roll the dice simply with whether or not you can recover for the victim. Let the manager, let the responsible person—the board of directors, the presidents of the companies—let them roll the dice with their own criminal liability and let's see how they do. Today they do not do that. They only roll the dice as to whether 180 or 23 people are going to get burned up. Did they figure it right or wrong? Obviously, the $128 million judgment showed them that they rolled them wrong.

Now, that was reduced later, as we all know; but I think it is a question of you have to look and say, just as we do when we vote, and you say, "What impact is this going to have on my political future?" You are thinking about yourself. I think a corporate manager ought to think, What impact is this going to have on my future? Am I going to go to jail because I have sent this product into commerce? Do I reasonably know in my expertise that this is a serious danger under the definition of this law which says it has all likelihood of harming you? If I know that, should I just go ahead and assume that my employer, maybe after I am gone, will assume responsibility? The guy that made the decision may be dead. What did he pay? What did his company pay? Nothing. But the people who worked in the plants in my district, they got a gold watch and cancer. That is not what they bargained for when they signed up to work in that plant or when they signed up for the war effort to help us build ships. That is not what they signed up to do.

So, I recognize the problem you have, but it is a problem that is consistent with our system of justice in this country. We ought not to allow someone to escape personal liability because we are afraid that the problems of overlapping prosecution could cause one to come out ahead of the other.

Mr. SENSENBRENNER. My time is up.

Mr. CONYERS. The Federal racketeering statute, commonly called RICO, allows the court in assessing a fine to penalize to the extent of the ill-gotten gains, which gets us around the question of some of

the nominal fines for a transnational corporation that would just as soon be found guilty and pay.

Does that feature meet your approval, and could it be operative under this legislation?

Mr. MILLER. Well, it is a very old belief in this country that you ought not to profit by your illegal activities. With your experience here in the Crime Subcommittee, you may be able to fashion penalties along the lines of the racketeering act.

But why is a racketeer any different that somebody we saw in hearings the other day, who put on the market a formula that lacked the ability to sustain human life. Small babies were given that formula, mothers were giving that to their children? Talk about a racketeer.

Definitely I think if you can devise, if this committee can put it together, you know we can devise a bill here that has the potential of really placing responsibility on individuals. If you're not going to profit, if you have the chance of going to jail, you may not want to engage in that activity; and then we may not need the Government to chase you around with OSHA and EPA and every other agency that we have.

Mr. CONYERS. Maybe the racketeering statute does apply to that person.

Mr. MILLER. In my mind it does, but usually, you know, they have to dress a certain way, look a certain way, before we call them racketeers.

Mr. CONYERS. Mr. Ashbrook?

Mr. ASHBROOK. One final point. In your testimony, I did not find mention of something which was brought to my attention after we looked into the school issue. I got letters, testimony, and statements which indicated that one company—I do not know whether it was Johns-Manville or another—does state that it wants to compensate victims and has not resisted that idea.

Is that correct?

Mr. MILLER. No. They want to devise a system for compensation which is different than them compensating the victims. What they want is a system in which we, the Federal Government, will make those victims whole—if you can make somebody with lung cancer or other kind of debility or disease whole.

Mr. ASHBROOK. I suppose it depends on how you read it. As I read it, they said they were willing to pay their share, but they did not want to pay the bill of the U.S. Navy.

How do you divide it up? Has anyone devised a formula, or does that go back to my first question?

It is rather hard to determine the respective degrees of involvement.

Mr. MILLER. I don't think there is a question in anybody's mind that the Government is going to end up picking the tab up for the U.S. Navy, and some of the shipyard workers, through Federal employees compensation. But when they talk about their own employees, you bet they have indicated for the first time in the testimony we had in Labor that they might be willing to pick up the tab for their own employees; because we have proved the 30-year coverup. That was not their original offer in the Fenwick bill.

It is still the problem of the courts to apportion out the liability. At this momemt we do not know the full role of the Government in it.

But I tell you, the bill is so big, John. Let me be candid, we're going to spend Federal dollars on it.

Mr. ASHBROOK. I thought the estimate was in the billions.

Mr. MILLER. It is possible that it is in the billions.

Mr. ASHBROOK. That is what it was reported to be, and those are merely the cases that have been filed. That does not necessarily mean that is what it would ultimately be.

Mr. MILLER. We're picking them up anyway through the VA system. These people are getting X-rays, they are getting taken care of. We are screening people with Federal dollars, people with cancer. Many of these people are elderly, they are on medicaid, medicare, they're getting taken care of in that fashion. We are already paying.

Mr. ASHBROOK. I have one last question.

Most of my questions have dealt with the World War II situation. Based on your experience and your study, can you distinguish this World War II situation from others?

I think we might all agree that in the emergencies of war even the Government might look the other way in order to produce ships. Kaiser, I think, as you well know, was probably one of the more liberally oriented corporations. So, even during war, things like that might have happened.

Did that degree of lack of concern evidenced in the 40's stop after the Second World War? What was the situation after that?

Mr. MILLER. They claimed they had no knowledge until 1964 with Dr. Selikoff's study. As I said in my testimony, a year ago the international association of these people was debating whether or not to put warning labels on the materials, with full knowledge of what we required in this country, but for European markets they argue over the size, the shape of the label, because of the impact on sales.

No, I'm not convinced at all that they have shown greater concern; not at all.

Mr. ASHBROOK. Thank you, Mr. Chairman.

Mr. CONYERS. Well, this has been an excellent beginning. We hope that you will work with us. We're beginning to examine a number of other witnesses, both legal and environmental.

Again, you have the commendation of this subcommittee.

Mr. MILLER. Thank you. Thank you very much for the time to make the case.

Mr. CONYERS. Our next witness is Mr. Castleman, an environmental consultant and engineer, and former air pollution controls person for Baltimore County Health Department. Mr. Castleman has been a consultant to many Federal regulatory agencies and has served on the Council on Environmental Quality and many other commissions and environmental groups. He has been consultant to litigation in the asbestos area and has an extensive list of publications to his credit.

We welcome you and incorporate your very extensive statement into the record, and that will prepare you for a summary and any additional comments you wish to make.

Thank you for joining us this afternoon.

[The prepared statement of Mr. Castleman follows:]

STATEMENT OF BARRY CASTLEMAN

I. PREVENTION

It is a pleasure to have the opportunity of your invitation to speak on Congressman Miller's criminal bill, H.R. 4973. As we enter the 1980's, there will be an increase in the rates of serious occupational and environmental diseases, a legacy from the first two decades of our people's rising post-war exposures to carcinogenic and toxic substances. But even as the shadow of our past failure in prevention grows darker, the outlook is bleak for the 1980's, in terms of what we are doing to prevent further occupational and environmental disease. Our safety as well as our health is threatened needlessly by the sale of defective consumer products (e.g. cars and tires).

Regulation of the marketplace has eliminated some of the worst threats in the workplace and the environment. But those of us who hoped for more substantial preventive action through the process of regulation have been disappointed. Every OSHA regulation is contested by industry, and in Congress it is a continuing struggle to just preserve the protective laws we have and provide regulatory agencies with some funds to develop standards and enforce them.

With the regulatory approach continuously blocked by everything from sticker bushes to fallen trees, those of us in the prevention business have been learning about indirect paths, like compensation. We find that the state laws on worker's compensation programs are full of problems for victims of occupational disease: short statutes of limitations for filing claims, long delays in scheduling hearings, and low limits of medical

and disability compensation have made workers' compensation a national disgrace. Over the last twelve years, an average of only five people per year have received compensation in the state of New York for occupational cancer.

Another form of compensation started out and in many places still is in good shape, however, and it is increasingly used by injured working people and the general public. This is product liability particularly, and damage suits in general, over the harm caused by reckless or negligent business practices. The mounting litigation over asbestosis, Ford Pintos, Firestone tires, Kepone devastation of the James River, pesticide sterility, and PBB poisoning of the dairy industry in Michigan, invoives mortal threats to millions of lives and billions of dollars in liabilities.

As a result, business interests in every state are mounting an effort to avert liabilities under the existing laws. This is being done by the erection of new legal defenses and statutes of limitations to bar suits for injuries and disease arising more than ten years after the sale of a product. Since 1977, the product liability laws in about twelve states have been rigged with these insidious lapses in the right to redress. Such statutes of limitations have withstood court challenges in cases involving products with long-latent effects.

At the national level, asbestos manufacturers collaborated in the development of a bill for asbestos "compensation." This bill, H.R. 2740, introduced originally in 1977 and reintroduced by Congresswoman Millicent Fenwick in the current session of Congress, would bar all damage suits against asbestos manufacturers and the government. Compensation for asbestos

diseases would be solely available through a federal bureaucracy using an expert medical board to evaluate causation. The disability compensation would be limited to something like $8,000 a year, and would be paid by both the taxpayer and the asbestos industry. Without going into a lengthy discussion of the merits, I just want to point out that passage of this bill would greatly lessen the liabilities of the asbestos companies, mainly at the expense of people with cancer and asbestosis. In effect, it would amount to society's seal of approval for the historic business conduct in the asbestos industry.

This somewhat lengthy prologue was necessary to present the reason I am here today. It is for the purpose of prevention of occupational disease, and similarly grave threats to the public. Congressman Miller's bill is the only forward step being taken legislatively in the area of prevention, and with the other preventive structures of regulation and compensation either under attack or already in ruins, this legislation is a vital need in these times.

I have no doubt that if ten people were selected at random anywhere in this country, told the stories of the asbestos industry, the Firestone radial and Fort Pinto cover-ups, and asked for their opinion on H.R. 4973, they would -- all ten of them -- urge its passage. The people in this country would like to see something done about the tendency of America's landscape to resemble a mine field of hidden time bombs.

Investigative Approach: The Education of an Expert Witness

I first delved into the medical literature on asbestos in 1970, as part of graduate training on air pollution. My Master's Thesis was a review of the state of knowledge on the threat of asbestos. Ever since then, I have been involved in struggles to curb worker and public exposure to asbestos. The issues illustrate the ubiquitousness of asbestos contamination: drinking water, table salt, consumer spackling compounds, schoolroom ceilings, Navy shipyards, and filters for penicillin manufacture, to name only a few examples.

For most of this decade, I focused on recognizing and correcting public health hazards directly. In order to choose priorities and pursue these efforts, it was necessary to keep up to date on the advances in our knowledge of the hazards of asbestos: particularly with an eye to the dose-response relationship between exposure and disease risk.

I did not concern myself with what the industry executives had done in the 1930's and the 1950's, because that seemed irrelevant to preventing future problems. It was not until 1976 that I was introduced to compensation.

The plaintiff was the widow of Ivan Johnson, an insulation worker who had died of pleural cancer from asbestos in Beaumont, Texas. Mrs. Johnson was one of the angriest people I had ever met, eight years after her husband's death. She had refused a settlement of $90,000 for the loss of her man, and I was asked by her attorney to present the history of development of medical knowledge to the jury. For this purpose I had brought about two dozen medical papers which a quick review had culled out, papers that, strung together, seemed to tell the story. The jury had already been selected, but just before

the trial commenced the defendants raised their offer slightly and the case was settled.

Later that year, another Texas attorney asked me to write a thorough review of this medical history on asbestos. I spent another 150 hours with the medical index and the articles themselves trying to locate everything published by 1940, and everything significant through 1964. The purpose of the inquiry was to reasonably establish when the makers of asbestos insulation should have known of the mortal hazard entailed in the installation of their products by shipyard and construction workers.

According to a precedent case in Texas federal court, brought by Mr. Johnson's coworker, Clarence Borel, the manufacturers were considered responsible for, among other things, providing warning labels on their products once it was known in medical circles that dust exposure in insulation work was dangerous. The warnings did not start to appear on these products until 1964, the year an epidemiological study was published showing that forty percent of New York insulation workers died of asbestosis and occupation-related cancer.

I submitted a distillate of the published literature on asbestos two and a half years ago to the Senate Commerce Committee, Sub-committee for Consumers, hearings on S.403, on product liability insurance. The wealth of published material convinced me beyond doubt that:

> The as-yet uncounted toll of death and disease is enormous, and it has directly resulted from calculated decisions to promote asbestos sales with the knowledge that workers' and consumers'

> lives would be endangered thereby.

In the past two and a half years, research and discovery involving dozens of plaintiffs' lawyers have revealed many details showing what was known, by whom, and what was done about that knowledge. The inside story is vital in evaluating the role of "company men" in failing to prevent the sacrifice of one million of their fellow citizens, their children, and their children's children. It can only be hoped that the passage of H.R. 4973 would have its intended effect on business executives faced with the choice between treacherous profit and the prevention of harm to the public.

The Asbestos Business

The founder of the modern U.S. asbestos industry was Henry Ward Johns. He patented asbestos roofing products, bought asbestos mines, started making fireproof textiles and insulation, and then something happened that he didn't expect. He got asbestosis and died in a few years, one bleak day in February 1898. We have no way of knowing whether Mr. Johns walked through his factories and noticed his longtime employees suffering the same emaciation, coughing fits, wheezing, and acute shortness of breath that was gripping him. We have no way of knowing what he said and thought when he attended the funerals of foremen of his factories who had died from the dust. We don't even know what his doctors told the sixty-one year old industry magnate he was dying from. We know only that his death certificate lists the cause as "phthisis pneumonitis" (failure of the lungs from tuberculosis or other disease).

In 1906, Dr. Montague Murray in England reported the death of a patient from asbestos fibrosis of the lungs to a parliamentary committee on industrial disease compensation. Murray's report was cited in a 1918 Bulletin from the U.S. Department of Labor Statistics, which called for the investigation of asbestos dust hazards. The Bulletin expressed concern over the industry's growth, noting that insurance companies were already refusing to sell life insurance to asbestos workers. The first case of asbestosis described pathologically in the literature was reported in the British Medical Journal by W. E. Cooke in 1924. As this was followed by other reports, the British Factory Inspectorate decided to survey the industry. The survey, completed in 1930 and reported both in a government report and the (U.S.) Journal of Industrial Hygiene, found asbestosis in one third of all the employees who had been with the industry for more than five years. Regulations for the control of asbestos dust went into effect in England in 1933.

In this country, case reports of fatal asbestosis began to appear in 1930. Even earlier, a foreman in a Massachusetts asbestos factory received disability compensation for asbestosis. By the 1930's, compensation was taken up at the top levels in the industry. The Board of Directors of the Johns-Manville Corporation settled eleven asbestosis cases in 1933 for "$30,000 provided written assurance were obtained from the attorney for the various plaintiffs that he would not directly or indirectly participate in the bringing of new actions against the company."

That same year, Dr. Merewether of the British Factory Inspectorate published a report showing that workers dying with asbestosis had an average survival time of only fifteen years past the start of asbestos work, compared

with a figure of forty years for those dying with silicosis. Merewether reiterated more bad news first reported at a conference in Los Angeles by the British radiologist Sparks: the asbestosis often gets worse, even after people showing the disease are removed from dust exposure. Merewether thoroughly described the disease, and its awful prognosis in light of his many cases, who had died at an average age of forty-one.

From North Carolina, Dr. Donnelly reported asbestosis in asbestos textile mills and warned that, "the protective devices now in use in many plants are most inadequate." And in 1934 the Supreme Court of North Carolina declared that asbestosis was compensable under the Workmen's Compensation Act as an injury "by accident."

The U.S. asbestos industry was not taken completely by surprise. In 1929, they had arranged for a survey of workers with three years or more employment "selected at random," as it was reported. The survey was completed by 1931 by Dr. Anthony Lanza of the Metropolitan Life Insurance Company and his coworkers, but it was not submitted for publication until late in 1934. The survey found that fifty-three percent of the workers had asbestosis by a conservative reading of their chest x-rays, and many others showed clinical symptoms. The galley proofs of the article were sent to the Johns-Manville Corporation and Raybestos Manhattan Corporation by Dr. Lanza. J-M attorney Vandiver Brown sent the galleys on to his legal specialist, George Hobart, in Newark, New Jersey. Mr. Hobart noted that the company was in danger of having asbestosis recognized as a compensable occupational disease in the 1935 session of the New Jersey Legislative Commission. He reported that the company's principal defense against negligence suits was

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the dearth of published medical knowledge on asbestosis. Now that the state of J-M's largest manufacturing plant (in Manville) was thinking of compensating silicosis, asbestosis might be joined in:

> "I, therefore, dislike to have this report suggest that asbestosis might be assumed to be 'similar' to silicosis, either as to the period of time within which it might develop, or as to the dosage received by the lungs, or as to the quantity of dust, etc."

Attorney Vandiver Brown sent Dr. Lanza Hobart's three-page letter suggesting detailed changes, and a cover note of his own specifically requesting that Lanza insert a sentence he had deleted from the original report sent years earlier to the company lawyers. The sentence appeared, word for word, as the main conclusion of the medical report published in January 1935:

> "Clinically, from this study, it (asbestosis) appeared to be a type (of disease) milder than silicosis."

Brown explained to Lanza that "all we ask is that all of the favorable aspects of the survey be included and that none of the unfavorable be pictured in darker tones than the circumstances justify." Lanza made a number of the suggested changes, and asbestosis did not become a compensable disease in New Jersey until 1945.

Asbestosis became compensable in New York in 1935, and an insurance company lawyer wrote that even at top rates some firms were unable to obtain insurance and were moving hazardous work out of the state. It was late that year that the trade magazine Asbestos had the temerity to write to Raybestos-Manhattan President Sumner Simpson for permission to run a first story on

asbestosis and modern methods of dust control. The subject had been raised earlier, of course:

> "Always you have requested that for certain obvious reasons we publish nothing, and, naturally your wishes have been respected."

Simpson sent it on to Vandiver Brown at J-M, commenting that the magazine had been "very decent about not reprinting the British articles." Vandiver Brown replied:

> "I quite agree with you that our interests are best served by having asbestosis receive the minimum of publicity."

The editor of Asbestos magazine wrote again some years later about publishing the results of industry-sponsored animal inhalation tests, still acknowledging that the information was confidential and "nothing should be published about asbestosis in 'Asbestos' at present." This letter is dated March 1939, one week after Dr. E. W. Baader reported in the literature that state insurance carriers in Nazi Germany were compensating lung cancer with even slight asbestosis as a compensable disease.

The industry experiments on animals were conducted at the Trudeau Institute's Saranac Laboratory in Saranac Lake, New York. The lab had started with tuberculosis research and moved on to dust inhalation studies in the 1920's. In 1936, an invitation was sent out to five other companies by Sumner Simpson, Raybestos' President, offering the suggestion of Vandiver Brown and himself that the industry support some research:

> "(W)e could determine from time to time after the

findings are made, whether we wish any publication or not. My own idea is that it would be a good thing to distribute the information among the medical fraternity, providing it is of the right type and would not injure our companies."

Saranac chief and pathologist, Dr. Leroy Gardner, promptly accepted the industry's offer of $5,000, assuring Van Brown that "the results of these studies shall become the property of the contributors and that the manuscripts of any reports shall be submitted for approval of the contributors before publication."

In 1939 and 1940, Brown wrote to Simpson, alarmed that Dr. Gardner was referring to his findings without obtaining the prior consent of his sponsors. A draft version of a 1949 confidential report to Johns-Manville referred to the "outline of a proposed monograph on asbestosis submitted by the late Dr. L. V. Gardner in February 1943. In it he called attention to the high incidence of lung cancer among mice inhaling long-fiber asbestos." Apparently, this outline was submitted to someone who did not wish its publication. (All mention of cancer was deleted from the confidential 1949 report sent to Johns-Manville.)

Owens-Illinois Glass Company got into the asbestos insulation business in 1943, and came to Saranac to test the dust from "Kaylo" insulation for its potential respiratory hazards. Five years later the tests had gone on long enough to produce extensive asbestosis in the test animals. Wrote Gardner's successor, Dr. Arthur Vorwald, to Owens-Illinois research chief Bowes:

"I realize that our findings regarding Kaylo are less favorable than anticipated, it is better to

discover it now in animals rather than later in industrial workers. Thus the company, being forewarned, will be in a better position to institute adequate control measures for safeguarding exposed employees and protecting its own interests." (November 16, 1948)

In 1950, Owens-Illinois safety specialist William Hazard wrote to Dr. Vorwald about his department's plan to issue a brochure on the "health aspects of Kaylo dust," but no such brochure was ever produced. The company hired a team from Saranac to conduct an industrial hygiene survey, completed in the beginning of 1951.

In light of the company's proprietary knowledge, it is interesting to read an April 1952 "exclusive" in The Petroleum Engineer extolling the virtues of Kaylo. The piece, written by Kaylo Division Director of Research, E. C. Shuman, begins with a photo of a refinery in Port Arthur, Texas, where Ivan Johnson and Clarence Borel worked as insulators.

"The story of how this company researched and developed the non-glass insulating material is interesting. It is also an inspiring example of the American Way. Without the vision, resources, and technical know-how of 'big business,' this material would not be on the market today."

The article boasts that applicators appreciate "the fact that (Kaylo) is nontoxic." It also has a photo of a smiling workman sawing up a piece of pipe

covering using a dust-covered Kaylo box as a makeshift work bench. The box bears the advice, "Handle with Care," obviously intended to protect the product against breakage in transit.

Owens-Illinois continued testing Kaylo at Saranac, where the director in 1954, Dr. G.W. Schepers again told company officials the tests showed Kaylo dust was harmful. But after 1953 the largest customer for Kaylo was Owens-Corning, and in 1958 Owens-Corning bought the Kaylo business from Owens-Illinois. The new owner, which had long manufactured fiberglass insulation, a competitive product, had known about the hazards of asbestos insulation even before the product, Kaylo, came on the market.

Back in 1942, Owens Corning was having trouble breaking into the insulation business with a fiberglass product. Asbestos Workers union members complained of skin irritation and demanded extra pay for their discomfort in handling fiberglass. Saranac Lab had tested fiberglass dust for Owens and reported that it caused no significantly adverse pathology. So as articles by Dr. Gardner and another researcher were going to press, the company decided to "take the offense in telling the health story of fiberglass where it would do the most good." The plan was to buy product liability coverage as a means of assuring the union that the product's safety was guaranteed. If this failed to impress, a "weapon in reserve" on the hazards of asbestos versus fiberglass would be used. This 500-page compendium on asbestosis would be used if the union leadership refused to budge on fiberglass, and it would be spread among the union locals. In this way, the company hoped to use the health issue to cut in on asbestos in the marketplace, while at the same time promoting dissention in the union, possibly even bringing about "the overthrow of the present union leadership."

Though the company unfortunately never unloaded the asbestosis issue on the union, Owens-Corning did print up a brochure for employers. This was full of endorsements for fiberglass as a raw material that carried lower workers' compensation premiums than competitive products like asbestos.

So when Owens-Corning went into insulation contracting and then bought the Kaylo business in the 1950's, it should have been no surprise that one immediate result was the filing of workers' compensation claims by insulation workers with asbestosis. Owens was not the only company that both manufactured asbestos insulation and was fighting compensation claims by (contracting division) insulation installers.

One insulation worker in southern California filed a claim for permanent total disability, listing as defendants fifty-four companies he had worked for over the years 1920-1957. Mr. James W. Riley and his widow spent the next four years wresting disability and death benefits from Johns-Manville, Owens-Corning, Armstrong Cork, Philip Carey, and Fibreboard, all of whom were manufacturing products that had caused Mr. Riley to die from asbestosis. When I examined the claim file on Mr. Riley at the state's offices, it turned out to be nine inches thick and included one notice of a 1961 hearing on "penalty for wilful failure to pay compensation and death benefits."

A large number of claims have been found against Armstrong Cork, a company that admits to having been served ~~eighteen~~ disability claims for asbestosis before starting to manufacture an asbestos insulation product used by its contracting units, in 1956. One of the earliest claims was filed by Mr. Richard Rothwell in 1952. Dr. Harriet Hardy, a respected industrial disease expert, asserted at compensation hearings in Massachusetts that Mr. Rothwell's lung cancer was caused by asbestos insulation dust. On the 1953 claim of Floyd Hyatt, Armstrong went all the way to the Florida Supreme Court to avoid paying compensation for asbestosis on a technicality.

Though few compensation records from before 1960 have been preserved, medical reports of insulation installers being compensated for asbestosis date from the 1930's in the U.S., Germany, and Finland.

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In the 1940's Johns-Manville periodically sent lung sections and chest X-ray films to the Saranac Lab in hopes of getting reports to evaluate compensation claims by asbestos workers. Rose Bertogliat, a widow of a Johns-Manville plant worker in Illinois, approached the company seeking compensation for the occupation-related death of her husband. Sections from Dominic Bertogliat's lungs were then sent by the company to Dr. Vorwald, who concluded that Mr. Bertogliat must have suffered "considerable respiratory difficulty" with his asbestos-torn lungs. Johns-Manville headquarters safety engineer Hugh Jackson wrote back that he was "particularly concerned that the type of exposure to which Mr. Bertogliat was subjected should produce the evident results." He continued:

> "To our way of thinking, although he had worked in the general area for a number of years, the degree of exposure was relatively slight. That is, he was subjected not to a concentrated exposure of any particular part of the process but rather only to that of the general atmosphere. Since there are numerous others who also have this type of exposure, I would appreciate your opinion as to whether Mr. Bertogliat might have had some individual susceptibility to the asbestos irritation and/or whether we should anticipate others with similar exposures to be similarly affected."

Dr. Vorwald replied on August 13, 1948, that "I can see no other alternative than to anticipate others with similar exposures to be similarly affected."

It must have been clear to Dr. Vorwald that the company was most pleased with negative findings. In all of Dr. Vorwald's archives, there is only one letter signed by Vandiver Brown, who was by 1949 ensconced in Johns-Manville's Executive Offices. The letter included payment of $90 for evaluation of two workers' chest X-rays, in 1949.

> "I was pleased to note your findings confirm our own belief that these men were not afflicted with any occupational dust diseases."

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Cancer

As the present medical director of Raybestos Manhattan has written,

> "Merewether (1949) first demonstrated a clear-cut association between asbestosis and lung carcinoma."

Dr. Merewether's data was quickly picked up in an editorial in the Journal of the American Medical Association. And Merewether himself also published a paper in the Canadian Medical Association Journal.

This last item was immediately spotted by Dr. Kenneth Smith of Johns-Manville, who would later become corporate medical director. He expressed his concern in a note to Dr. Vorwald, who was on his way to an international pneumoconiosis conference in Australia. Vorwald said he'd have a word with Dr. Merewether in Sydney.

Merewether's Canadian article included his statistic that, of 235 people dying in the U. K. with asbestosis, 31 (13.2%) also had cancer of the lung and pleura. This was contrasted with a 1.32% lung cancer rate with silicosis, and a 1.0% rate in the general population. In addition Merewether wrote:

> "It can be said with certainty, however, that a few months exposure to silica or asbestos dust in gross ... concentrations will inevitably cause death."

Vorwald wrote to Smith that the article was a "dilly and, as you do, I take strong exception to some of his statements." But Vorwald's real pitch was for further study funds.

"Paul (Cartier, physician at a Quebec asbestos mine's clinic) tells me of another storm which is brewing, this time concerning a case of asbestosis with cancer. I am most anxious to get in with the survey of all data available on the subject before the storm really breaks. <u>"As you know, fishing is always best just before rather than immediately after the storm."</u> (emphasis added)

Johns-Manville's plant worker Vernon Hall died later that month with lung cancer, and Hugh Jackson at corporate headquarters was apprised of the possibility that a compensation claim might be brought against the company.

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In November, 1950, the Quebec Asbestos Mining Association approved a request from Saranac for funds to do both epidemiological and animal inhalation investigations to see if asbestos caused cancer of the lungs. The animal tests cost $36,000 for two years of work. Approval was granted in a meeting attended by QAMA lawyers Ivan Sabourin and longtime Johns-Manville consultant, Dr. Anthony Lanza. The only trace of the animal study is an interim confidential report in 1952, in which Vorwald reported an excess of pulmonary cancer in mice exposed to asbestos dust for 14 months. No final report has ever been found. There was similar concealment of the epidemiological findings.

Dr. Cartier in Quebec had autopsied 53 asbestos miners, among whom 10 had lung cancer. He presented this table of results at the Seventh Saranac Symposium in 1952, proceedings of which were never published.

Comperative Incidence of Pulmonary Cancer in 2 groups of 53 Autopsied asbestos workers

	Group I Employees with Asbestosis	Group 2 Employees without Asbestosis	Total
Number Autopsied	34	19	53
Number of Pulmonary Cancer	4	6	10
Percent in Each Group	11.7%	31.5%	

From these results, one might think there was a high risk of cancer in the asbestos industry, a risk that extended to the employees with moderate as well as heavy exposure. But rather than consider this obvious point, Cartier concluded,

> "(T)his table does not reveal a statistical evidence of a causal relationship between asbestosis and cancer." (emphasis added)

In a paper presented in 1953 and published in 1955, Cartier reported that, of 40 miners with asbestosis that he had autopsied, 6 had had cancer of the lung. Without publishing a figure for the number of non-asbestotic workers autopsied, he said there were 7 other lung cancers among non-asbestotics. He alluded to a general industry survey, never published, which did not seem to indicate "a causal relationship." Playing a

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semantic game he described the role of the "asbestotic fibrosis" as "questionable" in the causation of cancer. Again, he walked wide around the frightening implications of his data, which showed that Canadian asbestos was quite a carcinogenic substance. This would have been clear if Cartier had revealed the proportion of lung cancer among non-asbestotics, which we now know was on the order of 30 percent.

No one in the industry was fooled by Cartier's published conclusions, least of all the cunning lawyer of the Quebec Asbestos Mining Association. Minutes of his September, 1955, presentation to members of the Asbestos Textile Institute, were recorded by Johns-Manville's Hugh Jackson:

> "Mr. Sabourin stated that the present major health problems of the industry pertained to the relationship of heart difficulties and cancer to asbestos exposure." Sabourin was accompanied by Dr. Cartier, himself, at the meeting.

Cartier's 1953 presentation on asbestos miners was hosted by Professor Anthony Lanza at New York University. One of Lanza's young associates, Dr. William E. Smith, approached Lanza about that time to test inhaled asbestos on rats for its cancer properties. Shortly before he was fired, Dr. Smith was told by Lanza that scientists looking for industrial causes of cancer were "trouble makers."

Having supported studies on men and mice that both yielded evidence of the carcinogenic effects of asbestos, industry enthusiasm for further research dissipated. Dr. Vorwald was fired by the Saranac Laboratory. He was replaced by Dr. Gerrit Schepers, who did not know of Vorwald's cancer study on asbestos. Dr. Schepers proposed that the Asbestos Textile Institute support carcinogenicity tests on asbestos and was turned down. In 1957 the laboratory folded.

There was still one place left for conducting confidential studies: The Industrial Hygiene Foundation, originally the Air Hygiene Foundation. It was set up by a cross-section of represenatives of American industry. (In the words of Vandiver Brown of Johns-Manville "(I)t is ... the creature of industry and is the one

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institution upon which employers can rely completely for a sympathetic appreciation of their viewpoint.") In 1947, I. H. F. did a medical and industrial hygiene survey for the members of the Asbestos Textile Institute (ATI) in 1947. The study found a continuing incidence of asbestosis and dust levels exceeding the lax guidelines recommended by the Public Health Service in 1938. (The textile mill owners fired 150 workers, most with asbestosis, just before the PHS showed up.) The author recommended that the industry assemble the best possible medical brains in a major effort to bring the asbestosis problem under control. Though the author called this industry-wide, confidential survey a "preliminary dust investigation", I. H. F. was never invited back to those plants.

After Saranac's cancer study proposal was rejected by the industry ("ill-advised ... due to its implication that a relationship existed between asbestos and carcinogenic development, a condition which has not been established although it has been given rather widespread publicity in the press"), I. H. F. decided to approach two asbestos company associations, ATI and Quebec Asbestos Mining Association, on a cancer epidemiology study. I. H. F. Director Daniel Braun sent excellent summaries of the cancer literature to Johns-Manville safety chief Hugh Jackson, as well as more lengthy reviews to the trade associations. The ATI members, thus informed that a recent study in England showed a very high lung cancer rate in asbestos textile workers, rejected the study proposal by a 6 : vote. From ATI's minutes in 1957:

> "There is a feeling among certain members that such an investigation would stir up a hornet's nest and put the whole industry under suspicion."

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After assuring a study design and method of analysis most likely to produce negative results, the Asbestos Mining group bought the idea of a cancer study. As usual, the survey was sent back to its sponsors for final review. Johns-Manville's Medical Director Kenneth Smith reviewed the draft with Hugh Jackson, and sent on recommended changes via Quebec attorney Sabourin. The study was published in 1958, and in the introduction it noted, "Perhaps no one has written so extensively on the subject as Hueper." Dr. Wilhelm Hueper at the National Cancer Institute, who had written about the carcinogenicity of asbestos since 1943, denounced the I. H. F. report as "statistical acrobatics which tend to obscure incriminating evidence."

We can only wonder what the President of Johns-Manville had in mind when he addressed his fellow industrialists at a 1955 meeting of the Industrial Hygiene Foundation with these words:

> "Years ago industrial research was unconcerned about problems of health and safety that might be involved in a product. When the product was developed, it was put on the market. Today our industrial research organizations probe into every health hazard. And every safeguard is insisted upon before the product is marketed to the consumer. A number of companies have established research organizations and laboratories for the sole purpose of eliminating health hazards that might injure the consumer. Some companies have granted fellowships for this specific purpose. And industry has inspired, to a very great extent, the movement to label properly certain types of products that might harm the consumer if he were not forewarned."

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Johns-Manville did not put caution labels on sacks of asbestos until 1968. No asbestos products are alleged by manufacturers to have carried warning labels until 1964 and later.

By the late 1950's there were regular meetings of the compensation committee at Johns-Manville's huge New Jersey plant. At these meetings were Medical Director Ken Smith, plant engineer Cliff Sheckler, Nurse Hahn, and a couple of others. Some exerpts of their notes:

Sigmund Skirzenski, age 52, advanced pneumoconiosis

Sheckler: Should we change him.

Smith: Won't make any difference. Do not transfer, retire if necessary.

Alphonso Desantis, age 50

Hahn: Should these men be advised?

Sheckler: We can put transite pipe out of business from this list alone.

John Hudak, 58, moderately advanced pneumoconiosis

Smith: Has he been counseled?

No.

Smith: I see no reason to bring in a man like this it is dangerous.

Anna Blanik, 49, moderately advanced asbestosis

DuBow: She is very nervous. If she is called in, she will get hysterical and I am sure you will have a claim on your hands.

Hahn: If she is transferred to another job, wouldn't that also precipitate something?

DuBow: Mrs. Blanik is working with no complaints. It is one year since she was (health counselled).

Smith: As a doctor, you can't leave her where she is today.

DuBow: Taking her off the job will not change things. The damage has been done.

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Stella Krzesewski, 41, moderate to advanced asbestosis

Sheckler: No health counseling

Patsy Infante, 53, 33 years in asbestos

Getter: Records indicate asbestosis in 2/51. Man was advised about dust in his lung in 1/55.

Workers at Manville describe the conditions in the 1950's as extremely dusty. Ted Kowalski, who is a leader of this community's victims of asbestos, used to saw the butt ends off of molded pipe insulation. The dust was so thick he couldn't see acorss the room: The air pollution from the factory covered the town with asbestos dust. The Manville asbestos workers' group is still struggling to bring New Jersey's compensation laws up to a minimum level of decency. These plant workers have no alternative to workers' compensation, and their employer's failure to tell them when their examinations showed occupational disease cannot even be litigated, let along used to demand punitive damages. At the January, 1960 meeting of the National Insulation Manufacturers Association somebody raised the idea of a health program. By this time, the industry leaders were busily fighting compensation claims from insulation workers in their contracting divisions. The idea was dropped at the Manufacturers' meeting that May, at a Florida beach resort. Of all the asbestos products ever marketed, the one that accounts for the greatest toll in exposure and disease is undoubtedly insulation, dust from which was daily breathed by millions of shipyard and construction workers.

A major producer of asbestos insulation was Philip Carey Manufacturing Company. In 1962, at the recommendation of consulting actuaries, Carey hired Dr. Thomas Mancuso for a medical survey of their manufacturing plant. It was initially hoped that:

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"From the claims standpoint, Dr. Mancuso, as a nationally accredited expert, can help us differentiate an expensive asbestosis or silicoisis case from non-occupational illnesses such as cancer and bronchitis, and make the defense stand up."

The author of this prediction was Louis A. Pechstein, Assistant Secretary of the company. Mr. Pechstein is now an official with the company that bought Carey in the early 1970's, Celotex Corporation.

Dr. Mancuso did a thorough survey of conditions at the plant and recommended extensive changes, not only inside the plant but in terms of consumer warnings and air pollution control. These recommendations were couched in terms of promoting public and consumer relations while avoiding lawsuits and compensation claims.

By mid-1963, Dr. Mancuso presented the company with the first report of Dr. Selikoff, showing the very high death rate from cancer and asbestosis among insulation workers. He advised that the officers and managers of an enterprise might be sued by their own employees for not providing a safe place to work.

Reporting the results of a conference with Mr. Pechstein and others, Dr. Mancuso submitted a confidential report to management on September 23, 1963. The report was full of specific recommendations to clean up the plant, control air pollution, and provide advisory services to product users. By this time, Mancuso appears to have realized that his advice would be rejected.

"Internally, within the company, the question has been raised as to why medical problems, particularly relating to cancer and asbestos, were not recognized before. Actually, they were recognized, but the asbestos industry chose to ignore and deny their existence."

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This company continued manufacturing asbestos insulation products without even attaching warning labels, until 1971.

Dr. Kenneth Smith testified in 1976, shortly before his death, that he'd recommended the use of warning labels on Johns-Manville asbestos back in 1952:

"The reasons why the caution labels were not implemented immediately, it was a business decision as far as I could understand. Here was a recommendation, the corporation is in business to make, to provide jobs for people and make money for stockholders and they had to take into consideration the effects of everything they did and if the application of a caution label identifying a product as hazardous would cut into sales, there would be serious financial implications. And the powers of be had to make some effort to judge the necessity of the label versus the consequences of placing the label on the product."

It would appear that the company's decision had been made some years before. Starting in 1947, and continuously until the insurance carriers bailed out on Johns-Manville in 1976, the corporation purchased a total of $364,000,000.00 in product liability insurance coverage.

What can we conclude from all this?

1. The entire asbestos problem of today is man made.
2. The concealment of medical facts and reckless indifference to the growing threat represented by the rising use of asbestos involved every major firm in the industry.

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Specifically:

a. The delayed publication of Lanza's 1935 industry-sponsored medical survey, critically weakened by editorial changes requested by Johns-Manville attorney Vandiver Brown representing his firm and Raybestos-Manhattan Corporation President Sumner Simpson.

b. The suppression of any mention of asbestosis in the U. S. trade journal, Asbestos, throughout the 1920's and 1930's.

c. Five asbestos companies, including Johns-Manville and Raybestos-Manhattan, contributed to inhalation experiments on animals with asbestos dust, but the scientists at Saranac were not allowed to publish any of their findings unless approved by Vandiver Brown. Studies implicating asbestos as a carcinogen were suppressed.

d. Even after receiving a report (1948) that Kaylo dust caused asbestosis, and having Saranac personnel conduct industrial hygiene surveys of the Ohio plant where Kaylo was produced (1951), Owens-Illinois continued to push the product as "non-toxic" in trade magazines (1952).

e. Owens-Corning, which had used the health issue against asbestos in the 1940's went into asbestos insulation contracting in the 1950's and bought the Kaylo business in 1958. Despite the longstanding knowledge of asbestos insulation dangers both in Owens-Corning and its new subsidiary, and despite mounting compensation claims by insulation installers in the 1950's, the company made no effort to inform insulators of the dangers and the measures to take to reduce exposure to the deadly dust.

f. Johns-Manville management rejected the proposal by Dr. Kenneth Smith to affix warning labels to asbestos in 1952. This despite the company's discovery in 1948 that one employee died of asbestosis from just breathing the general atmosphere inside their Waukegan, Illinois plant.

g. Johns-Manville's management held regular meetings at the large Manville, New Jersey plant, to consider health problems and avert workers' compensation claims (1957-1958). Their notes show that the workers were routinely kept in the dark about the company doctors' diagnoses of asbestosis. A John-Manville plant manager in California, Wilber Ruff, has testified that the company had a policy until 1971 of not telling workers if their biennial company physical showed signs of dust disease.

h. The Quebec Asbestos Mining Association sponsored an inhalation test of asbestos on mice, at Saranac in 1951-52. The preliminary findings of these tests, never published, were positive, in a 1952 report to QAMA. The same year that industry doctor Paul Cartier published figures purporting to show no cancer hazard in asbestos mines, QAMA's lawyer informed the (9/55) meeting of the Asbestos Textile Institute that cancer was a major problem in the industry.

i. ATI's members rejected proposed cancer studies from Saranac Lab and Industrial Hygiene Foundation in 1956-57. QAMA supported a short-term follow-up, mortality study of asbestos miners, published by I. H. F. researchers and roundly denounced for design biases by Dr. Wilhelm Hueper and Dr. Thomas Mancuso.

j. Armstrong Cork had a large number of compensation claims (for asbestosis and cancer, starting 1952) from insulation workers hired by its

contracting division. Yet Armstrong had long been repackaging asbestos insulation and then manufactured its own starting in 1956, with no warning labels and no attempts to advise workers of safest work practices.

k. Compensation claims by insulators were also being paid by Johns-Manville and Philip Carey Manufacturing Company in the 1950's. They continued to manufacture asbestos insulation with no attempts to warn of the danger, or conduct studies on the exposure and fate of insulation workers.

l. The National Insulation Manufacturers Association rejected the idea of setting up a health program in 1960. Member firms included major producers of asbestos insulation. The corresponding British manufacturers group (Thermal Insulation Contractors Association) had requested 70 copies of government warning on the health hazard of asbestos in shipyards in 1945.

m. Dr. Thomas Mancuso, whose study of asbestos workers published in 1963 showed an excess of cancer, was hired by the Philip Carey Manufacturing Company to conduct an industrial hygiene and medical survey of the Carey plant making asbestos insulation. He recommended continuous industrial hygiene oversight for the plant workers, the compilation of health and autopsy data for studies, and the development of a multi-faceted customer advisory effort on the health hazards. The responsible company officials, including Louis Pechstein, who had hired Dr. Mancuso, apparently disregarded much of this advice. Carey asbestos insulation was sold for the next 7 years without warning labels.

Some of the worst of these activities would be addressed by H. R. 4973. Individuals who profit by murder would be punished for wantonly endangering the people in this country. It was never the "American Way" to sell death in Kaylo boxes and call the stuff non-toxic. If we want to prevent that business from continuing, the rules of the marketplace will have to be changed. Those who conceal deadly truths from their workers and customers are almost never confronted personally with the fact that they have committed a monstrous crime. My own feeling is that no one in the executive suites would lightly risk imprisonment and humiliation for a quick buck.

Other Industries

The asbestos industry is subject to the same rules of the marketplace as many other businesses, and it does not operate in a singular manner. Concealment of knowledge of cancer hazards has also occurred in the chemical industry. Witness the policy of the DuPont Company, as privately explained by the corporate medical director in 1949.

DuPont had very high rates of bladder cancer in its dye workers, something quite common in industry despite the longstanding recognition of the cancer hazard in making aromatic amine dyes. But in 1948 DuPont Medical Director Dr. Gehrmann presented a paper to the effect that all the cancer was caused by one dye intermediate, which they were phasing out (beta-naphthylamine). At least two listeners were surprised to see another intermediate, benzidine, declared non-carcinogenic. These doctors, representing the British government and the biggest British dye producer, came to visit DuPont in 1949. In the course of this, Dr. Gehrmann confided to the other company doctor that DuPont realized

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benzidine was carcinogenic, but that it was company policy to blame beta-naphthylamine for all the workers' deaths. DuPont discontinued handling beta-naphthylamine in 1955, but did not stop making benzidine dyes until 1973.

The full particulars are included in the following articles from The Washington Post and a letter from Dr. Robert Cate, who was the British government physician who witnessed the confession of Dr. Gehrmann.

TESTIMONY OF BARRY CASTLEMAN, ENVIRONMENTAL CONSULTANT AND ENGINEER

Mr. CASTLEMAN. Thank you, Mr. Chairman and members of the committee.

Mr. Miller has covered many of the things that are in my statement, and I'll try not to repeat any more than I have to.

My own background is in the area of preventing occupational disease, environmental disease; and I have, for many years, hoped to see this done the most direct route through a regulatory process. And in the 1970's I think we have all been disappointed that the regulatory process hasn't worked as well as we had hoped, and that only the really worst of the problems seem to be handled by the regulatory process; and even these are tied up in lengthy litigation. And, so, those of us who are concerned about prevention have learned other methods less direct.

I became involved in compensation matters in 1976. I was approached by attorneys representing people who had asbestosis, had cancer, and they asked me to present for trial the history of the development of the knowledge of asbestos disease so that juries could see for themselves how long some of these things had been known.

And it was at this point, around 1976, that I started to take a very strong interest in the historical literature, which I had not really looked at before. Because when you talk about direct prevention, the historically literature doesn't seem very preventative; you need to know what is the state of the art today.

And, so getting into this, I have been positively amazed at what was known and what was covered up. Let me give you a couple of examples of this, with it in mind that the legislation proposed by Mr. Miller would directly address this sort of thing.

There was a laboratory called the Saranac Laboratory set up at the beginning of the century that was originally set up for tuberculosis research. Later on they started doing work on silicosis, and then they started testing industrial dusts.

By 1938 you have a list of the contributions to the Saranac Laboratory: the Portland Cement Association, Johns-Manville, Lake Superior Minning Assocation, Inland Steel—others. And this was a laboratory for experimenting on animals, using dust that was used in industry to see whether these dusts were dangerous when inhaled, whether they would cause adverse pathology on the lungs of the animals.

Now, the asbestos industry had contributed to the Saranac Laboratory starting 1937, and in the course of litigation it has come out that the Saranac Laboratory had an actual contract with Johns-Manville and four other companies to not publish any of the findings until they met the editorial scrutiny of the lawyers of those who were supporting research. It has also come out that a number of studies were suppressed. There was a study in 1943 submitted to the sponsors, which had to do with finding tumors in animals. There was other work in 1945 showing damage to the lungs of cats inhaling asbestos, and, according to Dr. Harriet Hardy, the director of the laboratory had tears in his eyes when he told her Johns-Manville wouldn't let him publish any of that stuff.

In 1952, the Saranac Laboratory did an inhalation study and found in its interim report, at 14 months, an excess of cancer in mice exposed to asbestos. A final report has never been found; the interim report was never published. It was only discovered recently in litigation.

The story of Kaylo is worth special attention. Saranac Laboratory started testing in 1943 a product called Kaylo. It was an insulation product, one widely used. It contained asbestos and hydrous calcium silicate. And in 1948 the director of the Saranac Laboratory wrote to Owens-Illinois and explained they had found that asbestosis was caused by the inhalation of Kaylo dust. And this was not asbestos dust, but the dust of the actual insulation product. And the conclusion of the letter says:

> I realize that our findings regarding Kaylo are less favorable than anticipated. However, since Kaylo is capable of producing asbestosis, it is better to discover it now on animals rather than later in industrial workers. Thus, the company, forewarned, will be in a better position to institute control measures for safeguarding exposed employees and protecting its own interests.

Now, this letter was sent to the company on November 16, 1948. In 1950, a letter from the files of the Saranac Laboratory on Kaylo acknowledges receipt of such material and mentions the idea of putting together a brochure warning about potential hazards of this insulation.

No such brochure was ever issued by Owens-Illinois. But in 1952, we have an article in the Petroleum Engineer where Owens-Illinois is advertising its product to the oil industry; and they say some remarkable things in here.

First of all, they have a picture of an applicator sawing the pipe insulation. And I would like for you to see the original article, because photocopies are not terribly good for seeing the dustiness. Your have this guy standing there smiling, not wearing a respirator, sawing up a hunk of this pipe covering with dust all over the place. He is using the Kaylo box as a workbench, and the only warning on that box is "handle with care," which is obviously intended to prevent the breakage of the product in transit; there is no warning about the danger of breathing the dust or working in a place where you are continually filling it with dust by sawing off the lengths of pipe covering to fit the various configurations of pipe in a power plant or any other place.

They talk in that article about the applicators being fond of this product because it is nontoxic; and that is an out-and-out lie. This article is published under the name of the director of research of the Kaylo division of Owens-Illinois who certainly knew that the

extensive innovations of the plant, to which he refers in his article, has a lot to do with industrial hygiene. But there is no mention that the dust of this product is deadly.

Mr. CONYERS. Without objection, we will accept into the record the company documents that relate to that statement.

Mr. CASTLEMAN. Thank you.

[See appendix.]

Mr. CASTLEMAN. I also have a copy of the confidential reports from the Saranac Laboratory to the Quebec Asbestos Mining Association, called "Asbestosis and Pulmonary Cancer," to which I have already referred.

Now, another amazing case of concealment occurred in the early 1960's. The Philip Carey Manufacturing Co., facing a number of workmen's compensation claims, hired a reknowned medical expert, Dr. Thomas Mancuso, and asked Dr. Mancuso to conduct industrial hygiene and medical surveys of the manufacturing operations where they were making an insulating product with asbestos, and to make recommendations for them that would reduce, among other things, their compensation costs associated with the manufacture of this product.

When Dr. Mancuso was hired, Louis Pechstein who was then assistant secretary of Philip Carey, announced, "From the claims standpoint, Dr. Mancuso, as a nationally accredited expert, can help us differentiate an expensive asbestosis or silicosis case from nonoccupational illnesses such such as cancer and bronchitis, and make the defense stand up."

I think these people didn't fully appreciate the fact that Dr. Mancuso would tell them what he thought, even though they were paying for his services. In 1963 Mancuso published an article showing that in asbestos manufacturing there was excess rate of cancer among the workers.

Well, Mancuso surveyed the plant and started submitting reports in 1963. Mancuso urged them not just to have full-time industrial hygenists in the plant, and to clean up all hazardous conditions existing there, but to, in addition, undertake to control the air pollution from that plant or it might cause cancer in the neighborhood, and the neighbors might sue.

Mancuso also urged that they conduct a program to warn the consumers of the product, that this was a dangerous product, and that certain use practices should be followed, obvious housekeeping measures that you would follow if you knew that the dust was a danger, like wetting insulation when you saw it, wearing a respirator, and things like that.

Well, none of this was done. This product was manufactured, according to the best information I have, until 1971 without so much as a warning label. And you may wish to question some of the people included in my testimony who are still alive, such as Mr. Pechstein and Hugh Jackson of Johns-Manville, and ask them if the existence of legislation such as has been proposed by Mr. Miller might have altered their actions at the time, might have altered perception of what was going on at the time in such a way that it would have benefited many of the people using their products.

Mr. CONYERS. That is an excellent suggestion. Mr. Ashbrook thought that we might want to follow up on it.

Was Dr. Mancuso's recommendation, in your judgment, appropriate and adequate in terms of his relationship to the company?

Mr. CASTLEMAN. Yes.

I have only the highest regard for Dr. Mancuso. He has a long, distinguished career in occupational medicine.

Mr. CONYERS. With no objection we will enter into the record at this point the Mancuso report.

[See appendix.]

Mr. CASTLEMAN. Well, Congressman Miller has already mentioned a number of the cases of out and out concealment, of the suppression of medical findings of asbestosis in plant workers by the Johns-Manville Corp., Johns-Manville's rejection of its own medical director's advise to label the product with asbestos as hazardous, for what the medical director testified in deposition shortly before his death were sales reasons.

These are cases of concealment which would be addressed in the bill. There are others, though.

In my written statement I also mentioned the case of duPont. I think there's something to say here about the asbestos industry; they're obviously subject to the same market constrains and rules as other industries, such as members of the chemical industry. You have mentioned the idea of reckless indifference, and I'd like to at least cite a few examples, of reckless indifference that you might wish to cover at something with criminal sanctions. I've spent quite a lot of time going around looking for old workmen's compensation claims involving manufacturers of asbestos insulation.

Some of the attorneys with whom I was working, who represented plaintiffs, believed that there were probably a number of such claims against the manufacturers because the manufacturers were also in the business of bidding on contracts. And, so, they would bid on a power plant job, or shipyard job, construction job; and if they got the contract they would go down and hire a bunch of insulation workers. They would do the job, using their own products. And if these guys got asbestosis, they would make workmen's compensation claims; and if it was a State like California, they would have to name as defendants, all the companies that they worked for handling asbestos. And the one that I brought in is the case of James Whitcomb Riley, of California; he listed 54 companies—contracting companies, manufacturing companies, and their insurance carriers.

This man filed for compensation in 1957. I believe all of these companies were making asbestos: Johns-Manville, Philip Carey, Armstrong Cork, and Owens-Corning. These companies were defendants in this action. And there were a number of others, and the companies were fighting these compensation claims.

Mr. Riley's claim file must have been about 9 inches thick. It is full of motions of change of hearing dates, medical records. There isn't any way you could assume that the defendant companies just wrote a check and paid him off without thinking about what this expense was really all about. There are a number of claims like this.

Now, how anyone can go manufacturing a product like that, without even affixing warning labels, while paying total disability and death benefits to people who use the product is something you may wish to consider when it comes to reckless indifference. Such conduct may or may not be directly attributable or assignable to a member of the board of directors.

Mr. CONYERS. Well, these was no OSHA, there was no legislation requiring reporting, and there is no federal statute on law of endangerment. Those would be my three likely reasons to suspect why the corporations felt no obligation to do more than pay off the counterclaim when and if it could be proven.

Mr. ASHBROOK. What is that date again?

Mr. CASTLEMAN. The claim was filed in 1957, and the disability and death benefits were ordered to be paid, starting in 1959.

Mr. ASHBROOK. That was about the time between 1957 and 1959, when Mr. Fleming found something wrong with cranberries. They probably were spending more time on that than they were on these.

Wasn't it Thanksgiving about that time when none of us were eating cranberries because there were problems with them?

Mr. CONYERS. Without objection we will incorporate into the record the documents of Mr. Riley's claims and file which detail the witness' discussion.

[See appendix.]

Mr. CASTLEMAN. There were 14 pages of workmen's compensation claims for asbestosis yielded up by the Armstrong Cork Co. in this litigation, some of which go back to the early 1950's, and many of which predate 1964, when warning labels first started to appear on these products.

Mr. CONYERS. Mr. Castleman, do you have any larger conclusions in terms of where we are in trying to control and get an orderly handle on the whole question of these massive numbers of cases?

Clearly, with these reporting requirements as recommended, and perhaps other legislation, there are and will be even a larger number coming forward.

In light of difficulty under OSHA procedures, do you have any wider recommendations to suggest?

Mr. CASTLEMAN. Are you talking about how to handle the approaching caseload of chemical diseases as a result of past exposures?

Mr. CONYERS. Right, and the present ones that will come about if we get this reporting system set up. In my mind it is clear that if everybody starts reporting there will be an even larger number than there have been.

Mr. CASTLEMAN. Well, if you're reporting it directly to your workers, that is something that cuts through just reporting it to the Government, which directly arms the workers with at least some means of taking steps to protect themselves. And I understand that this would be required, too, if the hazard extended to the workers of the company that developed the information.

And it is true, OSHA and the Environmental Protection Agency Office of Toxic Substances are, at this point, already overwhelmed with the information that they have to process.

But by making knowledge available to the customers of the product and workers at the same time as the Government, it is bound to do some good. And, also, I would suppose that State governments would pick up on information as well as the Federal Government, and may, in turn, take steps that would be quicker than the Federal Government's action.

As far as the approaching clinical disease problem, the problems of asbestos in the past, the outlook is not good at all. The litigation for compensating these people is an extremely arduous thing, too.

I was involved in a case in Miami, testified as an expert witness in a damage suit involving an asbestos company in May; and that case had been filed in 1975. Such delays make it very difficult, I think, for a lot of these people to go on.

Mr. CONYERS. Do you feel that there could be some substitutes for some of this obviously dangerous material that is used?

Are the corporations up against the wall and have to choose between trying to fight off compensation claims when and if they are discovered or not move their products forward, or are there alternatives that are yet to be examined?

Mr. CASTLEMAN. There definitely are.

There is a report by Oliver Bowels of the Bureau of Mines that I came across, dated 1955, that said hydrous calcium silicate as a substitute for asbestos had been around for 10 years commercially; and this is, from all I can tell, the same product which is now used in place of molded asbestos pipe covering. This asbestos was banned by the EPA in 1975, and it was obviously substituted for long before then.

Mr. ASHBROOK. Excuse me. The product ban was substituted, or the asbestos?

Mr. CASTLEMAN. The asbestos was banned in molded pipe covering in 1975, but obviously it could have happened a lot sooner. The state of the art appears to have been that asbestos could have been eliminated from pipe-covering materials 30 years sooner.

Asbestos is widely used in brake products—brake linings, brake shoes—and now there are breakthroughs being made by General Motors and Raybestos-Manhattan which appear to open the way to making these products without any asbestos in the next few years.

Mr. CONYERS. Are you near a conclusion so that I can open this up to questions by my colleagues on the subcommittee?

Mr. CASTLEMAN. Yes.

I would just like to say that the threat of asbestos has really engulfed us all. It is hard to find anybody who hasn't been exposed to asbestos pollution in drinking water, asbestos in dry-wall spackling compounds, asbestos in ceilings in public buildings, in schools, asbestos in shipyards, where many people work. This is something that has been let loose on us all. It is out and it is very difficult to get back in any kind of a controlled situation.

And this happended in a very calculated way. My written testimony goes into industry rigging of the medical literature going back to 1934. There is suppression of knowledge of asbestosis in trade journals in 1935, and so on.

My feeling is that if I had 15 minutes to tell the story to any 10 people chosen at random off the street, that all 10 of them would tell you to please put this legislation through so that this sort of

activity would at least have some deterrent that it doesn't now face in the marketplace.

Mr. CONYERS. Thank you. From what you have said, many of those 10 might also be affected by it.

Mr. CASTLEMAN. Yes.

Mr. CONYERS. I don't remember ever being tested for this.

How do we alert the general public who may not be working in Johns-Manville? It may not occur to them that they could be in danger.

What kind of precautions are recommended to the general public?

Mr. CASTLEMAN. There are very few precautions that you can take once you've been exposed; once you've got the fibres trapped in your lungs, there is very little that can be done. There seems to be some medical evidence that if you quit smoking and live 5 years after you have quit smoking, that from that point on your risk of getting lung cancer seems to go down. But there are other cancers caused by asbestos, mesothelioma for example, which are defintitely not associated with smoking habits but which are principally associated with exposure to asbestos, and which are showing up in people with what you might consider minimal exposure—people who are family members of asbestos workers who only got the dust that was brought home on a worker's clothes, or people who were neighbors of the Brooklyn Navy Yard, or, in one case, Mr. Miller referred to a Johns-Manville plantworker who died by asbestosis just from breathing the general atmosphere in one of Johns-Manville's plants. Johns-Manville went to the Saranac Lab and found that that was so, because they were trying to fight a compensation claim. It was in 1948.

Well, one of the people that I represent is a woman who worked in a plant as a secretary where they sawed up asbestos and made panels from 1940 to 1955, all of which came from Johns-Manville, and she was also exposed to the general environment, the general atmosphere, of the plant where asbestos products were being fabricated.

The failure of the company in providing a warning to their employees had the direct result of this woman getting a terrible form of cancer.

Mr. CONYERS. This could be terribly demoralizing to scores of thousands of people who are working in this environment in the industry who, I presume now, are beginning to raise this question in terms of what their employers are doing about it.

Is that, in fact, going on?

Mr. CASTLEMAN. Well, my own experience with high-risk follow-up is that it is not very popular among employers. I was working for the Congress' Office of Technology Assessment, and one of the things that I recommended action on was the notification of people who are now recognized to be at high risk of getting some specific types of cancer from some chemical agent they worked with in the 1960's which we identified, say, 2 years ago as a lung cancer agent. And there are certain types of screening one might be able to do to detect that early, in high-risk populations.

And I can tell you this didn't go over very well with the industrial representatives on the panel who were top executives from

Exxon and Fairchild Camera. We're talking about very large liabilities and the unwillingness on the part of the companies to say, "Well, we're sorry but you've been exposed to something that is very dangerous, and you ought to have certain kinds of medical followup." And companies have the records of the workers. Companies know who was exposed, at least have some idea. Any maybe in a lot of cases nobody else knows; that is a continuing problem.

Mr. CONYERS. Mr. Ashbrook?

Mr. ASHBROOK. Thank you.

I find your testimony interesting. I suppose you started and ended up with the same point. You said you were shocked by what was known and what was pointed up. I guess the finger today has been pointed at corporate America, which is always fair game.

But let us expand this discussion on what was known and what was covered up by possibly other institutions, including the Government.

Is it your understanding that these facts were known only to corporations? Were they known, for example, by the Government and the unions?

They too have responsibility in this area. Taking the latter first, I know of no union that has not been willing at any time or any place in the last 30 years to make issues of this type part of thier bargaining with management. They do have responsibility with respect to the workplace.

How would you rate union understanding of this problem in the past? Were they honestly without knowledge; were they blissfully ignorant; were they inept; were they in collusion with management; or none of the above?

Mr. CASTLEMAN. I would say, for the most part, they were honestly without knowledge.

Mr. ASHBROOK. So, most of this information, to the best of your knowledge, was never known by any industrial union that had the real responsibility for the workers in the workplace?

Mr. CASTLEMAN. To the best of my knowledge. I've had frequent contact with Roy Steinfurth, who is the health and safety specialist for the asbestos workers, insulation workers, in Washington. I asked him to come today, but he could not make it. He could tell you himself that they just didn't know.

Mr. ASHBROOK. You said you were shocked. I suppose I would find it shocking that a union with responsibility in this area knew nothing about it and was honestly without knowledge during this whole period of time.

Mr. CASTLEMAN. Well, up until 1964, when the warning labels appeared, when Dr. Irving Selikoff had a large conference in New York and announced his findings in a very public way, these things were—they were mostly in the medical literature, but they weren't in the public domain.

And there is an interesting story about Owens-Corning, which serves as an example of what companies knew and perhaps didn't share with the unions. This is a 1942 document, an intercompany correspondence having to do with how Owens-Corning could break into the insulation business with a fiberglass product. They were competing against asbestos. And their plan—this was a very bare-knuckle business plan—was to have as a weapon in reserve a

compendium of everything known about asbestosis, 500-and-something pages, complete bibliography, and to just keep that in waiting. They would go to the union with the plan, prearranged plan with an insurance company, Aetna, and they would say, "Look, we're going to buy product liability insurance so that if anything happens to you with our fiberglass product you are covered; you've got the same coverage as one of our own employees would have in manufacturing. That is how much we are willing to guarantee the safety of this product, and moreover—a reputable insurance company is going to stand behind it."

And if they didn't go for that, the company was willing to go ahead with circulating this 500-page compendium on asbestosis with some stuff on the relative innocuousness of fiberglass, and try and pressure the union leadership or bring about the overthrow of the union chiefs.

The problem was the insulation workers didn't like fiberglass because it caused skin irritation, and they were asking for a little bit more money to work with fiberglass. And this was keeping fiberglass out of the market.

As it turned out, according to Roy Steinfurth, Owens-Corning never told the union about asbestosis. What they did was get some kind of Government intercession to the effect that it was an unfair business practice for the union to demand extra money to work with their products as compared to somebody else's product, and they got the same union rates using the fiberglass. In that way they did not use the weapon in reserve of telling the union directly about the hazards of the competition's product.

Then, 15 years later, they bought the Kaylo business, and they certainly knew about the asbestosis problem.

Mr. ASHBROOK. Owens-Corning or Owens-Illinois?

Mr. CASTLEMAN. Owens-Corning.

Mr. ASHBROOK. Owens-Illinois had it?

Mr. CASTLEMAN. Yes, Owens-Illinois had it, and Owens-Corning bought it in 1958.

So, this is an illustration of how the unions came close to finding out but didn't.

And as far as the Government is concerned, Mr. Conyers has pointed out that there was no OSHA; the public health service was not in any way a regulatory agency, they were very ineffective. And lack of Government—substantial Government—action in the area of prevention in the shipyard is hardly surprising.

Mr. ASHBROOK. I just wonder if that is accurate. I mentioned the cranberry scare to be facetious. However, those types of things were done in those days, and it just seems hard to believe that someone in the Government would not have known or have had some indication that all of this information was out in the public sector.

Mr. CASTLEMAN. There appear to be at least a few people in Government who knew, but who were very friendly with the asbestos industry. One of them, Dr. Lewis Cralley, attended trade association meetings of asbestos companies. In fact, the Public Health Service's failure to warn workers about the hazards of asbestos in a Tyler, Tex. plant in 1971 led to the Government settling out of

court for $5 million in compensation to over 400 workers who had been in that plant.

But I would urge you to consider that, to put it politely, the irresponsible conduct of one Government official should hardly lay the burden of compensating this damage on the taxpayer.

And the incompetence of the Navy is not doing something sooner about the fact that they were using a lot of asbestos insulation in a careless manner doesn't mitigate the responsibility of the companies that were profiting by mining asbestos and using asbestos as insulation in products which they continued to sell.

Mr. ASHBROOK. What did you say that cutoff date was, 1964?

Mr. CASTLEMAN. For the introduction of warning labels, 1964 for some of them, but that was for Owens-Corning and Johns Manville. For Philip Carey, I believe it wasn't until 1971 that the product was either discontinued or labeled as potentially harmful.

Mr. ASHBROOK. The reason why I asked about 1964 is that we are sitting in a building that was completed just about that time. It would be interesting to know what was used in the way of insulation, particularly in the catacombs. I understand that we pipe our heat in from down on M Street, or somewhere down that way, for several blocks, and I think it is fairly insulated. It would be kind of interesting, Mr. Chairman, just to learn what was used.

I think we come more within the area of collusion than of victimization.

Thank you. I appreciate your testimony.

Mr. CASTLEMAN. You authorized the funds, do you think that makes you responsible?

Mr. ASHBROOK. Well, I do not know. It was just running through my mind. I do not want to trample on the State of North Carolina, but I suppose the same argument could be made with respect to those who vote for tobacco subsidies. [Laughter.]

I was listening to George with interest. It makes one wonder where the liability stops. Maybe we are guilty in a lot of areas like that because we have some degree of knowledge in things we do. So, I suppose we are not unlike some of the terrible corporate men one hears so much about.

Mr. CONYERS. Mr. Gudger.

Mr. GUDGER. Thank you, Mr. Chairman.

I have found your testimony quite exciting and quite interesting especially the idea that there is an area of knowledge that is kept from the public because of market forces or Governmental forces.

I recall, in the 1950's, having an interesting lawsuit in which we were dealing with a woman who had contracted a serious pulmonary condition. It was suspected that this was in consequence of her employment with a major retail company and her practice at that place where she was employed of breaking each spent tube that was brought in to be exchanged for a new tube. In that day there were so many different models and different sizes of florescence that most purchasers would bring in the old tube to display so that they would get the same or similar size new product.

I was confronted with a suit against this retailer brought by an attorney claiming that she had contracted beryllium poisoning. At that time it was not known that the beryllium was an element contained in the gas being used in the manufacture of these tubes,

and it was not generally known that it was a highly poisonous agent in bringing about fibrosis of the lung.

We came, in investigation, up to the Library of Congress, talked to physicians that had been dealing with pulmonary disease, and finally came to the conclusion that, in fact, there was a dangerous agent, beryllium, within these tubes, which, when they were broken by this employee, created enough gaseous vapor in the vicinity where the breaking took place to cause direct injury to her.

Needless to say, there was a settlement made involving the compensation claim, there was a settlement made involving the manufacturer's liability; and, within a year, that product was no longer being used in the manufacture of those flourescent tubes.

This is how the marketplace is supposed to work.

Now, what you are saying, is that there are instances in which responsible parties do not seek out a solution like this. I was representing the employer of this woman and was trying to find wherein the truth did lie. Once we found the truth, the retail merchant and the manufacturer worked out a solution so that the product was no longer manufactured; what was on hand was destroyed by the retailer, and the manufacturer put a replacement product on the line.

Now, my question to you is this, do you not think that with the current supervision through Occupation Safety and Health Administration, through the self-policing of the industry, and through the extreme exposure to major civil litigation, the marketplace is far more able now to deal with these hazards than it was 15 or 20 years ago?

I'm talking about the marketplace process itself now.

I realize that you will have to qualify your answer with respect to fraud and suppression of knowledge.

Mr. CASTLEMAN. A lot of these injuries are very long latent things; industrial substances that cause cancer take, on the average, 20 to 35 years to produce that effect. If the manufacturer has knowledge that the substance causes cancer, something which can be determined in a couple of years, and the manufacturer, for some reason, fails to notify the Government about that, there may not be any litigation over the cancer-causing properties of those substances for another 20 or 30 years. This is what happened with asbestos. This is why we don't have Vandiver Brown, Summer Simpson, Dr. Anthony Lanza and a number of other people to question about their criminal conduct in suppressing this information, because they all have died and nobody ever said anything bad about them while they were living.

So we have to remember that a lot of times these effects are very long latent and this complicates the whole business of assessing damages and having the marketplace react in a quick manner.

Then you also have the legal fix. As has been mentioned, the asbestos industry has come to Congress asking that a so-called compensation bill be enacted. The principal tenet of that compensation bill is to stop any further third-party suits against the asbestos manufacturer.

Mr. GUDGER. I come from North Carolina, as has been pointed out earlier, and we established a workmen's compensation system

in that State in 1939. And within about 6 years we had silicosis as a compensable disease.

Now, of course, many States did not because they were not dealing with mica and other mineral products which had the propensity to cause silicosis, and the incidence of silicosis had a long historic recognition before the compensation act became a part of our economic system in North Carolina. Then, later on, of course, asbestosis and brown lung have become compensable claims where connection with employment can be shown, brown lung being a condition of the lungs attributable to employment in a textile manufacturing plant where the cotton fiber is subject to being inhaled by the employee. OSHA is gaining a great deal of control of that hazard now, but has only been addressing it, I think, for the last 5 or 6 years.

Again, I get back to the situation where we see industry, government, the labor unions and individuals moving to try to reduce hazards when they are discovered, analyzed and appreciated.

I wonder, do you think that attaching a criminal accountability to something as sophisticated as these hazards will be of significant benefit when accountability has traditionally evolved through litigation and the sort of proofs that litigation affords?

Mr. CASTLEMAN. I don't know. I think it will help; I hope it will help. And it is the only thing that we've got left. But I don't know how well it is going to work once it is in practice. It depends, of course, on whether the law will provide a way that is reasonably enforceable and place the responsibilities where they belong, or whether it's weakened by all kinds of amendments and provisions and obscure definition changes.

Mr. GUDGER. Let me ask you one final question to illustrate the dilemma, and it is this. When the directors of major industry acquire knowledge that there is hazard to their employees or to the consumers of their manufactured product, which hazard could be relieved by a substitution of chemical component or other means, it seems to me that there is every possible economic inducement in the structure now to remove that hazard so as to avoid civil litigation, which would result in much heavier expense than would be impressed by small criminal penalties.

Mr. CASTLEMAN. A small criminal penalty means a loss of your freedom. If you have ever been in a room with the door locked from the other side, you'd be very impressed with that as a potential threat to people who otherwise consider themselves above the law and quite capable of paying out of petty cash all of the existing fines.

Let me tell you the example that convinced me that we needed some kind of a criminal sanction, and that is the *Firestone* case. The fact that Firestone went forward with a tire that it knew was defective, which had been reported to the top levels of Firestone in 1972, went forward with this despite the possibility of a $100 million recall, despite the fact that the chief executives in the company would be, unless they fled to the Bahamas or somewhere, involved in litigation depositions for a long time, despite the Government fine in addition to the cost of the recall and litigation, and the fact that this would turn around on them within 10 years time—not 30—and they still went ahead and put that tire on the

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market, tells me that you've got to have something, something more than what we had if you want to deter that sort of activity in the future.

Mr. CONYERS. Would the gentleman yield at that point?

This is one of the questions that the members of this subcommittee and the full committee are constantly involved, in terms of Federal and criminal law.

If one approaches incarceration from the point of view of removing those who have violated criminal laws from our society, based on their probability or possibility of continuing to injure or threaten the peace of others, you have one basis for incarceration. There are those who also look at incarceration after examining the Federal and State prisons and penitentiaries to find them a crime against everyone, and that to willingly, and in many cases, inflict that penalty which is far more than what is written in the statutes as an additional violation, indeed, is a violation of the States upon its citizens. Then you reach this notion of trying to deal with those who consider themselves above and beyond the range of criminal sanctions generally, and, so, there is this predilection to say, "Let's lock up executive and corporate criminals because we lock up street criminals."

Now, the problem that is raised here that causes me to bring it to your attention for comment is that there are many who are saying that we are locking up street criminals for the wrong reasons; so that we are now caught with the interesting notion that since we're locking up people who frequently should not be incarcerated, certainly not to some of the incredible length of time that they are, do we make all ends of justice wrong by evening it out and also start locking up white collar criminals, or do we consider the possibility of going to the motive for executive criminality in the first place, which is usually mercenary and prompt to increase profit taking, and there, we are engaged with the large and intriguing question of exacting large monetary fines from the individual and from the corporation, frequently making sure that the fines that would be levied against the individual will not be reimbursable by the corporate entity.

Mr. CASTLEMAN. I still favor holding to the incarceration of these people. I think they would be deterred by that threat better than any other kind of criminal you will ever find. And the history of having been jailed for such things might prevent such promotions as we have seen in the past, such as the vice president of Firestone who got that memorandum in 1972 becoming the president of Firestone later on, and the promotion of Vandiver Brown of Johns-Manville to become the top lawyer in Johns-Manville partly, I suppose, for his role in doing such a splendid job of managing the suppression of medical knowledge about the hazards of asbestos.

The fact that these people had a criminal record would not make it less likely that they would be promoted.

Mr. CONYERS. No; but if they had to cost their corporation $22 million, that might make them even less likely to have been promoted. In other words, I haven't yet been persuaded that incarcerating people who commit ordinary common crime has had any tendency to reduce the amount of crime committed.

Maybe there are some studies to that effect, but as we continue, there has been an incredible increase in the amount of maximum sentences, mandatory minimums, and commissions of crime with a weapon which carry additional inflexible incarceration. We have very little example of a person saying, "This would get me 14 minimum if I take this gun and do this." We don't find evidence that threatening and imposing longer sentencing really is any deterrent. I just wonder that since we have neither exacting, really significant, monitoring of damages against corporate executives, whether that may not be as good as incarceration which, in one view, may be seen to continue a questionable pattern in the American juridical system.

We have the longest sentences for crimes of any nation in the Western World.

Mr. CASTLEMAN. But if you allow—if you encourage—the existence of death merchants in the marketplace by not making them go to jail as criminals the same as you would anyone else who killed somebody, aren't you creating a privileged class?

Incorporation has a limited liability; a corporation could even go bankrupt and the individual who is the director of the corporation still doesn't face any personal—you know, doesn't face what I would call serious personal retribution or penalties for what he does as officer of the corporation.

Mr. CONYERS. Well, murder is one thing; these penalties that we are tracing here may be another. After all, the incarceration maximum is 2 years.

Mr. CASTLEMAN. That is the minimum.

Mr. CONYERS. If we're going to really look at it as murder, then I would have to want to change the 2-year maximum—2-year minimum. I'm sorry; I stand corrected.

Mr. CASTLEMAN. I mean if it's a 2-year maximum, I wouldn't be testifying in favor of it, Mr. Conyers. The idea is preventive, not revenge. The idea is to prevent these things from happening in the first place and to guarantee that somebody will go to jail if he does start doing this. I think it is going to do a lot of good.

And any kind of fines, as in the case of *Firestone,* as I just recounted, don't seem to have done so much good. Fines and recalls just don't seem to have accomplished that result.

Now, do you wish to put larger fines into this bill as an alternative to incarceration, or as an adjunct?

You know, that might be perfectly justified.

Mr. CONYERS. Are there any other questions of my colleagues?

If not, I want to express on behalf of all of us our appreciation for the experience and the very well-reasoned opinion that you have brought here today. We appreciate it, and we hope that you will continue to watch us as we wind our way through this legislation.

Thank you very much, Mr. Castleman.

The subcommittee stands adjourned.

[Whereupon, at 3:45 p.m., the hearing was adjourned.]

Additional Material

NOVEMBER 16, 1948.

Mr. U. E. BOWES,
Owens-Illinois Glass Co.,
Toledo 1, Ohio.

DEAR MR. BOWES: Enclosed you will find three copies of a report on the results of animal experiments with Kaylo dust. As is our custom, we have summarized briefly material previously presented, including our interim report dated October 30, 1947, and have given detailed discussion only of subsequent developments. When all experiments have been completed, we expect to prepare a final report which will include details of each phase so that all data will be available in one place. However, the experimental study of the effects of inhaled Kaylo dust on normal uninfected animals is now finished and conclusions expressed on that subject are final rather than tentative.

In the report issued one year ago, which describes the findings in animals that inhaled Kaylo dust for periods up to 30 months, the following tentative conclusion was made:

"In consequence of the experimental studies with guinea pigs to determine the biological activity of Kaylo, it may be tentatively concluded that Kaylo alone fails to produce significant pulmonary damage when inhaled into the lung."

During the 30 to 36 months period, however, definite indication of tissue reaction appeared in the lungs of animals inhaling Kaylo dust and therefore, I regret to say, our tentative conclusion quoted above must be altered. In all animals sacrificed after more than 30 months of exposure to Kaylo dust unmistakable evidence of asbestosis has developed, showing that Kaylo on inhalation is capable of producing asbestosis and must be regarded as a potentially-hazardous material. It should be noted that since neither silicosis nor the diffuse pulmonary fibrosis caused by inhaled diatomaceous earth was observed, the quartz and diatomaceous earth components of the dust apparently do not produce their typical lesions.

In order to present more information on the subject asbestosis, certain evidence derived from our experimental work with asbestos dust has been discussed. As these findings have not yet been released for publication, I request that, while using them as required in formulating a safety program, you regard them as confidential.

The new series of experiments with respect to the influence of Kaylo on tuberculous infection are well under way and are progressing satisfactorily. It is, of course, too early to expect significant results on which to base even tentative conclusions.

At this time may I review briefly the financial arrangement for conducting the investigation with Kaylo? The research program up to this year was carried on under a contract, initiated in 1945, by which the experiments would be subsidized with a grant of $5,000. per year. As pointed out in my letter of March 3, 1948, the contract terminated officially on February 15, 1948, but the investigation would be continued without charge until June because the orignial experiments were started late. Since a check was received which took care of the subsidy up to November 15, 1947, there is due on the old contract the sum of $1,250. for the final quarter of the contract (from November 15, 1947 to February 15, 1948). We have delayed sending an invoice for the final quarter until all work could be finished and a final report submitted. Following the termination of the experiment in June, it has required several months to do the histological work, study the tissue sections, collate the data and prepare the report which accompanies this letter.

We are including in the report a brief review of the new experiments in which the effect of inhaled Kaylo dust on tuberculous infection is being studied. Your purchase order AS–170 authorizing this experiment at $5,000. for one year is dated February 3, 1948, but owing to a shortage of animals and other unavoidable delays the actual experimental work did not get under way until May. Hence we have concluded that financial support for this new program should be dated from May 1, 1948. For reasons outlined in my letter of March 3, I suggested a two-year contract at $7,000. per year. Your letter of March 31 acknowledged this but failed to confirm the extra amount of $2,000. involved. Nevertheless, we have proceeded at the old rate and are endeavoring to absorb the increased cost from our Foundation reserve.

In a few days our accounting department will forward a statement of the payments now due in support of the research program, as follows:

Original experiment, begun Feb. 15, 1945, at rate of $5,000 annually:
For final quarter (Nov. 15, 1947 to Feb. 15, 1948)..... $1,250

New experiment, begun May 1, 1948, at rate of $5,000 annually:
For first quarter (May 1, 1948 to Aug. 1, 1948)..... 1,250
For second quarter (Aug. 1, 1948 to Nov. 1, 1948)..... 3,750

I realize that our findings regarding Kaylo are less favorable than anticipated. However, since Kaylo is capable of producing asbestosis, it is better to discover it now in animals rather than later in individual workers. Thus the company, being forewarned, will be in a better position to institute adequate control measures for safeguarding exposed employees and protecting its own interests.

Sincerely yours,

ARTHUR J. VORWALD, M. D.,
Director.

Encs. (3).

OWENS-ILLINOIS GLASS CO.,
Toledo, Ohio, December 12, 1950.

Dr. ARTHUR J. VORWALD,
Director, the Saranac Laboratory,
Saranac Lake, N.Y.

DEAR ART: Some time ago we mentioned to you that our Kaylo Division wants to gather together in brochure form material on the health aspects of Kaylo dust, and wants to consider the possibility of publishing some of your experimental findings.

As we recall it, you mentioned during the visit that Dr. Shook and I made to Saranac last July that the animal experiments were all completed (and no new ones need be started) and that the results of the several years' program would be written up in final report form. Could you let us know how this project stands?

Could you also let us know how we stand on the finances? Our accounting department reports that they have paid two invoices this year—one in January for $1,250 and one in May for $1,250.

We still feel that before this can be finally completed, it would be desirable for one of your engineers to visit our Sayreville plant and, among other things, take some gross air samples for composition analysis. Any time such a trip can be worked into your schedule conveniently, let us know.

One more point—you mentioned last July that all the asbestos work carried on through the years at Saranac was being written up and would be published. Has this been done yet?

Best wishes to you and Mrs. Vorwald for a merry Christmas—with lots of snow in the Adirondack hills—and a happy New Year.

Sincerely yours,

BILL,
Industrial Relations Division.

HYDROUS CALCIUM SILICATE HEAT INSULATION

(By E. C. Shuman, director of research, Kaylo Division, Owens-Illinois Glass Co.)

EXTREMELY LIGHT WEIGHT—11 LB. PER CUBIC FOOT—MAKES HANDLING EASY; SIMPLIFIED DIMENSIONAL STANDARDS FACILITATES NESTING AND APPLICATION

Always among the first to recognize and adopt improved materials and methods, the oil industry has quickly accepted a new heat insulation material of the hydrous calcium silicate type. A chemically reacted mixture of lime and silica, containing small amounts of asbestos fiber for hinging action, the new material looks quite similar to other rigid insulating materials commonly used in industry. It is not glass. In outward appearance, its distinguising characteristics are an almost chalky whiteness and a comparatively smooth surfact texture, even when sawed.

Property made hydrous calcium silicate is different form other insulating materials now on the market because of its unique combination of physical characteristics. Although it has a density of only 11 lb. per cubic foot, it has an average flexural strength in excess of 50 psi and a compressive strength of 150 psi. Insolubility in water and incombustibility are two more of its outsanding characteristics. It is effective throughout the entire temperature range from zero to 1200 F. Because its thermal conductivity is conservatively stated at 0.39 at 100 mean or 0.54 at 500 mean temperature, it is frequent practice to specify ½-in. less thickness for Kaylo insulation than for "combination" insulating materials in the range from 500 to 1200 surface temperature.

This new material is produced under patents numbered Re. 23,228, 2,547,127, and other pending patent applications.

Hydrous calcium silicate insulation has been used principally in the medium and high termperature range, because it is in this range that the material performs to greatest advantage. It may be used also as a low temperature insulation, provided proper vapor seals are employed.

Hydrous calcium silicate insulation products of certain types have been manufactured and sold commercially by Owens-Illinois Glass Company since 1943. The story of how this company researched and developed the non-glass insulating material is interesting. It is also an inspiring example of the American Way. Without the vision, the resources, and technical know-how of "big business," this material would not be on the market today.

Development of hydrous calcium silicate products began in 1938. The company wanted materials of construction to supplement its Insulux glass block, already well-established, and it had a great deal of manufacturing and engineering experience with the two principal markets used in hydrous calcium silicates—lime and sand.

Many other companies and groups have experimented with various hydrous calcium silicate products. Work had been done in Germany in the early 1930's. Several independent research organizations and manufacuring companies in the United States and Canada had attempted to develop commercial materials during this period. One group was able to produce experimentally limited quantities of a calcium silicate product which they called Microporite. It was a structural material, and there is an experimental house on Long Island today, which is built almost entirely of this material, except those parts that are exposed to weather.

Until the company's physicists, chemists, and engineers studied the component materials and learned the details of their reactions, however, no one had produced a stable, uniform product with the advantages now found in the hydrous calcium silicate.

Research had reached the pilot plant stage of manufacturing by the outset of World War II. Hydrous calcium silicate heat insulation, then being made at a converted brick plant at Berlin, New Jersey, was approved by the U.S. Navy, which used it for marine insulation. Even in those early days, the material proved stronger, more durable, and easier to handle than others tested.

After the War, construction began on a quarter-mile-long manufacturing plant at Sayreville, New Jersey, and manufacturing of hydrous calcium silicate begin there in March, 1948.

The original plant at Berlin, New Jersey, where the forerunner of today's hydrous calcium silicate heat insulation was first produced, has been remodeled and enlarged almost continually to become a sizeable and modern factory, from the outside looking much like a typical glass plant. The glassman who enters it, however, finds himself in strange surroundings.

The Sayreville, New Jersey, plant, although little changed on the outside since its construction, has undergone extensive change within during the past four years as the company has perfected improved processes.

OTHER CALCIUM SILICATES

Calcium silcates, of course, are not new to the chemist. Portland cement may be called a calcium silicate, for example. Even some types of glass can be called calcium silicates, although being fusion products, they are not typical members of the family. Kaylo insulation, however, is a chemically reacted product, and is a permanently set and stable product when it leaves the plant. Portland cement is an incompletely reacted chemical compound insofar as ultimate use is concerend and does not reach its permanent set until mixed with water. Glass is a fused product using no water, its raw materials melted and blended at high temperatures.

The manufacturing of hydrous calcium silicate insulation is essentially a chemical reaction operation. Lime, silica, asbestos, and water are mixed to form a slurry that is poured into metal molds to shape the desired product. The reaction of this slurry is accelerated by the use of elevated temperatures in large pressure vessels called indurators. After induration, or hardening, the material is dried to practical commercial limits. It should be noted that, because a chemical reaction is involved, there is no "binder" in any Kaylo insulation.

The millions of tiny air spaces per cubic inch that are left in the material after the moisture is driven off give this insulation its light weight and low thermal conductivity. Every cubic foot of insulation contains so many tiny air spaces that the total area of the surface surrounding them is about 100 acres.

By varying the proportion of water in the formulation it is possible to obtain products in various densities. As the density increases, strength becomes greater

and insulating value less. The density of 11 lb. per cubic foot presently used for heat insulation was established after long research as the one that represents the optimum combination of physical characteristics for that use, from a practical viewpoint.

A 20-lb per cubic foot hydrous calcium silicate is manufactured also, in the form of two building products—insulating roof tile, for roof decking, and core material, for fabrication by other manufacturers into fireproof doors and wall panels.

UNIQUE COMBINATION OF PHYSICAL CHARACTERISTICS

The fire resistance of hydrous calcium silicate is due to its mineral composition, which withstands high temperatures. It will withstand service temperatures as high as 1200 F for an indefinite period, without loss of thermal efficiency. Actually, because exposure to high temperatures drives off residual moisture, the thermal efficiency of the material improves after installation and use.

As might be pressumed from its structure, hydrous calcium silicate has a high absorption; yet it is not permanently damaged by wetting. Even when saturated, it retains a high proportion of its normal strength, and after drying it regains its normal strength and insulating value. It does not dissolve nor crumble.

Its hygroscopicity is low. After six hours exposure in an atmosphere of 120 F and 90 per cent relative humidity, for example, it absorbs only 0.9 per cent moisture by volume.

With a—pH factor of about 10, Kaylo insulation is rust-inhibitive. Contact with metal coverings or fasterners, therefore, offers no problem. This includes even aluminum, unless the insulation is saturated.

The material has remarkable dimensional stability. Linear shrinkage after 24 hours' exposure to a temperature of 750 F is only 0.8 percent, and only 1.5 percent after exposure to 1200 for the same length of time.

WIDE RANGE OF FORMS

Hydrous calcium silicate heat insulation is made in two basic forms in which heat insulating block and pipe insulation are further divided into many other forms. All units are 36 in. long.

For the insulation of flat surfaces there is flat block. For the insulation of vessels from 6 to 60 ft in diameter, there is curved block. Thicknesses from one through five inches in increments of one-half inch are available for both forms. Widths are three, six, nine, twelve, and eighteen inches.

For insulation of pipes and tubes from one-half inch to six feet in diameter, Kaylo insulation is made in numerous forms, all to Simplified Dimensional Standards (successive layers "nest"). For tubes and pipes through twelve inches in diameters, it is made in sectional form (two pieces to the circumference). For diameters through 24 in., it is made in tri-segmental form (three pieces to the circumference). For diameters through 41 in., it's made in quadsegmental form (four pieces to the circumference). For diameters to 6 ft, it is made in k-segmental form (pieces nominally 18 in. wide and with various radii of curvature).

Thicknesses range from one inch through five inches, in increments of one-half inch.

The tri, quad, and k-segmental forms are unique, and are made possible only by the high strength and light weight of the material. On larger pipes, they permit the user to reduce greatly the number of pieces applied to insulate a given surface of pipe and reduce the number of joints. The applicator, therefore, handles fewer pieces, yet the light weight of the material makes these larger units easy to lift and handle.

For large pipes with temperatures above 500 F the number of pieces to be applied is reduced even further. In this range it is customary to apply double thicknesses of other insulating materials—a diatomaceous earth type next to the surface in sufficient thickness to reduce the temperature to 500 or lower, and 85 percent magnesia or other material as an outer layer. Up to 1200, a single layer of hydrous calcium silicate (usually of lesser thickness than the former combination covering) is all that is needed.

A standard 20-in. pipe with a temperature of 700 is a good example of the labor saved by the use of hydrous calcium silicate insulation. With other standard forms and types of heat insulation, the applicator must handle 26 pieces for each 3 ft. of pipe. With k-segmental insulation, he handles only three.

All sizes and thicknesses of this pipe insulation are made to Simplified Dimensional Standards. This system was devised by Ray Thomas, staff engineer for Union Carbide and Carbon Corporation, as a means of simplifying the application and storage of pre-formed heat insulation. At the time that Thomas first published his

proposal for the system, this company was considering similar ideas. Hydrous calcium silicate was among the first, if not the first, heat insulation to be manufactured in conformance with this system. It is gradually being adopted by other manufacturers.

Under the Simplified Dimensional Standards system, every piece of pipe insulation is made with an outside diameter that corresponds to that of a standard pipe. Under the old system, pipe insulation is made in what are called standard and double standard thicknesses. So-called standard and double standard thicknesses are constant through certain ranges of pipe diameters. Because standard pipe sizes are often actually larger than their nominal diameters (e.g., "one-inch" pipe has an actual OD of 1.32 in., "six-inch" pipe an OD of 6.63 in.), pipe insulation made to the old system will not always nest.

To overcome this handicap, the Simplified Dimensional Standards system varies the thickness of the insulation from nominal thickness. So-called "one-inch" thick insulation for a "one-inch" pipe is actually 1.08 in. thick. "One inch" thick insulation for a "six-inch" pipe is actually 0.94 in. thick. These variations are insignificant as to thermal conductance (and our heat loss charts take actual thickness into account). The result is that insulation made to this system will always nest. Any size or thickness will fit snugly over either a standard pipe or another size or thickness of insulation.

SAVINGS BY SDS SYSTEM

The savings anticipated by Thomas in creating the system have proved practical. Because of the interchangeability of insulation made to this system, the number of sizes and thicknesses required to do a given job is greatly reduced. This is particularly beneficial to the user who keeps inventories of material for maintenance. He no longer need keep in stock all sizes and thicknesses that might be required for his insulated equipment. Instead, *he can stock only enough sizes and thicknesses to make up the necessary combinations.*

If processes are changed after equipment has been insulated, thereby neccessitating greater insulation thickness, the user can simply apply another layer to his existing insulation. He need not remove the first insulation and apply a new, thicker covering.

It is worth noting that the 1200 F effective temperature limit of hydrous calcium silicate also applies here. Often insulations must be removed from equipment because new operating temperatures exceed 500 or 600 F limits of the material.

SAVINGS IN APPLICATION

To the engineers who design and specify and to the workmen who apply, the advantages of Kaylo heat insulation products are many, the limitations few.

The "limitations" are tied up with the advantages. One is that the material is so strong and rigid that it cannot be broken and shaped easily around irregular surfaces, a not uncommon practice, though not considered good workmanship. On the other hand, it is this strength combined with light weight that makes it possible to manufacture and apply the insulation in larger sizes than has been previous practice. This same strength makes it possible for the applicator to cut hydrous calcium silicate insulation to fit irregular surfaces or odd spaces with an ordinary saw, or even with a knife. Applicators who use it learn the new "tricks of the trade" quickly.

Applicators appreciate the fact that hydrous calcium silicate is non-toxic and "easy on the hands."

And this high strength makes it possible to walk on insulated pipes and equipment during installation, and also reduces the amount of insulation breakage during construction. The insulation foreman on a large refinery project in Illinois where this insulation was used throughout, remarked recently that the wasted insulation for the entire job could be hauled away in a pick-up truck. Estimators are learning to use a smaller breakage factor when hydrous calcium silicate is specified.

It is not unusual for applicators to mix crushed magnesia insulation with water to form a paste and force it into small areas to be insulated. Hydrous calcium silicate, being insoluble in water, cannot be used this way. This same water insolubility, however, eliminates damage from rain before weathercoating on outside jobs, and also the need for replacing insulation if steam or water leaks occur in insulated pipes. Refining towers, insulated but not weathercoated, have withstood 3-day rains and high winds without damage.

Hydrous calcium silicate insulation is applied in the same manner as other insulating materials. It is available either with or without canvas covering, and can be strapped, wired or pinned to surfaces being insulated. Paints of any type compatible with an alkaline surface can be used. Its nail and staple-holding power are better than average. It has good affinity for insulating and finishing cements.

Due to its compatibility with a variety of adhesives, plus the fact that it is made to Simplified Dimensional Standards, hydrous calcium silicate pipe insulation as well as block may be shiplapped to order. Shiplapped insulation fits together like shiplapped lumber, providing staggering joints in single layer application. Skilled applicators often make their own shiplapping in the field, using a saw or even a chipping hammer.

The variety of forms of heat insulation that can be made in the plant or in the field by sawing, drilling, laminating, or combinations of them is almost endless. Skillful, conscientious workmen have found numerous shortcuts using these methods. The engineer and the estimator need only to decide which product promises to be the more economical for their requirements.

Although a relative newcomer to the field this heat insulation is a proved material in the oil refinery and gas processing field. Among the companies using it for major installations are Sun, Texas, Gulf, Sinclair, Standard of New Jersey, Standard of Indiana, Standard of Ohio, Standard of California, Sunray, Pure Oil, Imperial Oil, Phillips, Shell, Cities Service, and Humble.

SEPTEMBER 14, 1962.

H. R. Barrett, S. H. Badgett, D. A. Pechstein.
Subject: Occupational Health of employees.

I urge your attention to the very important attached report and recommendation of our actuary dated September 8, 1962.

We know now that the United States Public Health Service has ordered a preliminary investigation of asbestos users. Its Cincinnati office has been asked to get permission for a pilot study of Carey. That office replied that it did not have jurisdiction, Carey being in the municipality of Lockland. We will become involved, and it would be advantageous to be able to say that Dr. Mancuso is already conducting a study.

The meeting of September 7 included a tour of Building 44 where conditions were found to be unbelievably bad. The $37,000 dust collector was operating disadvantageously. Dr. Mancuso's engineering advice would be helpful in cleaning up Building 44, and dust and fume problems elsewhere. A crash problem is not contemplated. Any plan to be undertaken would be executed by stages.

From the claims standpoint, Dr. Mancuso, as a nationally accredited expert, can help us differentiate an expensive asbestosis or silicosis case from non-occupational illnesses such as cancer and bronchitis, and make the defense stand up.

At the meeting of September 7, the original discussion concerning his fee was at $10,000 to $12,000, so that there is room to reduce the $15,000 figure given in the attachment.

L. Knippa, K. Kriegf and I strongly recommend hiring Dr. Mancuso as our company-wide occupational health consultant.

Speed in reaching our decision is of the essence since Dr. Mancuso's services are being sought by other companies and he must limit his activities.

JOHN T. CANTLON & ASSOCIATES, INC.,
Columbus, Ohio, April 5, 1963.

Re Occupational health program
Mr. L. A. PECHSTEIN,
Assistant Secretary, Philip Carey Manufacturing Co.,
Lockland, Cincinnati, Ohio.

DEAR MR. PECHSTEIN: You will be interested in the reprints of the report of a study by Dr. Thomas F. Mancuso that was published in February 1963, and will therefore become a part of the medical and occupational health literature. This was based on studies and research done a long time ago and prepared for publication some months ago. It was part of the knowledge and information that Dr. Mancuso and I had when we discussed with you the necessity for an occupational health program in your operations.

The impairment of health that is involved began to show up in Workmen's Compensation claims in your operations four or five years ago, and at that time it was feared this would grow progressively more serious and costly and eventually would be a matter that your management would need to solve.

Also enclosed are copies of an article that appeared recently in an industrial health magazine, which is typical of and indicative of the publications that refer to the basic material of your products. There is danger, therefore, that a condition either exists, or the fear that such a condition will exist, that will affect not only

your own employes, but the employes of companies which purchase your products for use, or even of customers of your end products.

You have, of course, foreseen the problem and have retained as your Consulting Medical Director, Dr. Mancuso, who is the person best qualified to assist you in investigating the matter and to advise and guide you in solving it. Dr. Mancuso and I will again discuss these matters further at the time of our next visit.

Yours very truly,

JOHN T. CANTLON, *President.*

Enclosures.

THE PHILIP CAREY MFG. CO.,
August 15, 1963

Re Occupational health program.

Mr. LOUIS KNIPPA,
Plant Manager, Philip Carey Manufacturing Co.,
Cincinnati, Ohio

DEAR MR. KNIPPA: In further reference to our latest discussion in your office and in particular, the discussion with Mr. John W. Humphrey, President of your company, I am sending you copies of articles which have appeared in medical literature relating to the hazards of asbestos exposure in industrial employment and to the surrounding population.

These are recent articles. The most recent and perhaps the most important, is the paper presented at the Medical Association Meeting in Atlantic City on June 17, 1963, which has not yet appeared in medical literature, but which, of course, is known to the medical profession interested in this field of medicine, and is known to your trade unions, whose members were studied and whose unions participated in or partially underwrote the study.

A copy of this letter and two sets of the articles are being sent to Mr. L. A. Pechstein, Assistant Secretary, for himself and Mr. E. J. Fasold, Secretary, and a copy of this letter and one set of the articles are being sent to Mr. Karl F. Krieg, Employe Relations Manager.

Our coming meeting would be more productive and effective if you are able to review these articles beforehand.

With no intent to alarm you, may we bring to your attention another aspect of this problem. There have been recent law suits and discussions in legal and insurance circles in the past two years which would seem to indicate that employes who suffer industrial disabilities can sue fellow employes for personal liability at common law.

This refers particularly to the officers and managers of an enterprise to the extent that they do not fulfill their duties and obligations in providing a safe place for employes to work, or in detecting and removing occupational hazards and injurious exposures.

This personal liability seemed so certain and costly that the 105th General Assembly attempted to rectify it.

You will shortly be informed, in an eight-page letter from your Actuaries, John T. Cantlon & Associates, Inc., of the legislative changes enacted, including the particular amendment referring to this personal liability.

The reading of the enclosed articles will also inform you of the advances made in the study and medical findings in your industry. These will later become general knowledge among the unions and your employes, and is a forerunner of the Workmen's Compensation claims of the future. In addition, there is possible liability to persons other than employes from air pollution.

Mr. Cantlon and I are looking forward to the opportunity to further discuss this with you and with others in your organization.

Personal regards,

THOMAS F. MANCUSO, M.D.M.P.H.,
Research Consultant.

Enclosures.

STATEMENT OF THOMAS F. MANCUSO, M.D.M.P.H., THE PHILIP CAREY MANUFACTURING CO., SEPTEMBER 23, 1963

OCCUPATIONAL HEALTH PROGRAM

Following are the observations of the company's medical consultant, Thomas F. Mancuso, M.D.M.P.H., to preface a conference with management scheduled for

September 23, 1963. It is understood that the contents of this report are strictly confidential and are not to be used for any purpose other than consideration by the officials of the company. This information should remain within the knowledge of the persons participating in the conference and should not otherwise be disseminated.What are the immediate and long-range goals?

What are the recommendations to accomplish them?

What should the company do?

These are the questions posed at the latest conference with Mr. Louis Knippa, Lockland Plant Manager, Mr. L. A. Pechstein, Assistant Secretary, Mr. Karl F. Krieg, Employe Relations Manager, Mr. R. J. Preston, Safety Supervisor, and Mr. John T. Cantlon, Consulting Actuary, which may serve as a basis for points of reference and clarification.

It would be preferable to review this report in its entirety prior to discussing any of the specific areas referred to in order to evaluate the inter-relationship of the various factors mentioned.

Question A. What are the immediate and long-range goals?

1. Identify and evaluate the chemicals and materials in the working environment which are hazardous to health of the employes, which may cause an occupational disease or injury, in the Lockland plant, and subsequently, in each of the other plants and operations, including the Canadian mining and processing of asbestos. This should be conceived and carried out as a matter of company policy, recognizing that there should be no neglect of other company operations and that an over-all view of the situation must be obtained.

2. Development of priorities of risk of health hazard and liability for each of the company plants and within these plants, according to departments, manufacturing process and specific operations.

3. Determine the control measures required, engineering and medical, according to the priority of risk to the employes and the company, for each of these operations and manufacturing processes; determine and design the ventilation requirements for the specific operational hazards.

4. Determine the nature and extent of the air pollution problems derived from company operations, at all locations, beginning at the Lockland plant, and the control measures specifically required and designed for these situations.

5. Determine the nature and extent of the occupational disease problems immediately and projected on a company-wide basis, beginning with the Lockland plant and extending to all other operations.

6. Evaluate the nature, adequacy, range and scope of The Philip Carey Manufacturing Company's responsibilities for its employes' health, physical examinations, disabilities, first-aid and medical care, the cost associated with present operations in terms of employe protection, compensation liability, and effect on production. This includes evaluation of policies and procedures pertaining to sickness, return to work, specific tests, use of sickness insurance, medical and production problems relating to alcoholism, mental illness, heart disease and other impairments and handicaps; patterns of referrals for treatment, and types of medical examinations required for all and specific occupational groups.

7. Develop a system of medical records and surveillance on a company-wide basis, including all plants and company operations relative to the health status and disabilities of all employes for the detection of diseases and injuries, patterns of sickness in different departments and operations, and for the identification and early recognition of problems, the type of problem and the location.

8. Develop a medical program and prepare a manual of company policies and procedures pertaining to (5), (6) and (7) on a company-wide basis and as related to specific problems and occupational groups, in cooperation with personnel and production objectives.

9. Evaluate and determine toxicological or harmful effects of company products or components under various conditions of use, and as used in specific installations and occupations, buildings, industries, etc. by consumers.

10. Develop safe practice ventilation guides with illustrative drawings, as well as medical guide lines, for distribution with sales, for consumer protection and relations, to avoid added compensation liability by consumers.

11. Evaluate occupational disease and injury claims and identify nonlegitimate claims and prepare scientific data as may be required in the proper adjudication of claims.

Question B. What are the recommendations to accomplish these objectives?

1. Employ immediately an experienced, qualified industrial hygiene engineer, competent in the areas of the working environment and air pollution, to conduct the necessary studies and to carry out the responsibilities on a company-wide basis for (1), (2), (3), (4), (9), and (11) referred to previously. Initially, the work is to be

directed at the Lockland plant, with air sampling and ventilation control design for operations within the plant and for air pollution studies, and for control measures.

Regardless of obvious dust exposure, air sampling of the various dusts and chemicals must be carried out and measurements made of the concentration and analyses of the composition of the various dusts and fumes as basic reference data in determining the extent and priority of the need, as well as for the evaluation of effectiveness of control measures before and after studies. (Contractural arrangements pertaining to ventilation systems can be made contingent upon verification of effectiveness by the industrial hygiene engineer). In addition, such data is essential to the interpretation of compensation claims. Without such data, the company cannot deny or affirm whether exposures to silica, talc, or asbestos, or other dusts, fumes or gases, had occurred, and at what concentrations, etc., all of which have a bearing in determining whether a process or occupational exposure can be classified as harmful. Undoubtedly, many claims will occur in the future, in which such basic technical data is needed.

Past experience in other industries has shown losses of hundreds of thousands of dollars, where decisions on ventilation control measures were not made by qualified industrial hygiene engineers, but rather by others, including engineers of the company selling and installing the ventilation equipment.

In the area of air pollution, there seems to be a lack of awareness by the company of the financial liability that is at stake in the operations of The Philip Carey Manufacturing Company plants, as evidenced by the lack of control effort.

Although only the Lockland plant has been observed, it is evident that:

Air pollution does occur and has occurred over the years.

Emissions from asphalt and tar operations are liberated into the surrounding community.

Such fumes are known to be carcinogenic (produces cancer) in animals and humans.

If an individual in the neighboring community developed lung cancer, who was a resident for a number of years in that area, the company would have no scientific or legal basis to deny the possibility that such lung cancer cold have occurred or be due to the fumes from the Lockland plant.

There is no limit to the amount of money for such air pollution suits (Brush Beryllium was sued for $750,000.00 in each case).

A competent attorney and the climate of the courts relative to air pollution would make the success of such suits a distinct probability.

Since this one case can be multiplied many times over for the surrounding population of the Lockland plant and the problems of other areas (which would not be ascertained until a survey was made), it is evident that the company needs to know, on a sound and regular basis, the exact concentrations and the identity of the various chemicals dispered by its plants and that contributed by other industries in the surrounding areas, together with comprehensive data on wind direction, velocity, etc.

Unless the company immediately initiates such a program, it will not have any data from which a possible defense may be derived. Unfortunately, such information is no longer available for the preceding years. However, an experienced industrial hygiene engineer may indirectly, through reconstruction of processes and production, estimate the range and composition as it relates to present operations, etc. Wind data over the past years can be obtained from meteorological stations.

It is highly possible that after an adequate appraisal of all the company operations relating to occupational exposures and air pollution by the industrial hygiene engineer and an industrial medical consultant, The Philip Carey Manufacturing Company may find it financially desirable to change, relocate or discontinue certain processes and to reappraise further investments in production changes at particular plants where future liability may be excessive.

The Philip Carey Manufacturing Company is not in a position at this time, without such survey data, to appraise or determine the extent of its financial liability in the future, or to make the necessary immediate decisions on control.

2. Conduct medical studies which have a direct bearing on sales of the company products and legal liability through a medical director, medical consultant, university contract, or other arrangement. This relates to the questions which are inevitable and will be raised by all users and consumers and in general, by the public, because of the accumulation of recent scientific reports showing the positive association between asbestos and cancer of the lung, pleura and peritoneum. In addition to cancer, positive association also exists with Cor pulmonale (right heart failure due to the fibrosis of the lungs) pulmonary emphysema (which follows fibrosis), chronic bronchitis, bronchiectasis and pneumonitis. As a consequence, there is a formidable

array of medical problems now being recognized as directly related to asbestos exposure.

Some of the questions posed and to be readily anticipated nationally are:

Do these asbestos products or this particular asbestos product produce cancer?

Are we, as industrial users, going to be subjected to lung cancer and other cancer claims, because we are using this asbestos product, which will affect our compensation costs and employee relations and liability?

What other types of lung disease or medical problems may we expect from the use of this product?

What concentration of dusts, percentage of asbestos, and particle size, for how many years, will cause cancer or other medical problems?

What types of medical and engineering safeguards are required for control and prevention of disease when we use this product?

Internally, within the company, the question has been raised as to why medical problems, particularly relating to cancer and asbestos, were not recognized before. Actually, they were recognized, but the asbestos industry chose to ignore and deny their existence. Evidence of this was as recent as the Industry Hygiene Foundation Study, sponsored by the Asbestos Industry, at a cost of $40,000.00, which provided a basis for the companies to argue against this recognition of asbestos and lung cancer. The report, when properly analyzed, had many weaknesses, upon which the conclusion was drawn, and these weaknesses have been recognized in scientific circles.

Refutation of this report has already appeared in press and will appear in a number of publications. Consequently, the asbestos industry cannot rely on this report for legal defense.

A second more basic reason for the lack of recognition is that there was no planned, intelligent medical surveillance or supervision of the employees or the company activities, to detect what was happening to the employees over the years. In some companies, large numbers of cancers occurred among the employees, but there was no interest or medical effort obtained to recognize the occupational cancer and other lung disease problems.

It is also possible that there was no desire by these companies to recognize the problem because of the Workmen's Compensation implications. Evidently, what is not known cannot be recognized as an occupational disease.

A third reason for the lack of recognition of the cancer problem is the long latent period, the time from exposure to the development of cancer, for the majority of cases. Now, after 25 to 30 years, some of the cases will start appearing, and because of improved medical diagnosis and records, as required by the medical and insurance professions, there will be an increasing number of cases as additional years pass. This is also related to the number of years of exposure to asbestos. Usually, the higher concentration of exposure in years, the shorter the latent period, and similarly, the lower concentration of exposure, will have a much longer latent period, measured in years.

At The Philip Carey Manufacturing Company a high proportion of employees are in the older age group, and it will be difficult to disprove that asbestos exposure did not occur in the previous 20 or 30 years or more for those who subsequently develop lung cancer. It is evident that an occupational cancer problem existed at Plymouth Meeting, and it is highly likely that occupational cancer also has occured at the Lockland plant.

A fourth reason for the lack of recognition of the problem, not only at The Philip Carey Manufacturing Company, but at other asbestos industries, has been the inadequacy of medical records, which made accurate statistical evaluations difficult. This has been coupled with the absence of any plan of competent analysis of insurance, sickness and mortality data.

However, the situation now has changed. This information is now more readily known in scientific circles and is definitely known by the unions specifically involved because of their financial support in part of the project, which reported positive findings with cancer.

Further, this matter will receive congressional and public attention because of national study underway by the United States Public Health Service on asbestos and cancer.

Attention may be directed to this before Workmen's Compensation Boards throughout the country, because asbestos serves as an excellent illustration of the weakness of Workmen's Compensation Laws relative to occupational cancer (statute of limitations). Further attention may occur as this illustration is used in collective bargaining contracts among unions, not only asbestos, but boilermakers, pipe fitters, etc., for extra risk pay, sickness insurance, changes in pensions, etc.

CONTINUED

1 OF 10

All of these events, individually and collectively, represent potential and actual sources of attention throughout the country, directed at asbestos as a health hazard, and represent a likely sequence of events.

Although attention has been focused on cancer in this report because this is a disease more readily recognized and appreciated by the user or consumer, as well as the general public, The Philip Carey Manufacturing Company must realize that a similar situation may be developing; i.e., a lack of recognition of other health problems, for the same reasons previously stated, for other chemicals and processes in the company operations.

Unless a medical study is made of the industrial population and various records, these problems will not be recognized in time to prevent an "outbreak" of a collection of cases of the same disease of occupational origin, nor recognized in time to protect the health of the employes, with the same sequence of events possible as related earlier to asbestos and cancer.

Planned medical studies are required to detect these problems as early as possible; certainly before they become serious in terms of sickness and Workmen's Compensation costs of liability. In this way, the company can protect the health of the employes and be forewarned relative to health problems and projected liabilities, and can design a course of action appropriate to the situation.

Some of the possibilities which require study are cancer and blood changes of specific groups exposed to asphalt, tar and other solvents; lung changes among those exposed to talc, silica and dusts of varying compositions, including fibrosis and emphysema which may be related to dusts and some other chemicals.

These medical studies are really what a competunt medical director should and would do for a company to protect the health of the employes and the financial interests of the company. Such studies for those who may not be acquainted with the responsibilities of a medical director and the functions that would be normally carried out by an experienced medical director, might label such studies as research.

It is true that such studies to require additional skills and training available from a consultant to avoid the pitfalls that exist in the collection and analyses of such data, but the point being emphasized is that these medical studies are a *normal, necessary function* that every company, particularly one with many problems, would have carried out as an on-going current operation.

In this manner, management can be advised of various health problems, their nature, extent, location and the implications thereof, just as the research engineer, plant manager or employe relations director, do in their respective fields.

These medical studies of the employes exposed to specific dusts or chemcials provide observations which may serve as a basis extrapolation to consumer use of these products.

By determining the dust concentrations of specific operations, the chemical composition of the dusts, particle size and duration of exposure, for specific population groups and noting changes in time of x-ray or laboratory findings, as well as observing the development of symptoms or related illnesses, correlations may be established. This would be done on a departmental comparison basis of employes characterized by sex, color, age, and duration of employment, but differing by occupational exposure.

It is possible, through use of existing employe records organized by Mr. Krieg, to establish a plant cohort as of 1950 or 1952, identified by department and the necessary characteristics, so that a follow-up study could be undertaken. This would involve study and search of medical records, sickness and insurance coverage, etc.

Similarly, observations of importance could be derived from studying the Plymouth Meeting population in particular, their mortality pattern; i.e., the pattern of the various causes of death of that employe population, to detect abnormalities or variations with controls of specific causes of death. This may provide a clue as to the relative significance of asbestos exposure.

The Plymouth Meeting plant now recently closed, presents a unique and vital situation to study what factors or combination of factors in terms of duration of exposure to asbestos, is required for the development of cancer and related diseases. estimates of concentrations may be derived and together with analyses of settled dust and the making of departmental comparisons of employe groups exposed under various conditions, some index may be derived relative to the years and types of exposure required.

The Plymouth Meeting plant, in comparison with the smaller groups exposed at Lockland, has the necessary size population exposed over a sufficiently long period of time to asbestos, from which meaningful observations or conclusions could be made. Now that the Plymouth Meeting plant is closed, a confidential and flexible study can be made within the company structure. With a common termination date for all employes, a better statistical evaluation can be made. This is an ideal

situation to attempt to ascertain the standards and points of reference for comparision with employes of other plants.

Although dust determinations and necessary analyses were not done in the past for the various Philip Carey operations, an experienced industrial hygiene engineer can piece together production schedules, changes in operations, ventilation data, analyses of settled dusts, etc., to obtain some estimate of the probable range and composition of the dust exposures in the past, which can be related to medical data.

It is not known at present what has been the extent of chest x-rays in the various Philip Carey operations and plants over the years and to what extent these are available.

Forward prospective medical studies could and should be set up at the Canadian operations. This should be tied together with comprehensive engineering data and would serve as points of reference in succeeding years. A carefuly supervised medical program with special examinations, including respiratory function studies, should be initiated and repeated at periodic intervals, to observe and detect the earliest changes in the lungs of employes of the Canadian operations. These findings then could be correlated with exposure data and would confirm the absence or presence of a health hazard early enough to do something about it and to prevent liability. Information from Canada, representing relatively new operations and employes, may provide important data for extrapolation to other areas and this opportunity should be utilized.

In essence, medical and engineering studies are considered vital to the company's operations and financial liability and sales.

3. Prepare and inaugurate a medical and engineering consultation service and program of consumer aid, for the evaluation and control of any health problems and proper guidance on ventilation controls for the company's products.

4. Discontinue the practice of placing on Philip Carey's payroll employes of subcontractors indifferent areas of the country because of the occupational disease liability. It has already been established by the recent study supported by the union, that the union members have a high lung cancer rate.

It is highly likely that these installers, exposed to asbestos over the years, and generally continuing the same type of work, will develop high lung cancer rates. It is inadvisable to place the company in the position of defending against such claims and having such suits associated with Philip Carey. Such legal and medical costs can be avoided, as well as Workmen's Compensation claims. Such employes should remain the employes of the sub-contractors (Example noted in a national study—death certificate of lung cancer case, reported as an employe of The Philip Carey Manufacturing Company in Chicago—actually a sub-contract employe).

5. Set up rigid physical examinations and comprehensive pre-employment information on all new employes to exclude certain dust exposures, individuals with other chest diseases, etc.; special studies of specific occupational groups to detect early changes of harmful nature; procedures for medical surveillance, etc.; conduct special studies to determine those already affected and not recognized who can be transferred before further progression of the illness or disease.

6. Reconsider retirement and pension plans, sickness and insurance benefits to determine the most advantageous plan for employes and the company, in light of the large number of employes in certain age groups with many years of employment exposure who, in advanced ages, may develop the medical conditions discused in this report.

Unfortunately, The Philip Carey Manufacturing Company is now confronted with seeing the consequences of a lack of a program of medical supervision of its employes' health over the years; lack of dust control; lack of awareness of the injurious nature of the various chemicals utilized in the working environment, as well as the community, in terms of air pollution. This build-up is now apparent.

It is necessary that top management be alerted to the financial liabilities which are at stake, in terms of:

a. Occupational disease claims causing increasing funds to be set aside for Workmen's Compensation.

b. Air pollution suits for harmful exposure, particularly lung cancer.

c. Effect on sales by the publicity of the association of cancer with the use of and the manufacture of, asbestos products.

This information is necessary so that proper plans and judgments may be made as to a course of action in the over-all company management.

Such information and warnings should not be taken lightly, since the factors which would make such financial threats possible are already in existence and will be augmented in the near future by the additional publication of other scientific data.

BEFORE THE INDUSTRIAL ACCIDENT COMMISSION
OF THE STATE OF CALIFORNIA

M.L.H. APR 28 1961

GRACE RILEY Applicant VS JOHNS-MANVILLE PRODUCTS, ET AL	CASE NO. 57 D.A. 182-835 NOTICE OF TIME AND PLACE OF FURTHER HEARING SUPPLEMENTAL: ON THE ISSUE OF APPORTIONMENT, ORIGINAL LIABILITY OF NEWLY JOINED PARTIES DEFENDANT AND PENALTY FOR WILFUL FAILURE TO PAY COMPENSATION, AND DEATH BENEFITS.

NOTICE TO ALL PARTIES

You are hereby notified that further hearing will be held in the above-entitled action at

4107 LOS ANGELES STATE OFFICE BUILDING, 107 SOUTH BROADWAY
LOS ANGELES CALIFORNIA

JUNE 15, 1961 & JUNE 16, 1961 9:00 A.M. TWO DAYS:

Dated at: Los Angeles
April 25, 1961 INDUSTRIAL ACCIDENT COMMISSION

NOTE: CONTINUANCES AND FURTHER HEARINGS ARE NOT FAVORED.

SERVICE UPON:

SEE ATTACHED SHEET FOR PARTIES SERVED:

bp

PARTIES SERVED:

GRACE RILEY, 1596 WEST JUNO AVE. APT. 1, ANAHEIM, CALIF.

HAYS & MC LAUGHLIN, 6331 HOLLYWOOD BLVD., LOS ANGELES 28, CALIF.
FOUNDERS INSURANCE CO., 727 W. 7TH ST., LOS ANGELES, CALIF.
VETERAN'S ADMINISTRATION HOSPITAL, 5701 BELLFLOWER BLVD., LONG BEACH, CALIFORNIA
VETERANS ADMINISTRATION HOSP., 5901 E. 7TH ST., LONG BEACH, CALIF. ATTN: A. P. ILLIS, REGISTRAR
E. PIERRE DE LAWTHER, M.D., 1533 WILSHIRE BLVD., LOS ANGELES, CAL.

J. T. THORPE, INC., 929 E. 2ND ST., LOS ANGELES, CALIF.
JOHNS-MANVILLE, INC., 2960 LEONIS, VERNON, CALIF
JOHNS MANVILLE, INC., BOX 1450, LONG BEACH, CALIF.
JOHNS-MANVILLE, INC., ATTN: BERT GILBERTSON, BOX 9067, LONG BEACH 10, CALIF.
SOUTHERN ASBESTOS & MAGNESIA CORP. 1701 N. MAIN ST., LOS ANGELES
WARREN & BAILEY, ADDRESS UNKNOWN.
ASBESTOS CO. OF CALIF. (OUT OF BUSINESS)
PLANT RUBBER & ASBESTOS CO. C/O PLANT INSULATION CO., 2741 SO. YATES AVE., LOS ANGELES, CALIF.
LOS ANGELES RUBBER CO. (ADDRESS UNKNOWN)
MARINE ENGINEERING CO., 5933 TELEGRAPH RD., LOS ANGELES, CALIF.
FIBREGLASS ENGINEERING & SUPPLY COMPANY, 5933 TELEGRAPH RD. LOS ANGELES, CALIF.
LYNCH ASBESTOS CO., 2939 SO. SUNOL DR. LOS ANGELES, CALIF.
ROBERT O. LYNCH ASBESTOS CO. 2939 SO. SUNOL DR., LOS ANGELES, CAL.
PLANT INSULATION CO. 2741 SO. YATES AVE., LOS ANGELES, CALIF.
THORPE INSULATION CO. 2741 SO YATES AVE. LOS ANGELES, CALIF.
OWENS CORNING FIBERGLASS, PACIFIC COAST DIV., SANTA CLARA, CALIF.
COAST INSULATION PRODUCTS, 2316 SAN FERNANDO BLVD., LOS ANGELES
ARMSTRONG CORK CO. 1206 MAPLE AVE. LOS ANGELES CALIF.; AND 5037 PATARA ST., SOUTH GATE, CALIF.
TOTMAN-MORGAN, CHICAGO, ILL.
WESTON ASBESTOS CO. 675 TOWNSEND ST., SAN FRANCISCO, CALIF.
M. R. CARPENTER, 907 FRONT ST., SACRAMENTO, CALIF.
PLANT RUBBER & ASBESTOS WORKS 937 BINNON ST., SAN FRANCISCO 7 CALIFORNIA
EARL O. STICE CO. 852 WEST DORAN ST., GLENDALE, CALIF.
UNITED CORK CO., KEARNEY, NEW JERSEY
UNITED CORK CO. 2704 SO. SANTA FE, LOS ANGELES 58, CALIF.
CORK INSULATION CO., 155 E. 44TH ST. NEW YORK 17 NEW YORK
NEINDT CORK CO. 7101 TONELLE AVE., NORTH BERGEN, NEW JERSEY
METAL CLAD INSULATION CO. 1759 WESTERN AVE. TORRANCE CALIF.
OIL FIELD CONSTRUCTION CO. OF BAKERSFIELD 2650 CHERRY AVE. LONG BEACH 6, CALIF.
E. J. BARTELLS CO 12- 26TH AVE. SO., SEATTIE 4, WASHINGTON
ISOTHERM CO. 605 WILLIAMS ST. BAKERSFIELD, CALIF.
JAMAR & OLNEH CO. 320 NORTH HANDLING, CHICAGO 24, ILLINOIS
ASBESTOS PROD. CO. BOX 988 SAN DIEGO 12, CALIF.
UNITED REFRACTORY CONSTR. CO. 1201 BANKVILLE RD. PITTSBURGH, PENNSYLVANIA
PHILIP CAREY MFG. CO. LOCKLAND, CINCINNATI, OHIO
REESE INSULATION CO., 6025 DISTRICT BLVD., LOS ANGELES, CALIF.
LOS ANGELES CORK CO 4180 E. WASHINGTON BLVD., LOS ANGELES CALIF.
MOUNTAIN STATE CONSTRUCTION CO BOX 7586, DENVER, COLORADO
FIBREBOARD PAPER PROD CORP. 475 BRANNON ST., SAN FRANCISCO 17, CALIF.

PAGE 1

PARRIFINE CO., INC., 475 BRANNAN ST., SAN FRANCISCO, 19, CALIF.
C. R. DUTTON, C. A. LEIGHTON, WESTON FIBRE GLASS SUPPLY, LTD.
739 BRYANT ST., SAN FRANCISCO 7, CALIF.

AMERICAN MOTORISTS INS CO. 3545 WILSHIRE BLVD., LOS ANGELES, CALIF.
EMPLOYERS MUTUAL LIABILITY INS. CO. OF WIS., 3540 WILSHIRE BLVD.
LOS ANGELES, CALIF.
TRAVELERS INS CO., 510 W. 6TH ST., LOS ANGELES, CALIF.
ASSOCIATED INDEM. CO., BOX 2133, LOS ANGELES 54, CALIF.
PHOENIX INDEM. CO., 3750 W. 6TH ST., LOS ANGELES, CALIF.
FIREMANS FUND INS. CO., 3440 WILSHIRE BLVD., LOS ANGELES, CALIF.
AETNA CASUALTY & SURETY CO., 810 SO. SPRING ST. LOS ANGELES
INDUSTRIAL INDEM. CO. BOX 2252 LOS ANGELES 54, CALIF.
ZURICH INS. CO., 4465 WILSHIRE BLVD. LOS ANGELES, CALIF.
GUARANTEE INS. CO., 1671 WILSHIRE BLVD., LOS ANGELES, CALIF.
ARGONAUT INS. CO., 1001 WILSHIRE BLVD., LOS ANGELES, CALIF.
PACIFIC EMPLOYERS INS. CO., 1033 SO. HOPE ST., LOS ANGELES CALIF.
EMPLOYERS LIABILITY ASSURANCE CORP. OF LONDON, ENGLAND, 639 SO.
NEW HAMPSHIRE, LOS ANGELES, CALIF.
UNITED PACIFIC INS CO. 616 SO. SHATTO PL. LOS ANGELES, CALIF.
STANDARD ACCIDENT INS. CO., 548 SO. KINGSLEY DR. LOS ANGELES, CALIF.
GENERAL ACCIDENT & FIRE & LIFE INS CORP., 3535 W. 6TH ST.,
LOS ANGELES, CALIF.
NATIONAL AUTOMOBILE & CASUALTY CO., BOX 5780 LOS ANGELES 55, CALIF.
LIBERTY MUTUAL INS. CO., 714 SO. HILL ST., LOS ANGELES, CALIF.
STATE COMPENSATION INS. FUND, BOX 2134, LOS ANGELES 54, CALIF.

HERLIHY & HERLIHY, 412 W. 6TH ST., LOS ANGELES, CALIF.
MC CARTNEY, HALL & RYAN, 639 SO. SPRING ST., LOS ANGELES, CALIF.
TIPTON, HEINGAND, KENDIG & STOCKWELL, 611 SO. CATALINA, LOS
ANGELES, CALIF.
SPRAY, GOULD & BOWERS, 1671 WILSHIRE BLVD., LOS ANGELES, CALIF.
CLOPTON & PENNY, 639 SO. SPRING ST., LOS ANGELES, CALIF.
BROBECK, PHELGER, & HARRISON, 111 SUTTER ST., SAN FRANCISCO, CALIF.

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STATE OF CALIFORNIA
DEPARTMENT OF INDUSTRIAL RELATIONS
INDUSTRIAL ACCIDENT COMMISSION

APPLICATION
(Death Case)

CASE NO.

GRACE RILEY (APPLICANT) — 1596 West Juno Ave., Apt. #1 (APPLICANT'S ADDRESS)
Anaheim, California
Social Security No.
vs.
JOHNS-MANVILLE PRODUCTS, et al. (EMPLOYER) — 2960 Lerola (EMPLOYER'S ADDRESS)
Verona, California
INDUSTRIAL INDEMNITY COMPANY, et al. (EMPLOYER'S INSURANCE CARRIER) — Box 2252 (INSURANCE CARRIER'S ADDRESS)
Los Angeles 54, California

1. Applicant alleges that JAMES WHITCOMB RILEY (NAME OF EMPLOYEE) Oct. 23, 1899 (DATE OF BIRTH) while employed as an Insulator (OCCUPATION AT TIME OF INJURY) on 1/1929 to 5/19/57 (DATE OF INJURY) in California (CITY) by Johns-Manville, et al. (NAME OF EMPLOYER) sustained injury arising out of and in the course of employment, as follows: exposure to dust resulting in death on Jan. 24, 1961 (DATE OF DEATH)
2. Industrial Indemnity Co., et al. (NAME OF INSURANCE COMPANY — EXPLAIN HOW INSURER WAS SELECTED) was the employer's insurance carrier on date of injury.
3. Employee's earnings at time of injury $ Maximum @ (WEEK OR MONTH) The basis of pay was
4. Was compensation paid? Yes (YES OR NO) $ (TOTAL PAID) (WEEKLY RATE)
5. Was medical treatment needed? Yes (YES OR NO) Who furnished treatment? defendants
(GIVE NAMES OF DOCTORS WHO TREATED THE INJURY AND STATE WHO PAID THE BILL)
6. Has burial expense been paid? (YES OR NO) $ (AMOUNT) Who paid it?
7. The employee left surviving him the following dependents:

NAME	AGE (IF UNDER 21)	RELATIONSHIP TO THE EMPLOYEE	ADDRESS
GRACE RILEY		Widow	1596 W. Juno Ave., Apt. #1 Anaheim, Calif.

IMPORTANT—If any applicant is under 21 years of age, it will be necessary to file Petition for Appointment of Guardian ad Litem. Forms for this purpose may be obtained at the offices of the Industrial Accident Commission.

Reason for filing this application: Death benefits, burial expense, self-procured medical

WHEREFORE, it is requested that a hearing be set herein for the purpose of making such findings and awards as may be proper under the Workmen's Compensation Laws of California.

Dated at Los Angeles, California, April 10, 1961

Hearing requested at Los Angeles

GRACE RILEY (APPLICANT'S SIGNATURE)

Number of witnesses

Estimated time of trial 2 days

Hays, McLAUGHLIN & EVANS

6331 Hollywood Blvd., L.A. 28, Calif
HO. 7-7173 (TELEPHONE NUMBER)

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By Date

NOTE—PLEASE GIVE NAME OF CITY WHERE HEARING IS REQUIRED. CASE WILL BE SET FOR CITY DESIGNATED OR NEAREST CONVENIENT CITY. IF POSSIBLE, GIVE NUMBER OF WITNESSES EXPECTED TO BE CALLED, AND AN ESTIMATE OF THE TIME REQUIRED FOR HEARING SO THAT TIME MAY BE ALLOWED TO COMPLETE CASE WITHOUT A CONTINUANCE.

NOTE—UNDER THE PROVISIONS OF THE WORKMEN'S COMPENSATION, INSURANCE AND SAFETY LAWS, THE APPLICANT NEED ONLY STATE THE GENERAL NATURE OF THE CLAIM IN CONTROVERSY. WHEN APPLICATION HAS BEEN FILED BY, AND AWARD BY APPLICANT IT MUST BE FILED WITH OR MAILED TO THE NEAREST OFFICE OF THE INDUSTRIAL ACCIDENT COMMISSION WITHOUT DELAY. DUE NOTICE WILL THEREAFTER BE GIVEN OF THE TIME AND PLACE OF HEARING. EITHER PARTY MAY BE REPRESENTED IN PERSON, BY ATTORNEY OR OTHER AGENT

BEFORE THE INDUSTRIAL ACCIDENT COMMISSION OF THE STATE OF CALIFORNIA

CASE NO. 57-L.A. 182-835

JAMES WHITCOMB RILEY, Applicant, vs JOHNS-MANVILLE, INCORPORATED, a corporation; SOUTHERN ASBESTOS & MAGNESIA CORPORATION, a corporation; ASBESTOS COMPANY OF CALIFORNIA; PLANT RUBBER & ASBESTOS COMPANY; LOS ANGELES RUBBER COMPANY; MARINE ENGINEERING COMPANY, a corporation; FIBERGLASS ENGINEERING & SUPPLY COMPANY, a corporation; ROBERT O. LYNCH, an individual, doing business as Lynch Asbestos Company and Lynch Asbestos Company, a corporation; PLANT INSULATION COMPANY, a corporation; COAST INSULATION PRODUCTS, a corporation; ARMSTRONG CORK COMPANY, a corporation; J. T. THORPE, INC., a corporation; WARREN AND BAILEY; TOTMAN-MORGAN COMPANY; OWENS-CORNING FIBERGLASS COMPANY, PACIFIC COAST DIVISION; PLANT INSULATION AND THORPE COMPANY; EMPLOYERS LIABILITY ASSURANCE CORPORATION, LTD., of LONDON, ENGLAND, a corporation; THE TRAVELERS INSURANCE COMPANY, a corporation; ASSOCIATED INDEMNITY COMPANY, a corporation; FIREMAN'S FUND INDEMNITY COMPANY, a corporation; AETNA CASUALTY & SURETY COMPANY, a corporation; INDUSTRIAL INDEMNITY COMPANY, a corporation; EMPLOYERS MUTUAL LIABILITY INSURANCE COMPANY OF WISCONSIN, a corporation; GUARANTEE INSURANCE COMPANY, a corporation; ARGONAUT INSURANCE COMPANY, a corporation; AMERICAN MOTORISTS INSURANCE COMPANY, a corporation; ZURICH INSURANCE COMPANY, a corporation; PACIFIC EMPLOYERS INSURANCE COMPANY, a corporation, Defendants.	FINDINGS AND AWARD, ORDER DENYING LIEN CLAIMS AND ORDER DISMISSING PARTY DEFENDANT

Hays and McLaughlin, by John F. McLaughlin, applicant's attorneys

Herlihy & Herlihy, by Kennis T. Jones, attorneys for Argonaut Insurance Co., Phoenix Indemnity Co., Fireman's Fund Indemnity Co., Industrial Indemnity Co., and Employers Liability Assurance Corp., Ltd. of London, England

Clopton and Penny, by R. Wriesner, attorneys for Pacific Employers Insurance Co.

Tipton & Weingand, by C. Weingand, attorneys for Associated Indemnity Corp.

Spray, Gould and Bowers, by M. W. Eralley, Jr., attorneys for Employers Mutual Liability Insurance Co. of Wisconsin and Guarantee Insurance Co.

F. E. Carignan, representative for American Motorists Insurance Co.

Joseph Bilchak, representative for The Travelers Insurance Co.

An Application having been filed herein and all parties having appeared and the matter having been regularly submitted for decision, GEORGE A. MARTINELLI, Referee, makes his Findings and Award, Order Denying Lien Claim and Order Dismissing Party Defendant as follows:

FINDINGS OF FACT

1. James Whitcomb Riley, born October 23, 1899, while employed as an insulator by various employers in the State of California, commencing in the month of January, 1920 continuing through May 19, 1957, sustained injury arising out of and occurring in the course of his employment as follows: In the performance of his occupational duties, the applicant was exposed during each and every day of his employment to deleterious dusts, the accumulative effects of which resulted in a pneumoconiosis and tuberculosis which rendered the applicant totally disabled on May 19, 1957.

2. The names of the employers and insurance carriers for said employers during the periods of said employment and exposure are as follows:

(a) Employers: Johns-Manville, Incorporated; Warren and Bailey; Southern Asbestos & Magnesia Corporation; Plant Rubber and Asbestos Company; Los Angeles Rubber Company; Plant Insulation Company; Marine Engineering Company; Robert O. Lynch, an individual, doing business as Lynch Asbestos Company and Lynch Asbestos

Company; Plant Insulation and Thorpe Co.; Armstrong Cork Company; Coast Insulation Products; Totman-Morgan Company; and J. T. Thorpe, Inc.

(b) Theinsurance carrier for Marine Engineering Company, a corporation and Plant Insulation Company, a corporation during a part of the period of applicant's employment was Pacific Employers Insurance Company, a corporation.

The insurance carrier for Robert O. Lynch, an individual, doing business as Lynch Asbestos Company and Lynch Asbestos Company, a corporation during a part of the period of applicant's employment was Industrial Indemnity Company, a corporation.

The insurance carrier for Coast Insulation Products, a corporation, during a part of the period of applicant's employment was Guarantee Insurance Company, a corporation.

The insurance carrier for J. T. Thorpe, Inc., a corporation during the entire period of applicant's employment was American Motorists Insurance Company, a corporation.

The insurance carrier for Plant Insulation Company, a corporation, during a part of the period of applicant's employment was Fireman's Fund Indemnity Company, a corporation.

During said times, all the employers and the employee were subject to the provisions of the Labor Code of the State of California.

3. Said injury caused temporary total disability entitling the applicant to $40.00 per week beginning May 20, 1957 through November 16, 1959 and thereafter during the continuance of disability or until the further Order of this Commission, based upon maximum earnings.

4. Defendants are entitled to credit for all sums heretofore paid as disability indemnity.

5. Applicant is entitled to be reimbursed for the reasonable value of medical treatment procured by him to cure or relieve from the effects of said injury, to be adjusted by the

parties among themselves. If adjustment is not possible, this Commission will determine the matter upon the filing and service of itemized bills. Among the items of reimbursement are the following: The defendants are directed to pay to Veterans Administration Hospital the sum of $2,685.60; To Dr. C. Pierre De Lawter, the sum of $105.00; for services rendered as anesthesiologist which was authorized by the defendants; and to Dr. John K. Shirey, the sum of $331.00.

6. In view of Finding #5, the lien claims of Dr. C. Pierre De Lawter and Veterans Administration Nospital should be denied.

7. Pursuant to Labor Code Section 4600, applicant is entitled to the reasonable, actual and necessary medical expense incurred for x-rays, laboratory fees and medical reports required to successfully prove his claim herein, in the sum of $150.00 payable directly to Dr. John K. Shirey.

8. Founders Insurance Company is entitled to a lien against unpaid compensation in the sum of $1,040.00 for the period beginning May 27, 1957 for a period of 26 weeks, at the weekly rate of $40.00 under the provisions of Labor Code Section 4903-F.

9. Founders Insurance Company is not entitled to a lien in the sum of $120.00 for hospital benefits paid the applicant under the provisions of the Labor Code.

10. Applicant is entitled to such further medical and/or surgical treatment as may reasonably be required to cure or relieve from the effects of said injury. This treatment is to be furnished by the defendants herein.

11. Said injury will result in permanent disability. Further hearing to establish the extent thereof will be held by the Commission upon the request of any party in interest upon proof that the disability has become permanent and stationary.

12. The claim herein is not barred by the Statute of Limitations.

13. Defendants have not been prejudiced by any alleged failure of the applicant to report said injury within the time required by the provisions of the Labor Code.

14. Applicant's attorneys are entitled to a lien against unpaid compensation for the reasonable value of their services in the sum of$750.00.

15. Pursuant to stipulation of the parties, Phoenix Indemnity Company, a corporation, is entitled to be dismissed and discharged herefrom.

A W A R D

AWARD IS MADE in favor of James Whitcomb Riley against Johns-Manville, Incorporated, a corporation; Warren and Bailey; Southern Asbestos & Magnesia Corporation, a corporation; Plant Rubber and Asbestos Company; Los Angeles Rubber Company; Plant Insulation Company, a corporation; Marine Engineering Company, a corporation; Robert O. Lynch, an individual, doing business as Lynch Asbestos Company and Lynch Asbestos Company, a corporation; Plant Insulation and Thorpe Company; Armstrong Cork Company, a corporation; Coast Insulation Products, a corporation; Totman-Morgan Company; Pacific Employers Insurance Company, a corporation; Industrial Indemnity Company, a corporation; Guarantee Insurance Company, a corporation; American Motorists Insurance Company, a corporation; and Fireman's Fund Indemnity Company, a corporation, jointly and severally, of the sum of $40.00 per week beginning May 20, 1957 through November 16, 1959 and thereafter during the continuance of disability or until the further Order of this Commission; together with interest as provided by law; less all sums heretofore paid; less the sum of $1,040.00 payable to Founders Insurance Company, as outlined in Finding #8; and less the sum of $750.00 payable to Hays and McLaughlin, as attorneys' fees; together with reimbursement for the reasonable value of his self-procured medical treatment; among the items of reimbursement,

the defendants shall pay directly to Veterans Administration Hospital, the sum of $2,685.60; To Dr. C. Pierre De Lawter, the sum of $105.00; and to Dr. John K. Shirey, the sum of $331.00, as outlined in Finding #5; together with reimbursement under Labor Code Section 4600 in the sum of $150.00 payable directly to Dr. John K. Shirey; together with such further medical and/or surgical treatment as may reasonably be required to cure or relieve from the effects of said injury, as outlined in Finding #10.

IT IS ORDERED that the lien claim of Veterans Administration Hospital and the lien claim of Dr. C. Pierre DeLawter be and they are hereby DENIED.

IT IS FURTHER ORDERED that Phoenix Indemnity Company, a corporation, be and it is hereby DISMISSED.

DEFENDANTS ARE FURTHER ORDERED to report to this Commission on Form C-6 within ten days after the cessation of compensation payments under the above continuing award. Copies of said form and copies of all reports incidental thereto are to be served on all adverse parties before filing with this Commission.

GAM:NN
57-LA 182-835

GEORGE A. MARTINELLI
Referee
INDUSTRIAL ACCIDENT COMMISSION

DATED AT LOS ANGELES, CALIFORNIA
NOVEMBER 27, 1959
S E A L

[From the Washington Post, July 15, 1979]

DuPont's Record in Business Ethics: Another View

(By Barry I. Castleman)

The "Five-Part Quiz on Corporate Ethics" offered to readers of Outlook two weeks ago by the DuPont public affairs office contended that critics of business morality have failed to appreciate the complexities of the ethical problems that face business executive. A fuller understanding of such issues, the article suggested, would vindicate the actions of DuPont, for one.

At least one of the examples cited in this article deserves further discussion. This was an account of DuPont's discovery in the 1930s that workers manufacturing dyes using an intermediate called Beta-naphthylamine were developing cancer. Whereupon, "We made full disclosure in the medical journals, cleaned up the process, and took care of employes to the best of medical science's ability."

The cancer hazard in dye making was brought to the attention of the DuPonts by the late Dr. Wilhelm C. Hueper, who is widely regarded as the father of environmental cancer prevention. Fortunately, Dr. Hueper and others who were involved in this struggle in the 1930s and '40s have left the account of industrial history and ethics which follows. This story will even be informative to the DuPont public relations writers, whose "Mobil ad" view of past events was as incorrect as it was self-serving.

Dr. Hueper had emigranted from Germany and was working under the tutelage of a physician at the University of Pennsylvania in the early 1930s. This gentleman was also the personal physician of Irenee DuPont. One day old DuPont had a cold and Hueper came along for the house call. Dr. Hueper asked to see the DuPont Company's dye works, and this was arranged within a short time. He was horrified to find dyes being made with benzidine and beta-naphthylamine, with absolutely no industrial hygiene precautions taken. White, powdery dust was everywhere, and the work areas where the deadly amines were handled were in no way cordoned off from the large chemical works. Hueper noted that it had been known since the turn of the century in Europe that these conditions led to a very high incidence of cancer of the bladder. Hadn't DuPont had that experience, too? The quick answer was "No," but within a few months there were 23 cases of bladder cancer noticed among past and present workers.

A few years later Hueper was working for DuPont Company, and someone seriously suggested that maybe they should just hire people for two years apeice in the dangerous areas and then lay them off. Hueper explained that if they did that, they would be mass-producing cancer. Meanwhile, Swiss dye chemists found other routes of dye synthesis that obviated the need for Beta-naphthylamine, which was abandoned in Switzerland in 1938.

Hueper's most brilliant research was done while he was at DuPont. For 40 years, it had been known that workers exposed to Beta were getting bladder cancer, but when the substance was tested on rats it produced no effect. Dr. Hueper tested Beta on dogs, and it produced numerous bladder tumors. He theorized that there were species-specific metabolic pathways for this substance, which itself was not carcinogenic. However, in some species Beta was metabolized into an active form, which accumulated at high concentration in the urine. The dog "digested" the chemical much the way man did, but the rat was able to pass it off without chemically converting the Beta to its deadly form. Hueper even identified the carcinogenic metabolite in the urine of his dogs.

Word soon got around that the head of the DuPont research labs had announced to the local papers that he had made this discovery. Hueper, enraged, went to see the editor, saying that the big shot had never set foot in his laboratory. "I call that theft," fumed Hueper. The editor calmed him down and called the lab director, who admitted that the work was not his after all. "By then, I knew my days at DuPont were counted," Hueper told me. The scientific report was published in 1938, around the time Hueper left DuPont. After that time, Hueper said, DuPont toxicological research that was bad for business was treated as a trade secret and withheld from publication.

Wrote Hueper in 1943:

"Industrial concerns are in general not particularly anxious to have the occurrence of occupational cancers among their employes or of environmental cancers among the consumers of their products made a matter of public records. Such publicity might reflect unfavorably upon their business activities and oblige them to undertake extensive and expensive technical and sanitary changes in their production methods and in the types of products manufactured. There is, moreover, the

distinct possibility of becoming involved in compensation suits with extravagant financial claims by the injured parties. It is, therefore, not an uncommon practice that some pressure is exerted by the parties financially interested in such matters to keep information on the occurrence of industrial cancer well under cover."

In this paper, Hueper called upon industry to find substitutes for carcinogenic substances such as secondary aromatic amines and asbestos.

DuPont finally stopped using Beta in 1955. But Beta's chemical cousin, benzidine, persisted as a mainstay in the manufacture of numerous dyes for cotton, paper and leather. Hueper had told DuPont that benzidine was carcinogenic in 1936, but benzidine proved to be not so easily substituted as Beta.

An important international medical congress was held in London in 1948, at which the chief medical officer of the DuPont Company presented a paper to show that benzidine was not a cause of industrial cancer, and that all the cases of bladder cancer in his factories could be laid at the door of Beta, whose use he said was being abandoned.

In the early months of 1949 the medical officer to the Imperial Chemical Industries Dyestuffs Division visited the DuPont Chambers Works dye plant. This man, the late Dr. Michael Williams, was accompanied by another British researcher, and they were shown around by the corporate medical director who had given the paper at the London medical congress. After the plant tour, he drove Dr. Williams and his colleague to their next destination, quite a long drive. Dr. Williams, who often recounted the story, noticed that his companion in the back of the car had his eyes closed, and said to the DuPont doctor, "Look, you are a company man, and I am a company man, and Dr. So-and-So is asleep. Can you explain to me why, after the records and so on that you have shown to us today, you are so certain that benzidine is not causing any of the trouble?"

He got the reply, witnessed by the other Briton, who was in fact not asleep but thinking, "We here know very well that benzidine is causing bladder cancer, but it is company policy to incriminate only the one substance, Beta-naphthylamine."

Dr. Williams had only recently joined the giant Imperial Chemical firm, where he later became known as an ardent campaigner against occupational cancer hazards.

DuPont did not withdraw from the benzidine dye business until 1973. According to company records, there were 339 known cases of urinary bladder cancer ascribed to benzidine and Beta among DuPont workmen during the years 1956–1974. Even accounting for the 20–25-year lapsed period between onset of exposure and development of cancer, it is obvious that this continuing epidemic of cancer was both foreseen and preventable.

The DuPont public relations department was not content to merely rewrite history, but went on to lecture The Post's readers about morality, of all things. The writer admonished that "we give up the Moral Rectitude Race. If we consider the possibility that most people in business have pretty much the same base of values as most of their critics * * *" I could well imagine Dr. Hueper's reaction to the suggestion that he was the moral equivalent of the DuPont executives and their medical minions.

He called them chiselers, the callous businessmen who saved a few thousand dollars on industrial hygiene engineering. He railed at them for suppressing the deadly truth from their workers, with their "flexible" front-men in medicine, law and public relations. Bill Hueper learned about business ethics and occupational cancer from the people who wrote the book. "The only thing they understand is jail and bad publicity."

The public's fears and suspicions of business will only be allayed when outfits like DuPont, Velsicol (Tris), Firestone (Radial 500 tires), Ford (Pintos), Hooker Chemical (Love Canal) and their ilk stop giving business a bad name. Until then, sanctimonious varnish over criminal business conduct serves only to warn us that the danger persists.

Chester Beatty Research Institute,
London, England, July 30, 1979.

Editor,
Washington Post,
Washington, D.C.

Dear Sir: Although now retired due to ill-health, I feel obliged to write to you about two articles on the Business Ethics of DuPonts which have been brought to my notice and which I have now seen for myself.

A few days ago I was astonished, and not best pleased, to receive a telephone call from a representative of DuPonts, who had somehow identified me as someone referred to in the second of your articles (which I had, of course, not seen), and who

had also managed to ferret out my retirement address with telephone number. The reason for the call was to ask if I could remember an incident referred to by Barry Castleman, and to ask me to confirm or deny it. I am writing this letter in the hopes that if I make my reply public, and also state such relevant facts as I know about the subject being discussed, I will be spared further inquisition by either party to the dispute or by any other people who may feel involved, for there is then no more for me to add.

The incident described related to a conversation between the then Medical Director (now dead) of DuPonts and the late Dr. Williams, a medical officer at I.C.I.Ltd. The conversation took place in the presence of a British scientist, who was thought to be dozing in the back of the car, and related to the state of scientific knowledge about the power of benzidine to cause cancer of the bladder in 1948. Since I was the "dozy Brit" referred to, I informed the man from DuPonts that the tale as recounted was absolutely true, and that the Medical Director of DuPonts had stated that he and the company were aware that benzidine was a carcinogenic hazard to workpeople.

The two articles that you published give two somewhat differing versions of the dates at which DuPonts became aware that beta naphthylamine and benzidine were thought by a large body of responsible people to cause cancer in human beings. In my view neither account is accurate. Since this very topic of awareness of this type of risk was crucial to an important lawsuit by two workmen against I.C.I.Ltd in England in 1970–71 the Judgement in that case has passages that are important in relation to the argument between your contributors Carl B. Kaufmann of Duponts and Barry Castleman, I feel that I should quote extracts of the salient points.: Mr. Justice O'Connor, in his lengthy Judgement said "By 1914 it was appreciated in Germany and Switzerland that men employed in the synthetic dyestuffs industry were exposed to a definite cancer hazard." In 1921 the International Labour Office in Geneva published "Cancer of the Bladder among workers in Aniline Factories". I quote three passages from that paper.

"In 1912 Luenberger published a very interesting study dealing with 18 cases observed among the workers at Basle handling Aniline dyes. From that moment the existence of a very close connection between the manipulation of aromatic bases and tumours of the bladder among workers was proved."

Among the conclusions at page 22, the following are found—

"(4) It is not possible to determine the substance capable of engendering tumours. At present one can go no further than to incriminate the amino compounds, and particularly benzidine and beta naphthylamine".

"(7) It is, therefore absolutely necessary that in factories in which workers are exposed to the dangerous action of aromatic bases, the most rigorous application of hygienis precautions should be required".

A little later in his Judgement Mr. Justice O'Connor continues with the history as it relates to DuPonts, quoting from unpublished company reports made available to the Court by one of the defendants. He says "In 1933 Dupont sent a medico-technical team to Europe visiting England, Germany and Switzerland. They made individual reports and recommendations and also some joint recommendations. . . . I quote from Dr. Gehrmann's recommendations. . . .

9. We should consider aniline, beta naphthylamine and benzidine as the causative materials and take immediate steps to construct all operations so that there shall be absolutely no dust, no fumes nor any skin contacts."

Their joint report opens with an interesting piece of information when it is remembered that Dupont did not go into the production of synthetic dyestuffs until 1915 or 1916 "approximately two years ago we began to experience a few cases of bladder tumours among our workmen at the Dyeworks. . . . This is the most serious occupational disease that we have ever encountered".

According to information that I collected during my visit to DuPonts in 1949, when the car conversation incident occurred, the manufacture and use of the suspected aromatic amines started in 1930 and the first cases of confirmed bladder tumours occurred in 1929. By 1948 there had been 139 cases, 115 at the Chambers works and 44 at Carrollville.

After some exchange of information about my own researches and researches at the Haskell Laboratories during 1949, Dr. Gerhmann informed me in a letter dated 30 December 1949 that owing to legal difficulties it would not be possible to send me information that had been promised or new information that might arise. However, Kauffman's own statement about information being given to persons inside or outside the Company in relation to health and safety removes any scruples that I might otherwise have felt about making public this hitherto undisseminated information.

All this may be summarized as follows:—From about the time that DuPonts entered the synthetic dyestuff field the Company had, or should have had, an awareness of the dangers attendant on such manufactures. It must surely be idle to pretend that such a company would not be expected to be aware of the German and Swiss publications about the hazard, even before the factory was built. Still less could it be claimed that they could reasonably be excused for not knowing of the International Labour Office publication of 1921.

Duponts themselves were experiencing the first wave of casualties by 1929, and by 1933 they were made aware, by their own investigating team, that both beta naphthylamine and benzidine were almost certainly the main culprits.

That Dr. Gerhmann should, in 1948, present a paper at the ninth International Congress on Industrial Medicine (I was present) claiming that benzidine was not one of the bladder carcinogens would not in itself be scientifically unacceptable, for as the late Lancelot Hogben once said "it is by no means to the discredit of any philosopher to say that he has changed his views in the course of a prolific career", if the evidence derived from a study of the epidemiology of the disease at DuPonts had warranted such a *volte face.* However, the car conversation renders this explanation untenable and lends support to some of Barry Castleman's strictures on Carl Kaufmann's description of business ethics.

May I reiterate my plea that now I have "revealed all" I am left in peace until I rest therein!

ROBERT A. M. CASE, M.D., Ph. D., F. I. Biol.,
Professor Emeritus (Ret.), University of London.

CORRESPONDENCE BETWEEN ASBESTOS COMPANIES AND TRADE MAZAGINE "ASBESTOS"

"ASBESTOS"
Philadelphia, Pa., September 25, 1935.

Mr. SUMNER SIMPSON,
President, Raybestos-Manhattan, Inc.,
Bridgeport, Conn.

DEAR SIR: You may recall that we have written you on several occasions concerning the publishing of information, or discussion of, asbestosis and the work which has been, and is being done, to eliminate or at least reduce it.

Always you have requested that for certain obvious reasons we publish nothing, and, naturally your wishes have been respected.

Possibly by this time, however, the reasons for your objection to publicity on this subject have been eliminated, and if so, we would like very much to review the whole matter in "Asbestos".

Our thought is that we could either prepare from data which we have in our files, or obtain from Mr. W. A. Godfrey of the Cape Asbestos Company, London, who is much interested in the subject, an article on the work done in England and then follow it with an article written by someone in your organization, as to the work done here.

We understand from Mr. Stover that your North Charleston plant, contains very complete dust control equipment and a description of such equipment, if you approve, would make a very interesting part of the article. Possibly even you could supply a photograph or two showing some part of this dust control equipment.

We await with much interest your reply. If there is no serious objection it would seem to be a most interesting subject for the pages or "Asbestos", and possibly a discussion of it in "Asbestos" along the right lines, would serve to combat some of the rather undersirable publicity given to it in current newspaper.

Very truly yours,

R. S. ROSSITER.

BRIDGEPORT, CONN., *Oct. 1, 1935.*

Mr. VANDIVER BROWN,
Attorney, Johns-Manville Corp.,
New York City.

MY DEAR MR. BROWN: Enclosed is copy of a letter received from Miss Rossiter, of "Asbestos."

As I see it personally, we would be just as well off to say nothing about it until our survey is complete. I think the less said about asbestos, the better off we are, but at the same time, we cannot lose track of the fact that there have been a number of articles on asbestos dust control and asbestosis in the British trade

magazines. The magazine "Asbestos" is in business to publish articles affecting the trade and they have been very decent about not re-printing the English articles.

I shall be pleased to have your opinion in the matter.

Very truly yours,

SUMNER SIMPSON, *President.*

Enc.

JOHNS-MANVILLE,
New York, N.Y., October 3, 1935.

Mr. S. SIMPSON,
President, Raybestos-Manhattan, Inc.,
Bridgeport, Conn.

MY DEAR MR. SIMPSON: I wish to acknowledge receipt of yours of October 1st enclosing copy of the September 25th letter from the editor of the magazine "ASBESTOS." I quite agree with you that our interests are best served by having asbestosis receive the minimum of publicity. Even if we should eventually decide to raise no objection to the publication of an article on asbestosis in the magazine in question, I think we should warn the editors to use American data on the subject rather than English. Dr. Lanza has frequently remarked, to me personally and in some of his papers, that the clinical picture presented in North American localities where there is an asbestos dust hazard is considerably milder than that reported in England and South Africa.

I believe the question raised by Miss Rossiter might well be considered at the committee meeting scheduled for next Tuesday, at which I understand both you and Mr. Judd will be present.

Very truly yours,

VANDIVER BROWN, *Attorney.*

[Intra-company correspondence]

OWENS-CORNING FIBERGLAS CORP.,
Toledo, Ohio, January 7, 1942.

Attention of Mr. E. J. Marshall.
Subject Asbestos Workers Union.

REVIEW OF 1941

1. The issue was joined.
2. Our health story was drawn together.
3. Our strategy has been to attack each situation locally.

IMMEDIATE DEVELOPMENTS AHEAD FOR 1942

1. Siebert article to appear in January issue of Industrial Medicine.
2. Gardner article in preparation for Journal of Industrial Hygiene.
3. Sulzberger program under way.

STRATEGY FOR 1942

Should it not be to take the offensive?

The following plan is suggested:

1. Gather as a weapon-in-reserve an impressive file of photostats of medical literature on asbestosis. Available are two bibliographies covering medical literature to 1938, citing references to scores of publications in which the lung and skin hazards of asbestos are discussed. This file would cover five or six hundred pages, which can be microphotographed in the library of the Surgeon General in Washington or in some other medical library.

2. (a) Explore through Aetna the feasibility of working out a plan whereby our products liability coverage could be extended to all members of the Asbestos Workers Union wherever and whenever they are handling Fiberglas products. This would involve some 2,000 workers all of whom would have to be X-rayed (X-rays to be interpreted at Trudeau by Dr. Sampson), and in all probability given a physical examination before group coverage became effective on a set date.

(b) If feasible, approach Union leaders with offer presenting plan as follows:

(1) A demonstration of Owens-Corning's willingness to work with A.F. of L. Union Labor.

(2) A means of extending to Union members on construction jobs the same kind of insurance protection and industrial hygiene precautions now available to workers in private industry.

(3) An irrefutable demonstration of the willingness of a reputable commercial insurance company to underwrite such a risk and of the manufacturer to carry the premium cost.

(c) If reaction is favorable, arrange for Aetna representatives to present plan at Union district conferences and/or meetings of locals or at general convention of Union in fall of 1942. Presentation to be accompanied by distribution of Aetna leaflets explaining the insurance and telling the Fiberglas health story.

(d) If reaction is unfavorable, use the asbestosis weapon-in-reserve to let them stew. He may be sure that word of the proposal will reach competition and may give us a lever with which to go direct to the locals under the union's professed law of local autonomy. This procedure may provide an opportunity to promote dissension in the ranks that conceivably could bring about over-throw of the present Union leadership.

(e) The proposal can be exploited publicity-wise to our advantage either way.

If the reaction is favorable, it is a step unprecedented in the industry, taken by a manufacturer so confident of the absence of unusual hazard in his materials that he has joined forces with Aetna—at a rate more favorable than could be granted to any competitive manufacturer—to protect and reassure labor and assume liability attaching to any occupational hazard attributable to his materials.

If the reaction is unfavorable, the way is opened to spread word among the locals about the refusal of the Union officials to make this protection available to the members and to play all the stops on asbestosis. Implied is the threat to distribute to all members of the Union copies of the U.S. Public Health Bulletin No. 241 on Asbestosis.

Principal advantages of the whole plan are that it would take out of the realm of rumor and gossip all the stories of injuries that are floating around, would enable us to document such stories, and would enable us to take the offensive in telling the health story of Fiberglas where it would do the most good.

First Interim Report

ASBESTOSIS AND PULMONARY CANCER

to

Quebec Asbestos Mining Association

by

The Saranac Laboratory

of

The Trudeau Foundation

Saranac Lake, New York

May 7, 1952

Submitted by:

Arthur J. Vorwald, M.D.
Director, The Saranac Laboratory
and The Trudeau Foundation

5/28/52

ASBESTOSIS AND PULMONARY CANCER

I. INTRODUCTION

An experiment has been in progress at The Saranac Laboratory for some 14 months in an attempt to ascertain the influence of inhaled asbestos dust upon the incidence of pulmonary tumors in mice. The purpose of this study is to obtain experimental data for correlation with experience pertaining to pulmonary cancer in industrial workers exposed occupationally to the inhalation of asbestos dust.

Two strains of mice, one susceptible and the other resistant to the development of pulmonary tumors, have been exposed to the asbestos dust; comparable numbers of control animals of each strain have been kept in normal air but under conditions of housing and diet identical with those of the experimental animals. The experiment has been designed to reveal a possible earlier onset of tumors in the exposed animals than in the control group as well as to determine the total incidence of tumors occurring over the entire period of the experiment.

It may be stated here that the evidence obtained reveals no tendency towards an earlier onset of tumors among exposed animals in comparison with control animals. Nevertheless, there does appear to be a trend toward a greater incidence of tumors in the exposed animals than in the control animals. It is important to note, however, that statistical analysis of the data obtained up to the present shows that the differences between the experimental and the control animals are no greater than might be expected to occur by chance alone. The experiment is not completed and it is considered likely that, if the ratios of tumor incidence at the next period when animals

are killed are similar to those for the 14-month interval, the trend which is now noted may finally be shown to be statistically significant because of the larger total number of animals observed.

II. MATERIALS

A. Dusting Material: The dust used in this experiment was received on January 5, 1951, from the Johnson Company Asbestos Mines of Thetford, Quebec, and was given the Saranac Laboratory number MD-135. X-ray diffraction analysis revealed that the material contains a variety of minerals, of which the serpentine group amounted to 70 per cent. Though the particulate mineral serpentine and the fibrous mineral chrysotile yield the same diffraction pattern, petrographic examination showed that there was considerably more chrysotile than serpentine present in the material. Much of the chrysotile occurred in thick unopened bundles, but it was estimated that at least 25 per cent of the chrysotile was present as individual fibers or partially opened bundles. Other components, largely particulate, included a few per cent of magnetite, chromite, brucite, talc, and quartz, and traces of miscellaneous minerals. The quartz content was about 1 to 2 per cent. Of the particulate material at least 85 per cent of the particles were less than 5 microns in size.

Studies of samples of atmospheric dust taken from the animal exposure room revealed, with respect to the length of the chrysotile fibers, that the fibers occurred in the following distribution of sizes:

Fibers less than 5 microns in length	32.3 %
" from 5 to 10 " " "	35.8
" " 10 to 20 " " "	20.7
" " 20 to 50 " " "	8.3
" " 50 to 100 " " "	2.7
	99.8 %

B. Animals: The mice used in this experiment were obtained from the Jackson Memorial Laboratory at Bar Harbor, Maine. That laboratory carries colonies of two different strains of mice, identified as Strain A and Strain C, susceptible to pulmonary tumors. Strain A, under the usual practice of observing the observation for tumor until the mice approach old age, had a natural incidence of pulmonary tumors that approximates 95 per cent. Strain C, under similar circumstances, has an incidence of the tumors of about 60 per cent. Since in the present experiment it was proposed to study the influence of dust exposure upon the over-all incidence of tumor, Strain A was considered unsuitable for this investigation because any increased incidence above the normal rate of 95 per cent would be difficult to ascertain. Strain C was selected, therefore, because it had a lower incidence of pulmonary tumor and because it offered certain other advantages, among which was the fact that the incidence of mammary carcinoma, in Strain C, which might interfere with interpretation of the pulmonary lesions, was low.

Of the several available strains of mice resistant to the development of pulmonary tumors, the Strain C 57 black was chosen because mice of this strain were readily available in sufficient numbers to permit obtaining a colony of an age and sex ratio comparable to that of the Strain C colony.

III. METHODS

A. Dust Administration: The technic developed at The Saranac Laboratory some fifteen years ago for the dissemination of asbestos dust into the air for experimental purposes is being used in the current study. The method consists essentially of mechanical agitation

of the asbestos dust by a rotating paddle in a large hopper filled with asbestos dust to approximately the level of the axle of the paddle. The edges of the paddle are equipped with stiff wire brushes to break up the small balls of asbestos which tend to form. The dusting mechanism is kept in operation inside the 8-foot cubical dust room for 8 hours a day, 5 1/2 days per week. Animals live continuously in the room, which is ventilated with fresh clean air when the dust disseminator is not in operation. Atmospheric samples are collected in the room at regular intervals with a Greenburg-Smith midget impinger and dust counts made by the light field technic with a microprojector. The dust counts have averaged 817 million particles per cubic foot of air. In general, the fibers have represented about 6.6 per cent of the total count, or 53.8 million. Of the total number of fibers, about 11 per cent are longer than 20 microns. It will be recalled that, in regard to the production of asbestosis, the fibers greater than 20 microns in length are of the greatest importance.

B. Animals: At the start of the experiment 260 mice were placed in the dust room; 130 of these were Strain C mice, and 130 were Strain C57 black mice. Of each strain 30 were males and 100 were females. This sex ratio was dictated by space requirements, since male mice tend to fight and must be kept in small groups, while many females may safely be placed in a single cage. The total number of control mice was 340, with a sex distribution similar to that of the exposed groups.

In order to follow the development of tumors and to observe any possible earlier onset of tumors among the exposed mice, experimental animals and control animals were killed at regular intervals after the

beginning of the exposure to dust. The intervals chosen were 2, 4, 6, 10, and 14 months; the next interval has been set for 16 months. At each period 34 experimental and 34 control animals were killed; of each group of 34 animals, 17 were Strain C and 17 were Strain C57 black. In each case, the 17 animals included 4 males and 13 females.

IV. RESULTS

The observations made at each of the periods when animals were killed are presented in table 1. It will be noted that the total number of animals examined in each of the different groups varies slightly. This variation is the result of a few spontaneous deaths in each group. The observations made in such cases have been incorporated in the data for the next period. In many instances animals dying spontaneously have been eaten by their cagemates. It has been necessary to discard these animals completely from the record of experimental observations.

It will be noted that within Strain C there is a higher percentage of tumors among animals exposed to asbestos dust than among the controls. The same situation is true within the Strain C57 black. Obviously, the same condition is true also of the over-all figures combining both strains.

The significance of all these percentage incidence figures has been tested statistically by means of the well-recognized formula:

$$S.E. = \sqrt{\frac{P_1 \cdot q_1}{n_1} + \frac{P_2 \cdot q_2}{n_2}} \quad \text{where}$$

S.E. = Standard error of difference in incidence between two groups

n_1 = Total number of animals in the group

Table 1

Occurrence of Pulmonary Tumors

in Mice Exposed to Asbestos Dust and in Mice Not Exposed to Dust

Strain of mice	Period of observation	Number of mice with tumor in the group exposed to asbestos dust			Number of mice with tumor in the control group not exposed to dust		
	months	Male	Female		Male	Female	
Strain C (Tumor susceptible strain of mice)	2	0	0		0	1	
	4	0	1		0	0	
	6	0	1*		1	0	
	10	0	2		0	1	
	14	1	7		0	4	
				12			7
Number examined:		22	72		20	72	
				94			92
Incidence of tumor:		12 ÷ 94 = 12.8%			7 ÷ 92 = 7.6%		
Strain C57 Black (Tumor non-susceptible strain of mice)	2	0	0		0	0	
	4	0	0		0	0	
	6	0	0		0	0	
	10	0	1		0	2	
	14	2	2		0	1	
				5			3
Number examined:		19	66		20	69	
				85			89
Incidence of tumor:		5 ÷ 85 = 5.9%			3 ÷ 89 = 3.4%		
Incidence of tumor in both groups:		17 ÷ 179 = 9.5%			10 ÷ 181 = 5.5%		

* Malignant

Table 2

Difference in Incidence of Pulmonary Tumors

in Mice Exposed to Asbestos Dust and in Mice Not Exposed to Dust

Groups of mice compared	Observed difference in incidence	Twice the standard error of difference	Statistical significance of observed difference
	per cent	per cent	
Strain C asbestos group vs Strain C control group	5.2	8.8	Not significant
Strain C57 black asbestos group vs Strain C57 black control group	2.5	6.5	Not significant
All asbestos groups (both strains) vs All control groups (both strains)	4.0	5.5	Not significant
All asbestos groups at 10 and 14 months vs All control groups at 10 and 14 months	8.3	13.0	Not significant
All asbestos groups (total incidence) vs All groups * (total incidence)	3.1	4.8	Not significant

* The values for all groups (total incidence) are based upon observations for the asbestos and the control groups and also for groups exposed to two other dusts--iron oxide and quartz--in another experiment.

P_1 = Per cent of animals with tumor in a specific group of animals

Q_1 = " " " " without tumor in the same specific group

(Thus, $Q_1 = 100 - P_1$)

P_2, Q_2 } Corresponding symbols for another group of animals

It will be recalled that if an observed difference in percentage incidence between two groups is greater than twice the standard error of that difference, the difference may be considered to be significant and due to factors other than chance. If the observed difference is less than twice the standard error, it is very likely due simply to chance. In table 2 the observed difference in the incidence of pulmonary tumor and the critical value of twice the standard error of difference are compared for the various groups. It will be noted by comparing the values that none of the observations made to date are statistically significant. An example of the method of calculation follows.

Calculation of standard error of difference between over-all incidence of tumors in the control animals and in the experimental mice from data in table 1:

Incidence of tumors: Experimental animals 9.5%

" " Control animals 5.5

Number of animals observed: Experimental animals 179

" " " Control animals 181

$$S.E. = \sqrt{\frac{9.5 \times 90.5}{179} + \frac{5.5 \times 94.5}{181}} = \sqrt{4.80 + 2.87} = \sqrt{7.67}$$

$$= 2.77$$

$$2 \times S.E. = 5.5\%$$

Thus a difference up to 5.5 per cent is likely to occur by chance. The observed difference of 4 per cent (9.5 - 5.5 = 4.0) may therefore have occurred simply by chance distribution of animals and is not statistically significant.

V. COMMENT

It will be apparent from a review of table 1 that the experiment is now in its most important phase. The incidence of pulmonary tumors has begun to rise for animals killed at the 18-month period, both for the control animals and for the animals exposed to asbestos dust. The increased incidence is more pronounced for the group exposed to dust, but the rise has occurred at about the same time in both groups. The differences between the two groups, however, as has been noted, are not statistically significant.

The impression is gained from an inspection of table 1 that the large numbers of animals killed early in the experiment are weighting the final figures and detracting from the magnitude of the incidence of tumor. It must be noted that this study has been an experimental one and that it has been necessary to make observations by killing animals for study at regular intervals. It appears that by means of a rather involved statistical procedure the disproportionate weighting of the values by the data of the early observations can be eliminated. This procedure will be carried out after final observations have been made, since it is too laborious an undertaking to be performed at the present stage when the values obtained would be only of academic interest.

It may be noted in passing that if the over-all incidence of tumor among the exposed animals had been only slightly greater—11 per cent rather than 9.5 per cent—the difference between the incidence for the exposed group and for the control group would have been statistically significant.

VI. SUMMARY

An experiment concerning the influence of inhaled asbestos dust upon the incidence of pulmonary tumors in mice has been in progress for 14 months. Analysis of the results of this experiment reveals that thus far (after the animals have been exposed to asbestos dust for 14 months), the dust has not exerted an influence of a degree sufficient to cause statistically significant alterations in the incidence of pulmonary tumors. The final phases of this experiment will be of great importance, since at the most recent period when animals were killed for study the incidence of tumors had increased and the increase seems to be more pronounced among the animals exposed to asbestos dust than among the non-exposed control animals.

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CORPORATE CRIMINAL LIABILITY

THURSDAY, DECEMBER 13, 1979

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON CRIME,
COMMITTEE ON THE JUDICIARY,
Washington, D.C.

The subcommittee met, pursuant to notice, at 9:30 a.m. in room 2226, Rayburn House Office Building, Hon. John Conyers, Jr. (chairman of the subcommittee) presiding.

Present: Representatives Conyers, Synar, Volkmer, Hyde, Sensenbrenner, and Gudger.

Also Present: Hayden W. Gregory, counsel; Steven G. Raikin, assistant counsel; Joseph V. Wolfe, associate counsel; Linda Hall and Phyllis Henderson, secretaries.

Mr. CONYERS. Good morning. The subcommittee will come to order.

The Subcommittee on Crime continues its hearing on H.R. 4973 which would amend the code to impose criminal penalties for knowing nondisclosure by business entities of lethal defects in products and business practices.

The witnesses that we have heard included the sponsor of this legislation, Mr. George Miller of California, and an environmental consultant, Barry Castleman, who described in detail a number of cases where allegations of the various industries knowingly concealed serious dangers associated with their productions in business practices.

The asbestos; Lathrop, Calif., well poisoning; Love Canal; and exploding gas tank cases were all brought into the discussion.

Today, our deliberations continue with two distinguished witnesses who will offer their comments and observations.

We are pleased to begin with Dr. Samuel Epstein. We now have approximately 12 additional cosponsors of this legislation, and it appears to be gaining support, even at its second session.

Dr. Epstein is a professor of occupational and environmental medicine at the School of Public Health at the University of Illinois Medical Center at Chicago.

He has been chief of the laboratories of carcinogenesis and toxicology at the Children's Cancer Research Foundation in Boston, senior research associate in pathology at Harvard Medical School, and professor of environmental health and human ecology at Case Western Reserve University Medical School.

He is an authority on toxic and carcinogenicity hazards due to chemicals and is the author of over 200 scientific publications and 4 books.

He has been before congressional committees numerous times, worked with Federal agencies, and is president of the Rachael Carson Trust and chairperson of the Commission for the Advancement of Public Interest Organizations.

I am currently scanning his latest book, "The Politics of Cancer," and recommend it enthusiastically to those members of the committee and citizens who would want to understand the nature of our subject matter, which is now related to white collar crime, but taking a new direction, of which homicide is a part of the criminal act.

We welcome you, Dr. Epstein. We appreciate your preparation for this hearing and incorporate in its totality your printed statement, and that will allow you to proceed in your own fashion.

TESTIMONY OF DR. SAMUEL S. EPSTEIN, PROFESSOR OF OCCUPATIONAL AND ENVIRONMENTAL MEDICINE, SCHOOL OF PUBLIC HEALTH, UNIVERSITY OF ILLINOIS MEDICAL CENTER AT CHICAGO

Dr. EPSTEIN. Mr. Conyers, members of the subcommittee, I would like to insert a statement on my professional qualifications, background, and publications into the record.

Mr. CONYERS. Without objection, they will be accepted.

[The information follows:]

SAMUEL S. EPSTEIN, M.D., CIRRICULUM VITAE

PERSONAL

Born April 13, 1926, Middlesborough, Yorkshire, England. Naturalized U.S. citizen. Married, Three Children. Professional address: School of Public Health, University of Illinois Medical Center, P.O. Box 6998, Chicago, Illinois 60680.

QUALIFICATIONS

1947—B.Sc. (Physiology) London University, England.
1950—M.B.B.S. (Bachelor of Medicine, Bachelor of Surgery) (Double Honors) London University, England.
1952—D.T.M.H. (Diploma of Tropical Medicine and Hygiene, Bacteriology and Parasitology) London University.
1954—D. Path. (Diploma of Pathology) London University.
1958—M.D. (Doctorate of Medicine, Thesis in Pathology and Bacteriology) London University, England.
1963—Diplomate, in Public Health and Medical Laboratory Microbiology, of the American Board of Microbiology.
1971—Fellow of the Royal Society of Health, England.

POSITIONS HELD

1950: Demonstrator, Morbid Anatomy, Guy's Hospital, London.
1951: House Physician, St. John's Hospital, London.
1952: Postgraduate Student in Tropical Medicine, Pathology, Bacteriology and Parasitology, Royal Army Medical College, London.
1952–1955: Specialist in Pathology, Royal Army Medical Corps.
1955–1958: Lecturer in Pathology and Bacteriology, Institute of Laryngology and Otology, University of London.
1958–60: British Empire Cancer Campaign Research Fellow, in conjunction with the Chester Beatty Cancer Research Institute, and Tumor Pathologist at the Hospital for Sick Children, Great Ormond Street, London.
1960: Consultant in Pathology, The Memorial Hospital, Petersborough, England.
1961–1971: Research Associate in Pathology and Microbiology, The Children's Hospital Medical Center and the Children's Cancer Research Foundation, Inc., Boston, Mass.

1961–1971: Chief, Laboratories of Carcinogenesis and Toxicology, Applied Microbiology and Histology, The Children's Cancer Research Foundation, Inc., Boston, Mass.
1962–1971: Senior Research Associate in Pathology, The Children's Cancer Research Foundation, Inc., Boston, and Research Associate in Pathology, Harvard Medical School, Boston.
1971–1976: Swetland Professor of Environmental Health and Human Ecology; Professor of Pharmacology; Director, Environmental Health Programs, Case Western Reserve University, School of Medicine, Cleveland, Ohio.
1976 to date: Professor of Occupational and Environmental Medicine, School of Public Health, University of Illinois at the Medical Center, Chicago, Illinois.
1978—Director, Environmental Health Resource Center, State of Illinois.

AWARDS

1. Military Awards in Royal Army Medical Corps, 1953:
   (a) Montefiore Gold Medal in Tropical Medicine
   (b) Montefiore Prize in Tropical Hygiene
   (c) Ranald Martin Prize in Military Surgery
2. Society of Toxicology, 1969 Achievement Award.
3. Fellow of the Royal Society of Health, 1971.
4. Fellow of the New York Academy of Sciences, 1975.

SOCIETY MEMBERSHIPS

1. Society for Pathology and Bacteriology.
2. Society for General Microbiology.
3. Society of Protozoologists.
4. Air Pollution Control Association.
5. American Association of Pathologists and Bacteriologists.
6. American Society for Experimental Pathology.
7. American Association for Cancer Research.
8. American Board of Microbiology.
9. Society of Toxicology.
10. Environmental Mutagen Society.
11. American Association for Advancement of Science.
12. Society for Occupational and Environmental Health.
13. New York Academy of Sciences.

COMMITTEES AND CONSULTANTSHIPS

1. Member, Society of Protozoologists Committee on the Relation of Protozoology to Public Health, 1962–1968.
2. Chairman, Committee on Biological Effects of Air Pollution, Air Pollution Control Association, 1963–1973.
3. Member, Technical Council of Air Pollution Control Association, 1963–1973.
4. Executive Secretary, Environmental Mutagen Society, 1969–1972.
5. Chairman, 1969, HEW Panel, Mutagenicity of Pesticides, "Mrak Commission".
6. Chairman, 1969, HEW Panel, Teratogenicity of Pesticides, "Mrak Commission".
7. Member, 1968, HEW Panel, Pesticides Interactions, "Mrak Commission".
8. Member, 1969, HEW Panel, Carcinogenicity of Pesticides, "Mrak Commission".
9. Chairman, NIMH Panel on Chronic Non-psychiatric Hazards of Drugs of Abuse, 1969.
10. Consultant to the Committee on Public Works, United States Senate, 1970–1974.
11. Chairman, Effects Division, Technical Council, Air Pollution Control Association, 1970–1973.
12. Consultant, Center for Studies of Narcotic and Drug Abuse, National Institute of Mental Health, 1970–1973.
13. Consultant to the Panel on Polycyclic Organic Matter, National Academy of Sciences, National Research Council, 1970.
14. Consultant to the Pesticide Board of the State of Massachusetts, 1970–1971.
15. Consultant, U.S. Senate Sub-committee on Executive Reorganization and Government Research, Committee on Government Operations, 1971.
16. President-elect, Society for Occupational and Environmental Health, 1972–1974.
17. Member, National Air Quality Criteria Advisory Committee, Environmental Protection Agency, 1972–1975.
18. Member, Department of Labor Advisory Committee on Occupational Carcinogens, 1973.

19. Consultant, Industrial Union Department, AFL/CIO, 1973 to date.
20. Ad Hoc Consultant Oil Chemical and Atomic Workers Union, 1968 to date.
21. Ad Hoc Consultant Textile Workers Union, 1972 to date.
22. Chairperson Occupational Task Force, State of Ohio, 1974–1975.
23. President, The Society for Occupational and Environmental Health, 1974–1976.
24. Consultant, Office of General Counsel (on Aldrin and Dieldrin), Environmental Protection Agency, 1974.
25. Consultant, Office of General Counsel (on Chlordane and Heptachlor), Environmental Protection Agency, 1975 to date.
26. Member, Environmental Health Advisory Committee, Environmental Protection Agency, 1975 to date.
27. Consultant, Occupational Safety and Health Administration, Department of Labor, 1977 to date.

PUBLIC INTEREST GROUPS AND ORGANIZATIONS

1. President, Rachel Carson Trust, Washington, D.C., 1974 to date.
2. Chairperson, Commission for the Advancement of Public Interest Organizations, Washington, D.C., 1974 to date.
3. Member, Advisory Council Center for Science in the Public Interest.
4. Member, Science Advisory Board for the Journal, "Environment".
5. Member, Board of Directors, Consumers Union of United States, Inc., Mount Vernon, N.Y.

PUBLICATIONS AND TESTIMONY

1. Epstein, S. S., and Winston, P.: Intubation granuloma. J. Larnygol. Otol., *71*: 17–38, 1957.
2. Epstein, S. S., Winston, P., Friedmann, I., and Ormerod, F. C.: The vocal cord polyp. J. Laryngol. Otol., *71*: 673–688, 1957.
3. Epstein, S. S. and Shaw, H. J.: Metastatic cancer of the larynx as a cause of carotid-sinus syndrome. Cancer, *10*: 933–937, 1957.
4. Epstein, S. S.: An intra-oral inoculation technique for the production of experimental pneumonia in mice. J. Hygiene, *56*: 73–79, 1958.
5. Epstein, S. S. and Stratton, K.: Further studies in the mouse intra-oral inoculation technique. J. Hygiene, *56*: 81–83, 1958.
6. Epstein, S. S. and Shaw, H. J.: Multiple malignant neoplasms in the air and upper food passages. Cancer, *11*: 326–333, 1958.
7. Winston, P. and Epstein, S. S.: Papilloma of the larynx: A clinico-pathological study. J. Laryngol. Otol., *72*: 452–464, 1958.
8. Epstein, S. S. and Friedmann, I.: *Klebsiella* serotypes in infections of the ear and upper respiratory tract. J. Clin. Path., *2*: 359–362, 1958.
9. Epstein, S. S.: A "stripping" technique for the examination of the total epithelial surface of the larynx. J. Path. Bact., *75*: 472–473, 1958.
10. Freeman, T., Wakefield, G. S., and Epstein, S. S.: Platelet-agglutinating factor in glandular fever complicated by jaundice and thrombocytopenia Lancet, 383–385, Oct. 25, 1958.
11. Epstein, S. S. and Bradbeer, T. L.: A case of primary diptheritic otitis media. J. Laryngol. Otol., *72*: 1001–1003, 1958.
12. Epstein, S. S.: Experimental *Klebsiella* pneumonia in mice with particular reference to periarterial changes. J. Path. Bact., *78*: 389–396, 1959.
13. Epstein, S. S.: The biochemistry and antibiotic sensitivity of the *Klebsiella*. J. Clin. Path., *12*: 52–58, 1959.
14. Epstein, S. S. and Payne, P. M.: The effect of some variables on experimental *Klebsiella* infections in mice. J. Hygiene, *57*: 68–80, 1959.
15. Shaw, H. J. and Epstein, S. S.: Cancer of the epiglottis. Cancer, *12*: 246–256, 1959.
16. Epstein, S. S. and Weiss, J. B.: The extraction of pigments from *Euglena gracilis*. Biochem. J. *75*: 247–250, 1959.
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18. Epstein, S. S., Payne, P. M., and Shaw, H. J.: Multiple primary malignant neoplasms in the air and upper food passages. Cancer, *13*: 461–463, 1960.
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21. Epstein, S. S., Weiss, J. B., Bush, P., and Causley, D.: Vitamin B_{12} and growth of *Euglena gracilis* Fed. Proc., *20*(1): 450, 1961.
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23. Epstein, S. S. and Burroughs, M.: Some factors influencing the photodynamic response of *Paramecium caudatum* to 3,4-benzpyrene. Nature, *193*: 337–338, 1962.
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Prepared Testimony on White Collar Crime (H.R. 4973) Before the Subcommittee on Crime of the Committee on the Judiciary by Samuel S. Epstein, M.D., Professor, Occupational and Environmental Medicine, School of Public Health, University of Illinois Medical Center, Chicago, Ill.

A. INTRODUCTORY STATEMENT

Mr. Conyers, members of the Subcommittee, my name is Samuel Epstein and I am Professor of Occupational and Environmental Medicine at the School of Public Health, University of Illinois Medical Center, Chicago. A statement on my professional qualifications, background, and publications is attached to this testimony. As a pathologist and experimental toxicologist, I have for some three decades studies the hazardous effects of chemicals and chemical pollutants, including drugs, food additives, pesticides and industrial chemicals, in air, water, food and the workplace with particular reference to delayed toxic effects, notably cancer, and have over two hundred scientific publications and five books in these areas. Additionally, during the past decade, I have had increasing involvement in the interface between science and public policy, as exemplified by membership of a wide range of Federal advisory and expert committees, by consultantships to Congress, including the Senate Committee on Public Works, and by assisting organized labor and public interest groups in the development of their concerns on health and safety.

In the course of these activities, I have had occasion to undertake detailed investigations of the regulatory data base of a wide range of consumer products and industrial chemicals. These investigations have revealed a pattern of constraints, including gross negligence, manipulation, distortion, suppression and destruction of data, which are so frequent as to preclude their dismissal as exceptional aberrations. Besides the businesses concerned, involved in the generation and interpretation of such constrained data are a complex of commercial testing and consulting

laboratories and organizations and academic consultants, supported by a network of industry front organizations and quasi-professional societies. Such constrained data have served as the basis for the past and continuing successful strategies of some segments of industry which have minimized or denied risk to workers and the public-at-large, and have maximized product or process efficacy and the costs and difficulties of compliance. Such strategies, reflecting apparent preoccupations with short term economic growth to the detriment of considerations of long term adverse public health and environmental impacts, have resulted in a burgeoning toll of cancer and other preventable diseases.

These grave charges, including "knowing (acts of) nondisclosure", are not made lightly or speculatively. They pose fundamental questions of legal equity, besides reflecting the subersion of democratic decision making processes by special interests. Before substantiating and illustrating these charges; I would like to offer some comments on H.R. 4973.

B. COMMENTS ON THE BILL

May I first congratulate Congs. Miller and Conyers and other members of Congress for having introduced H.R. 4973, and Cong. Conyers and members of the Subcommittee on Crime of the Committee on the Judiciary for the important and informative hearings they have held so far on the bill. This bill epitomizes our most honored constitutional and legal traditions, and the indivisibility of American justice. The bill recognizes the serious nature and implications of white collar crime, and seeks to restore eroding trust in government and the judiciary by eliminating the major discrepancies which currently exist between legal and societal responses to white and blue collar crimes. The bill can thus also be expected to exercise an indirect deterrent effect against blue collar crime.

1. Impact on business

The thrust of this bill is consistent with the finest traditions of American business. It offers business the time opportunity to explicitly reassert its highest ethical standards and, by policing itself, to preclude or limit the need for the futher regulatory policing. Clearly, the bill imposes no unreasonable restraints on commerce or on technological innovation, but merely seeks to encourage honest disclosure of "lethal defects," and to deter and punish those who knowingly commit criminal acts on "nondisclosure." In so doing, the bill will discourage the introduction into commerce of products and processes with "lethal defects," with attendent major economic dislocation following their subsequent withdrawal once these defects become belately recognized. Successful self-policing by business will also act as a major brake to burgeoning product liability suits, such as those we are now experiencing for asbestos products. Finally, the bill offers a unique opportunity to restore the eroding public confidence in big business, in general, and the chemical industry, in particular, and thus to reverse the growing and nationally damaging trend of polarization and confrontation between business, and the general public and labor. Recognition of these various considerations and the overall favorable impact of this bill on business has been clearly recognized by Irving S. Shapiro, Chairman of E. I. duPont de Nemours & Co., who speaking on behalf of the Business Roundtable, agreed in hearings of September 13, 1979, that the same standards of criminal law should be applied to business executives and corporations as for the general public and who, with the Justice Departemnt, on November 28, approved a tough package of white collar crime proposals.

2. Ambiguities in the assignment of responsibility

My major criticism of the bill relates to ambiguities in its apparent alternatives assignment of responsibility for "nondisclosure" to an "appropriate manager" or to a corporation. Such criminal acts, at least in big business, are rarely committeed by any one individual alone acting in a corporate vacuum nor, even in a case of organized crime such as antitrust violations, can they be committed by an inanimate corporation, but by its managers or directors.

Making a corporation the defendant, unless a co-defendant with responsible named individuals in that corporation, trivializes and depersonalizes the offense and encourages the abnegation of personal responsibility. Responsibility should be neither restricted to a "corporate manager" nor diffused anonymously behind the corporate veil, but should be extended to the full range of involved individuals for whom criminal intent can be demonstrated. These may include the administrative superiors of the "appropriate manager(s)," other managers, the board of directors, who determine the overall climate and policies and standards of business practice and ethics, and others such as plant physicians, industrial hygienists, and engineers,

who may be a "knowing" party to "nondisclosure," although not necessarily invested with "appropriate" management authority.

Some measure of responsibility should also be extended to outside consultants and commercial consulting industrial hygiene, engineering and testing laboratories who generate and interpret product and process health and safety data on the basis of which the particular business is regulated, and who may be susceptible to direct or indirect influence to produce patterns of information consistent with the perceived short term needs of business. The theme of individual responsibility could be further emphasized were the bill to require the specific licensure of managers and directors with direct responsibilities in health and safety, and the compulsory revocation of such licenses following the determination of guilt for "nondisclosure." Such a threat to professional careers may prove a potent complementary deterrent to criminal sanctions.

An important incentive to disclosure which the bill should explicitly address is the protection from dismissal or any retaliation of whistle blowing business personnel who report or otherwise draw attention to a potential "serious danger."

3. Restrictions in the concept of "knowing"

Perhaps a more fundamental problem relates to the restriction of responsibility to "knowing (acts of) nondisclosure" to the exclusion of reckless acts, such as distortion of information and gross negligence, and which involve blatant disregard for the possibilities of serious consequences, but which reflect a state less than "knowing." Such consideration suggest that the bill should recognize two major categories of white collar crime—those involving "knowing" acts which merit a high level of sanctions, and those involving reckless acts for which a lesser level of sanctions should be imposed.

4. Restrictions on the concept of "warning"

Emphasis in the bill on "affected employees" may be misleading as it appears to divert consideration from the additional possibility of "serious danger" to the general public or to special non-occupational subgroups of the general public. Additionally, there appears to be a lack of symmetry between the affirmative requirement to notify affected employees and the absence of such requirements to notify the general public. It would appear unreasonable that the burden for the latter should be shifted to Federal agencies.

Recognition of the impact of "serious danger" must also be extended outside America to arrest the growing and alarming trend of "dumping" or exporting hazardous products and processes to lesser developed countries, particularly after their regulation in the U.S., and especially in the absence of full and comprehensible disclosure to the local population at potential risk.[1] Apart from possibilities of reimportation of "dumped products," such actions seriously damage the good name of American business and the international repute of our country.

5. Redress for victims

Considerations of redress for victims of white collar crime do not seem to be adaquately presented in the bill. Victims should be aided in their pursuit of civil suits by providing them with full access to evidence collected by federal investigators in white collar crime suits. The bill should also recommend modernizing statutes of limitation to allow for tolling of statutes to reflect serious long delayed consequences, such as cancer, of white collar crime.

C. CASE STUDIES ON HUMAN CONSEQUENCE OF WHITE COLLAR CRIME

With notable exceptions, such as the Pinto and asbestos case studies, the November 15, 1979 hearings on this bill have focused on economic crimes with primarily economic consequences. My testimony extends the scope and import of these concerns to economic crimes with adverse human consequences, including preventable disease and homicide.

A wide range of disturbing examples of such crimes, some of which would arguably rise to the level of criminality and involve a variety of industries and their consultants, are summarized in the attached Chapter Eight, from my book "The Politics of Cancer," [2] which also offers scenarios for improving the reliability of industry data (Appendix 2). The attached excerpt from Chapter Nine of the book demonstrates how such activities reflect a complex of strategies designed to preclude or limit Federal regulation of hazardous products and processes. Detailed specifics of

[1] For a recent general discussion on "dumping," with illustrative reference to contraceptives, drugs, and pesticides, see "Mother Jones," November 1979.

[2] Anchor Press/Doubleday, New York, 1979.

these and other "knowing" and reckless acts, resulting in "serious danger" to workers and the general public, are documented in the book, and are illustrated as follows:

1. Knowing acts of nondisclosure

a. Suppression of human data on carcinogenicity of asbestos products by Johns-Manville, Raybestos-Manhattan, Inc., and other asbestos industries. See p. 89–96 (The Asbestos "Pentagon Papers").

b. Suppression of carcinogenicity test data on vinyl chloride by the VC/PVC industries, and also by the Chemical Manufacturers Association. See p. 104–106.

c. Suppression of carcinogenicity test data on bischloromethylether (BCME) by Rohm & Haas Company. See p. 119–120; 125.

d. Suppression of mutagenicity test data on benzene by Dow Chemical Company. See p. 133; 147.

e. Suppression of carcinogenicity test data on chlordane/heptachlor by Velsicol Chemical Company. See p. 279.

f. Suppression of carcinogenicity test data on kepone by Allied Chemical Company. See p. 308–309.

2. Reckless acts

a. Gross exaggeration by Arthur D. Little, Inc. (under contract to the Society of the Plastics Industry, Inc.), and Foster D. Snell of data on economic impact of compliance with a proposed OSHA standard for vinyl chloride. See p. 107–110.

b. Marketing of acrylonitrile plastic Coke bottles (Cycle Safe) by Monsanto prior to testing acrylonitrile for carcinogenicity. See p. 208–209.

c. Falsification of test data on aldactone and aspartame by Hazleton Laboratories under contract to G. D. Searle Company. See p. 303–304.

d. Destruction of epidemiological data on occupational carcinogens by Dow and duPont Chemical Cos. See p. 307–308.

3. Destruction of test data on drugs, food additives, pesticides and industrial chemicals by Industrial Biotest Laboratories, a subsidiary of Nalco Chemical Co., under sub-contract to the Chemical Industry Institute of Toxicology (under contract to the major chemical industries). See p. 309–310.

Dr. EPSTEIN. As a pathologist and experimental toxicologist, I have for some three decades studied the hazardous effects of chemicals and chemical pollutants, including drugs, food additives, pesticides, and industrial chemicals, in air, water, food and the workplace with particular reference to delayed toxic effects, notably cancer, and have over 200 scientific publications and 5 books in these areas, including The politics of Cancer (Anchor/Doubleday, N.Y., 1979), excerpts which I attached to my written testimony.

Additionally, during the past decade I have had increasing involvement in the interface between science and public policy, as exemplified by membership of a wide range of Federal advisory and expert committees, by consultantships to Congress, including the Senate Committee on Public Works, and by assisting organized labor and public interest groups in the development of their concerns on health and safety.

In the course of these various activities I have had occasion to undertake detailed investigations of the regulatory data base of a wide range of consumer products and industrial chemicals. These investigations have revealed a pattern of constraints, including gross negligence, manipulation, distortion, suppression, and destruction of data, which are so frequent as to preclude their dismissal as exceptional aberrations. Besides the businesses concerned, involved in the generation and interpretation of such constrained data are a complex of commercial testing and consulting laboratories and organizations and also academic consultants, supported by an extensive network of industry front organizations and quasi-professional societies.

Such constrained data have served as the basis for the past and continuing successful strategies of some segments of industry which have minimized or denied risk to workers and the public at large, and have maximized product or process efficacy and the costs and difficulties of compliance.

Such strategies, reflecting apparent preoccupations with short-term economic growth to the detriment of considerations of long-term adverse public health and environmental impacts, have resulted in a burgeoning toll of cancer and other preventable diseases.

These grave charges, including "knowing—acts of—nondisclosure," I assure you, are not made lightly or speculatively. They pose fundamental questions of legal equity, besides reflecting the subversion of democratic decisionmaking processes by special interests. Before substantiating and illustrating these charges, I would like to offer some comments on H.R. 4973.

First, I would like to congratulate Congressmen Miller and Conyers and other Members of Congress for having introduced H.R. 4973, and Congressman Conyers and members of the Subcommittee on Crime of the Committee on the Judiciary for the important and informative hearings they have held so far on the bill.

This bill epitomizes our most honored constitutional and legal traditions, and the indivisibility of American justice. The bill recognizes the serious nature and implications of white-collar crime, and seeks to restore eroding trust in Government and the judiciary by eliminating the major discrepancies which currently exist between legal and societal responses to white- and blue-collar crimes. The bill can thus also be expected to exercise an indirect deterrent effect against blue-collar crime. First, what is the potential impact of this bill on business?

The thrust of the bill is consistent with the finest traditions of American business. It offers business the timely opportunity to explicitly reassert its highest ethical standards and, by policing itself, to preclude or limit the need for further regulatory policing.

Clearly the bill imposes no unreasonable restraints on commerce or on technological innovation, but merely seeks to encourage honest disclosure of lethal defects, and to deter and punish those who knowingly commit criminal acts of nondisclosure. In so doing, the bill will discourage the introduction into commerce of products and processes with lethal defects, with attendant major economic dislocation following their subsequent withdrawal once these defects become belatedly recognized. Successful self-policing by business will also act as a major disincentive to burgeoning product liability suits, such as those we are now experiencing for asbestos products. Finally, the bill offers a unique opportunity to restore the eroding public confidence in big business, in general, and the chemical industry, in particular, and thus to reverse the growing and nationally damaging trend of polarization and confrontation between business on the one hand and the general public and labor on the other hand.

Recognition of these various considerations and the overall favorable impact of this bill on business has been clearly recognized by Irving S. Shapiro, chairman of E. I. du Pont de Nemours & Co., who speaking on behalf of the Business Roundtable, agreed in hearings of September 13, 1979, that the same standard of criminal law should be applied to business executives and corporations as for the general public and who, subsequently, with the Justice Department, on November 28 approved a tough package of white-collar crime proposals.

There are, however, some possible areas of ambiguity in the bill, and I would like to address myself to these.

First of all, possible ambiguities in the area of assignment of responsibility. My major criticism of the bill relates to ambiguities in its apparent alternative assignment of responsibility for nondisclosure to an appropriate manager or to a corporation. Such criminal acts, at least in big business, are rarely committed by any one individual alone acting in a corporate vacuum nor, even in a case of organized crime, such as antitrust violations, can they be committed by an inanimate corporation, but by its managers or directors. Making a corporation the defendant, unless a codefendant with responsible named individuals in that corporation, trivializes and depersonalizes the offense and encourages the abnegation of personal responsibility. Responsibility should be neither restricted to a corporate manager nor diffused anonymously behind the corporate veil, but should be extended to the full range of involved individuals for whom criminal intent can be demonstrated. These may include the administrative superiors of the appropriate manager, other managers, the board of directors, who determine the overall climate and policies and standards of business practice and ethics, and others such as plant physicians, industrial hygienists, and engineers, who may be a knowing party to nondisclosure, although not necessarily invested with appropriate management authority.

Some measure of responsibility should also be extended to outside consultants and commercial consulting industrial hygiene, engineering and testing laboratories who generate and interpret product and process health and safety data on the basis of which the particular business is regulated, and who may be susceptible to direct or indirect influence to produce patterns of information consistent with the perceived short-term needs of business.

The theme of individual responsibility could be further emphasized were the bill to require the specific licensure of managers and directors with direct responsibilities in health and safety, and the compulsory revocation of such licenses following the determination of guilt for nondisclosure. Such a threat to professional careers may prove a potent complementary deterrent to criminal sanctions.

An important incentive to disclosure which the bill should explicitly address is the protection from dismissal or any retaliation of whistle blowing business personnel who report or otherwise draw attention to a potential serious danger.

Another point relates to restrictions in the concept of knowing. Even perhaps a more fundamental problem relates to the restriction of responsibility to "knowing—acts of—nondisclosure" to the exclusion of reckless acts, such as distortion of information and gross negligence, and which involve blatant disregard for the possibilities of serious consequences, but which reflect a state less than knowing.

Such considerations suggest that the bill should recognize two major categories of white collar crime—those involving knowing acts which merit a high level of sanctions, and those involving reckless acts for which a lesser level of sanctions should be imposed.

The next point I would like to make relates to restrictions on the concept of warning. Emphasis in the bill on affected employees may be misleading as it appears to divert consideration from the additional possibility of serious danger to the general public or to special nonoccupational subgroups of the general public. Additionally, there appears to be a lack of symmetry between the affirmative requirement to notify affected employees and the absence of such requirements to notify the general public. It would appear unreasonable that the burden for the latter should be shifted to Federal agencies.

Recognition of the impact of serious danger must also be extended outside of our country to arrest the growing and alarming trend of dumping or exporting hazardous products and processes to lesser developed countries, particularly after their regulation in the United States and especially in the absence of full and comprehensible disclosure of the hazards to the local population at potential risk. Apart from possibilities of reimportation of dumped products, such actions seriously damage the good name of American business and the international repute of our country.

With reference to redress for victims, it is my considered opinion that problems of redress for victims of white collar crime do not seem to be adequately presented in the bill. Victims should be aided in their pursuit of civil suits by providing them with full access to evidence collected by Federal investigators in white-collar crime suits.

The bill should also recommend modernizing statutes of limitation to allow for tolling of statutes to reflect serious, long-delayed consequences, such as cancer, of white-collar crime.

I would now like to move to some case discussions and case studies on the human consequences of white-collar crime.

With notable exceptions, such as the Pinto and asbestos case studies, the November 15, 1979, hearings on this bill focused on economic crimes with primarily economic consequences. My testimony seeks to extend the scope and impact of these concerns to economic crimes with adverse human consequences, including preventable disease and homicide.

A wide range of disturbing examples of such crimes, some of which would arguably rise to the level of criminality and involve a variety of industries and their consultants, are summarized in chapter 8 from my book, The Politics of Cancer, which also offers scenarios for improving the reliability of industry data.

Chapter 9 of the book demonstrates how such activities reflect a complex of strategies designed to preclude or limit Federal regulation of hazardous products and processes.

Detailed specifics of these and other knowing and reckless acts, resulting in serious danger to workers and the general public, are documented in the book. I have classified these actions as either knowing acts of nondisclosure or simply reckless actions.

I will simply list these examples now, and you should guide me as to what period of time you want me to spend on any of these examples or respond to specific questions.

Knowing acts of nondisclosure include suppression of human data on carcinogenicity of asbestos products by Johns-Manville, Raybestos-Manhattan, Inc., and other asbestos industries. This is described in pages 89 to 96, The Asbestos Pentagon Papers.

I should mention that after Congressman Miller drew attention to the Asbestos Pentagon Papers, he was threatened by a libel suit by Johns-Manville, if he repeated outside Congress statements he made charging the industry with decades of coverup, lies, and failing to disclose information on compensation settlements.

I leave it to you to decide on the appropriateness of such threats to Members of Congress.

The second example relates to knowing acts of nondisclosure and suppression of carcinogenicity test data on vinyl chloride by the VC/PVC industries, and also by the Chemical Manufacturers Association—see pages 104–106 of my book.

The next example is knowing acts of suppression of carcinogenicity test data on bischloromethylether by Rohm & Haas Co.—described on pages 119, 120, and 125.

The next example is suppression of mutagenicity test data on benzene by Dow Chemical Co.—see pages 144 and 145.

The next is suppression of carcinogenicity test data on chlordane and heptachlor by Velsicol Chemical Co.—see pages 273–275, 279, and 280.

Mr. CONYERS. I think that perhaps we can accept a summary and then go into our questions, because your detail is in summary form in your statement, and I think in your book you go into even greater detail in a number of these cases; am I correct?

Dr. EPSTEIN. Yes.

Mr. CONYERS. First of all, I must commend you on the legal improvements that you have recommended. I think putting in a reckless as well as a knowing provision very appropriately creates two levels of liability that should be distinguished, and I think will improve the legislation a great deal.

I am not sure Mr. Miller would agree or not. Why do you think that he might be favorable to that? We are certainly going to discuss it. I see you have had a fair amount of experience with the legislative process, because you have read the bill through very carefully, and I find that your recommendations are really quite appropriate. You mentioned that the appropriate manager may be too narrow a description, and you suggest probationary periods for corporations as well. What I think is most important is that we must view this in a positive frame of mind, so that the corporations and the business community do not have to feel that this is in effect an adversary proceeding.

Would you elaborate on your view as to how we can at least with a fair amount of agreement come to a conclusion on the necessity of such legislation?

Dr. EPSTEIN. I think that the guarded congratulatory reaction of Irving S. Shapiro is already an indication that the business community does not appear to regard this bill as a threat but as a constructive effort to improve the relationship of the business com-

munity with the public in general. While it would be presumptious of me to dot the "i's" and cross the "t's" of Mr. Shapiro's comments, nevertheless, let me attempt to comment as follows. In my prepared statement, I indicated that this bill would probably have substantial positive impacts on business, I would like to also address myself to an impact which I did not discuss in the statement; that is when a product, or a process is introduced and locked into commerce, the economic impact of its subsequent removal from commerce can result in major economic dislocation. Therefore, the improvement of the quality of data, to prevent belated withdrawal of products from commerce, represents a major improvement, which would have a positive impact on business.

To give you one small example, when I was working as a consultant to the Senate Committee on Public Works in the early 1970's, I was involved and perhaps responsible for the scientific evaluation of a product known as nitrilotriacetic acid, leading to its subsequent withdrawal; this product was used in detergents as an alternative to phosphates. Suffice it to say the quality of the data which industry had obtained from its commercial testing laboratories was demonstrably inept, and consistent with short term perceived marketing needs. As a result, the industries concerned had locked themselves economically into NTA production, with the result that they lost over $300 million when the product had to be removed from commerce.

Mr. CONYERS. Is there not a governmental responsibility as well as laws against this that could help this objective be more readily achieved?

Dr. EPSTEIN. Yes, sir, there is a wide range of laws. Suffice it to say, irrespective of the nature of the laws, the decisionmaking has to reflect a body of information, and if the body of information is fundamentally constrained, then any decisions that flow from this will also be fundamentally constrained.

I wonder if I may go on to discuss something which could be regarded as motivation for the generation of such constrained data; and on the other hand, to try to understand why we are faced with this very difficult situation. In the area of motivation, we are moving now from the phenomenological to, as I stress, the gray area of interpretation.

Mr. CONYERS. Would you explain that statement?

Dr. EPSTEIN. Two problems: What are the quality of data? Can you demonstrate that there have been actions of suppression, destruction, and manipulation? And I would submit the record clearly demonstrates this to be the case.

The second question is, What is the interpretation for this? Why is this happening, and what can we possibly do to arrest this trend for the benefit of industry as a whole, which has suffered major economic losses from such problems, and to minimize ongoing confrontation between industry and society?

Now, there are several theories as to why information generated and interpreted by industry does suffer from these defects. One is the theory of original sin. The theory of original sin is based on the Machiavellian approach which postulates that industry is bad and labor and public interest are good. I have little patience or tolerance for such simplistic theories. However, I do believe, nevertheless, that it is possible for senior executives in industry to create a climate of social irresponsibility or indifference to which lower echelons will respond accordingly.

For instance, in a recent newspaper article on the multimillion takeover genius, Victor Posner, in his discussions with senior executives in the steel industry, he is quoted as saying to them, "Look, don't bother me with details. Your job is to make money. I don't want to know what is happening with the health and safety details. It's your job to make money."

Although one can say one has little patience for the theory of original sin, nevertheless, it is possible by actions of omission and commission for top executives to create a climate of opinion to which inside industry lower echelons will respond in a possibly predictable fashion.

The captive-of-history theory is another theory which says basically that the function of industry and business very reasonably has been and is technological innovation and to make money. However, as technology has become more complex, industry has not been able to shift its innovative genius from the realms of product and process development to the whole area of health and safety. Resultingly, there has been an imbalance in the distribution of industry resources which still are directed in the area of product and process development without undue recognition of problems of health and safety.

Another theory is the more sinned against than sinning. In many instances, top management is given information consistent with what is perceived to be the interest of industry, particularly the short-term interest of industry.

The theory for which I have a particular sympathy is the Pogo theory. The Pogo theory states "I see the enemy and that is us." It is possibly as much the public's fault, and possibly even the fault of Congress, as it is the fault of industry. And the reason for this is that we have allowed a fundamental conflict of interest to be cemented into the whole informational data base of this country.

It is like asking the Mafia to regulate drug traffic. If you ask industry that clearly wants to market a particular product or process, to supply us with the information on the basis of which agencies are going to regulate their product or process, an inevitable conflict of interest becomes built in. Until relatively recently, neither Congress nor the public has been adequately interested in decisionmaking in relation to product and process, health and safety areas, with a result that the lobbying pressures which industry is in principle entitled to exert have been exerted in a vacuum.

How does one go about producing, better industry data (*a*) which will minimize the need to consider criminal sanctions, (*b*) which will minimize the need to withdraw hazardous products and processes from the market, and (*c*) which will stop the hemorrhagic burgeoning toll of product liability suits?

Beside your bill which is clearly a responsive step in the right direction, there are other scenarios, some of which are in effect, and some are not. Those which are in effect already, include the recognized need to police testing laboratories. The Food and Drug Administration in 1977 was given a $17 million appropriation by

Congress specifically for the purpose of auditing laboratories, and making surprise inspection visits.

Such an approach, however, really doesn't address the major issue of how to get rid of the inherent conflict of interest? And I offer in my book a scenario called the buffer concept.

Let us say you, as the president of a company, have developed a product which you want to market. You say as a responsible executive, "All I want to know is am I going to run into problems?" Then instead of asking your own in-house scientists "to run it through its paces" or give it to Arthur D. Little with whom you have been having contracts with for the last 5 years, you go to an intermediary buffer group, such as a public committee perhaps appointed by the National Science Foundation.

Mr. CONYERS. Quasi-governmental?

Dr. EPSTEIN. In a sense, yes. I am proposing the formation of balanced committees representing a wide range of interests, to whom the concerned industry can say, "We want this product tested. We don't mind how the facts come out. We want to really know the real situation before we make any further economic commitment."

One advantage of this is one could build up into the process a series of indemnifying insurances for industry. Such as if a product is tested by the buffer route, then, the Federal Government will indemnify that industry against any subsequent claim based on problems reflecting the test data.

The intermediate buffer group advertises for bids for testing in Commerce Business Daily News, a practice more consistent with the capitalist ethos than the present practice of the secret awarding of unbidded contracts. Then anybody who wants to do the testing can apply, including any industry, universities, commercial testing labs, anybody with the exception of the industry whose product it is.

So you thus create a barrier between those who manufacture the product and those who test. The loyalties of those who are testing is then primarily to the buffer group.

The buffer group periodically sends out inspectors to inspect the records and practices of the testing laboratory. At the end of 2 or 3 years, 1 of 3 things happens:

First, the people that do the testing, whether industry or otherwise, come back and say, "Well, we have tested the product and we think it is safe."

Fine, that information is then sent back by the buffer group to the industry concerned and to the appropriate regulatory agency. The industry is entitled to make major economic commitments, and possibly, one would further safeguard the industry by saying you have done everything that can be reasonably required. You have paid for the test. If any future questions crop up, such as product liability, you will be indemnified by the Federal Government.

Second, it may be found that the testing was done shoddily. Why should the industry have to pay for it again? This can be prevented by making the group that does the testing post a bond, stipulating that if their work is shoddy or haphazard, they will be forced to repeat the test at their own expense.

Finally, the data may be equivocal. This problem could perhaps be resolved by considering whether or not the test should be repeated at Federal expense.

Mr. CONYERS. Has the buffer group theory been used occasionally?

Dr. EPSTEIN. It is in principal used by Federal agencies when they award contracts.

If you are in a Federal agency, you can't pick up the phone and call a friend and say, "We have got a couple of million dollar contracts, shall we pass it on to you?" You have to advertise in Commerce Business Daily News.

There are obvious differences between the Federal Government and industry doing this. In principle, however, I am not suggesting anything other than what is accepted Government practice at the moment. And this approach is a great deal more consistent with the capitalist ethos than is the secret award of unbidded contracts.

Mr. CONYERS. Your discussion, even though it goes beyond the scope of the bill, is very important because the bill is not a panacea and it is not a cure-all, but a very modest beginning in the wider range of white-collar crimes that the subcommittee is concerned with, and in a larger focus it is on our whole industrial economy.

I can't help but recall that today the Chrysler situation is before the House of Representatives, which in some respects this discussion makes me remember what we will be doing a little later on.

I thank you now. I want to yield to Mr. Volkmer of Missouri, if he has comments or questions.

Mr. VOLKMER. Have you found that most of the violations in the past have appeared in the chemical industry?

Dr. EPSTEIN. I am not really competent to answer that, sir, because by virtue of my own professional biases that is an area which I have the greatest concerns.

I cannot make comparisons between that and other industries, as my level of information in industries outside of the chemical industry is far less substantive.

Mr. VOLKMER. Can you give us any data on incidents within the chemical industry, since you are familiar with that?

Dr. EPSTEIN. Yes, sir. I may say, first, in the book I do have a detailed discussion of the so-called Asbestos Pentagon Papers, which have been addressed at a previous hearing, including detailed quotations from various executive's positions and those responsible in the asbestos industry over the last 30 years or so.

Let me give you a few other examples and start off with "knowing actions" and examples of "reckless actions." I think a good example of "knowing actions" is the vinyl chloride case study.

Vinyl chloride was introduced into commerce, in the late 1930's without any substantive long-term testing for its potential hazards.

In 1970, an industry toxicologist from Italy called Viola reported at the International Congress on Cancer in Houston results of tests on vinyl chloride at 30,000 parts per million, 3 percent of VC in air. The thrust of his report was that—"we tested a very high concentration, of VC air, and we found some odd tumors of little or no practical relevance."

However, a year later at a confidential meeting of the Manufacturing Chemists Association—I refer you to page 104 in the book—

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the true import of Viola's findings were made clear. In fact, Viola had found carcinogenic effects down to concentrations less than .5 percent in the air. For this and other such reasons, industry concluded that the Viola data should not be published as this would otherwise "lead to serious problems with regard to the vinyl chloride monomer and resin industry * * * and force an industrial upheaval via new laws on strict interpretation of pollution and occupational health laws."

Union Carbide was at this meeting and they expressed their concerns, "that in view of the large stake they had in areas most likely to be affected, such as food, food packing, fiber and aerosols, it would be seriously hurt by arbitrary, panic-induced Government restrictions."

Shortly after the original Viola report, a consortium of European industries headed by Montedison contracted with another Italian toxicologist, Cesare Maltoni, to do some tests in animals which were started about July 1971. By late 1972, Maltoni had confirmed the earlier findings of Viola and had extended them and shown that you could produce a wide range of carcinogenic effects in a wide range of animal species, and in some down to low levels of 50 parts per million.

In October 1972, the Manufacturing Chemists Association, the major trade association of the chemical industry in this country, sent representatives to visit Maltoni and they agreed with the European consortium to share this information among themselves but not disclose it.

Now, subsequent to that, the National Institute for Occupational Safety and Health in early 1973 published a note in the Federal Register asking for all information on the toxic and other effects of vinyl chloride.

In March 1973, the Manufacturing Chemists Association responded and recommended to NIOSH that there should be a precautionary label for vinyl chloride which made no reference whatsoever to the carcinogenic effects on animals.

Let me quote to you from a report of a special committee set up by the American Association for the Advancement of Science which incidentally did not have access to the detailed incriminating documentation which I have published.

Because of a suppression of these data, tens of thousands of workers were exposed without warning for perhaps some 2 years to toxic concentrations of vinyl chloride.

Mr. VOLKMER. Let me, if I may, since we don't have a lot of time. We can read in the book and get the whole concept. This is one area which there appears to be a violation, if we had had such a law.

There are other areas, without saying, you know, giving a full description. Have you had accounts of other areas in the chemical field?

Dr. EPSTEIN. Yes, sir, I regret to say that there are a wide range of such examples and the suppression of the carcinogenic test data bischloromethylether is a glaring example of this.

This chemical is known as BCME which is fairly vital in the whole ion exchange industry and nuclear industry, too.

Now, two companies started manufacturing this process, one Dow Chemical and the other Rohm & Haas. Dow Chemical in 1949

decided because the chemical was acutely toxic they were going to enclose the process, and started manufacturing the chemical in a totally enclosed process. And as far as we know, according to all available documentation, there has not been a single incident of cancer in workers exposed.

However, at the Rohm & Haas Plant in Philadelphia by the early sixties, groups of workers, young men and women, were dying of lung cancer at a relatively young age. This was because the company had made little or no attempt to include the production process and protect the exposed workers.

Mr. VOLKMER. I think we are familiar with this one, too.

Dr. EPSTEIN. Similarly, 2 years ago Dow Chemical Co., at the time when the Occupational Safety and Health Administration was moving in the direction of promulgating a 1-part-per-million standard for benzene, Dow had completed a study by late spring of 1977 demonstrating chromosomal damage in workers exposed to benzene levels less than 10 parts per million. However, Dow did not release this critical information. Nevertheless, news of these tests leaked out. As a member of one of the expert advisory committees that was considering an environmental standard for benzene for the Environmental Protection Agency, we made requests to Dow to release this information. Eventually, after great pressure was put on the company to release the data, they finally released it in March 1979, after the hearing record was closed.

Another example is the suppression of carcinogenicity data on chlordane and heptachlor.

The tests were undertaken for Velsicol Chemical Co. by two major groups, International Research Development Corp. (IRDC) and Kettering Laboratories in Cincinnati.

On the basis of information which these two groups developed for Velsicol, the products were introduced into commerce. In 1974, the Environmental Protection Agency commenced regulatory hearings against chlordane and heptachlor. I was an expert witness for the agency on whose behalf I examined the test data.

It soon became apparent that there were substantial questions about the validity of the histological reports and the findings, so the agency assembled a team of outside independent experts who reviewed the histology of IRDC and the Kettering Laboratories. Where these groups reported no evidence of cancer, the agency team found a very high incidence of cancer in test animals.

Velsicol was clearly told in December 1972 by two of its own consultants, that chlordane/heptachlor induces cancer. However, Velsicol did nothing. They didn't communicate with EPA as they were required to. They went into the regulatory hearings making no reference to the fact that they had prior knowledge as to the carcinogenicity of chlordane/heptachlor. This was the basis of their agency criminal indictment in Chicago. A final example relates to kepone. Allied Chemical is the manufacturer of kepone. You may recall that at Life Sciences Product Corp., an Allied Front, groups of workers exposed to kepone were found in 1973 and 1974 to be suffering from advanced neurotoxic effects. However, Allied Chemical Co. had done extensive testing on kepone going back to 1950, when they had demonstrated some of the neurotoxic effects of kepone.

By 1961 and 1962, Allied demonstrated that kepone induces sterility and cancer; and confirmed the earlier data on neurotoxicity. They failed to reveal this information to their employees for over 12 subsequent years. My book "The Politics of Cancer" provides documentation of a wide range of such criminal and quasi-criminal acts which legislation such as H.R. 4973 would be likely to deter, and for this main reason warmly endorse it.

Thank you very much, Mr. Chairman.

Mr. CONYERS. Mr. Henry Hyde of Illinois.

Mr. HYDE. I have one question or comment. You were talking about the buffer theory. I should think that product liability insurance carriers would be vitally interested in policing some of the risks that they are going to be asked to assume. Did they play an adequate role in the testing of new products?

Dr. EPSTEIN. I am glad you asked that question. Recently, Mr. Robin Jackson, a senior executive of Lloyds of London, wrote an article complaining about the burgeoning product liability area, saying, this is being forced on the industry who couldn't have anticipated the types of health and safety problems that are now happening. I replied and said that in a wide range of areas there is ample documentation demonstrating early knowledge by the industry of major problems which they suppressed and failed to act on. (See appendix.).

The answer to your question however, is that potentially the insurance industry could serve to act as a very important break to white-collar crime.

In this connection, it is interesting how some chemical industries are finding it increasingly difficult to get coverage for product liability. Some industry trade associations are now considering establishing ther own insurance companies in the Bahamas. Another proposed solution, particularly favored by the asbestosis industry, is establishment of a no-fault insurance, possibly based on Federal subsidies and akin to the limited liability secured for the nuclear industry by the Price-Anderson Act.

Mr. HYDE. Let me ask this. If there is going to be nondisclosure from the company—who, one could assume, initially would have superior information about the nature of their products and any inherent dangers that would vitiate the coverage—I should think that the insurance company could demand full disclosure and thus make some of their own tests. If the contract of insurance were written properly, it would almost force a disclosure from the manufacturer, at least to the insurance company which will have to carry the financial risk.

Dr. EPSTEIN. This hinges on the question of what you mean by knowing. If your consulting labs produce constrained information to you and you as a business executive receive this information and you make an appropriate marketing decision, why should you be held responsible for the faulty data.

Mr. HYDE. We will encounter the same problem in criminalizing this activity.

Dr. EPSTEIN. This is why I am suggesting the whole concept of "knowing" has to be extended along the lines I have indicated, that the mere conscious act of knowing itself may not necessarily be

enough. There also has to be recognition of importance of not knowing and, more importantly, not wanting to know.

Mr. HYDE. The standard you suggest would be "knowing" or "in the exercise of reasonable care ought to know." I can see problems caused by the compartmentalization in corporations, too. One section knows one thing and another section knows another, and the twain do not meet.

Dr. EPSTEIN. I agree. I think the whole concept of knowing should be diffused from the one individual who nominally is given this responsibility and encouragement of a climate of openness and realization that when these events of nondisclosure occur, they can be far more damaging to the industry than to any other segment of society.

Mr. HYDE. I find this very fascinating. Thank you very much. Mr. Gudger, I have no more questions.

Mr. GUDGER [presiding]. Thank you very much for that series of questions, Congressman Hyde. I have one or two questions that I would like to ask you, Dr. Epstein.

You have presented strongly the case that the term "appropriate manager" is too narrow and that liability under H.R. 4973 should encompass possibly consultants, plant doctors, even engineers where special knowledge has become available to them and they have an opportunity to counsel and perhaps do not counsel to the full extent of that knowledge.

Would you comment further on that topic as to what you think might be more appropriate language than this "appropriate manager of the corporate entity" and as to how far you think this obligation of disclosure, accountability, and indictability should extend?

Dr. EPSTEIN. It is a very difficult question to respond to because one can make the case you don't know where to begin or to end.

I do believe that the restriction to corporate manager is too narrow on the one hand and on the other hand, I wouldn't wish to see penalties extend to the total managerial staff of an industry. But between these two extremes I think it is possible to make some clearer determination of responsibility and the determination should clearly include the corporate manager and his superiors, because he, like all of us, is responsible to a higher authority and the higher authority creates the tone and the ethical standards in which the business operates.

Quite apart from that, if a physician, plant engineer or chemist, over and above the appropriate managers who have the management authority, has information, and fails to disclose this information, it is not unreasonable that the penalties should be exercised on him or her. They have professional obligations to society apart from their employer and their interests in disclosure would be considerably enhanced if on the one hand they were protected against this whistle-blowing retaliation and on the other hand, if top management made it clear that we regard such disclosure as in the best interests of industry.

It is in the best and finest interests and traditions of American business to place an affirmative responsibility on people that have such information to immediately communicate this to top management, and to create such mechanisms for direct routing of this

information. Once you create this kind of climate, I think all these acts, criminal and quasi-criminal, will tend to be discouraged and become what they should be, exceptional aberrations of an otherwise reasonable system.

Mr. GUDGER. I have one other question and then I will yield to counsel. I believe you have endorsed the idea that perhaps the bill should not only have the knowing test and the liability under the knowing test but also a liability under a reckless test and I think when you get into this situation where you are holding the engineer accountable, and the consultant, where special knowledge is a test or applicable test, that there is considerable merit in the suggestion that there should be two levels of accountability, two levels of criminal responsibility.

Would you comment briefly as to why you think this is desirable?

Dr. EPSTEIN. May I give you one example of a reckless act before commenting, sir, just to give you a flavor of what I mean by reckless acts.

In 1974, the Fortune top 10 of the chemical industry, created what is called the Chemical Industry Institute of Toxicology, whose claimed function was to provide industry and government with good, safe, reliable health and safety data. The newly created institute contracted for most of its testing to a group known as the Industrial Biotest Laboratories in Northbrook, Ill. Suspicion started to mount against the activities of Industrial Biotest and in April of 1977, a group of Federal investigators arrived at Northbrook to look at the records of the company. They knocked at the door of Industrial Biotest, and were greeted by the president of the company, Mr. Frisque, who said, "Gentlemen, there has been a very unfortunate occurrence. We accidentally destroyed all our records last night." The records which they destroyed included test data on thousands of pesticides, food additives, industrial chemicals, in current use.

Hazleton Laboratories has similarly committed such reckless acts. At congressional hearings held in 1976, Hazleton was shown to have altered the records of carcinogenicity and other testing on animals of the drug Aldactine and the sweetener, aspartame.

There are many more documented examples of reckless acts on the record than there are of nondisclosure, but in some of these examples it is difficult to apply the same rigid, legal standards of knowing and nondisclosure. Rather than try to build all of these quasi-criminal acts into the knowing acts of disclosure category, I think this heterogeneous group could be better categorized under the term of reckless acts—this is somewhat arguable—where a lesser standard of knowing obtains and where there perhaps should be a lesser criminal penalty.

But I think it is important to realize there is a continuum, between so-called negligence on the one hand, reckless acts and overtly criminal acts.

I don't have the legal expertise clearly to even suggest exactly where you draw this line, except my strong instincts based on my professional experience, are that one should have a category of reckless acts, define it how you will.

Mr. GUDGER. Thank you, Dr. Epstein.

I would like to yield to majority counsel, Hayden Gregory. Then I will yield to minority counsel.

Mr. GREGORY. This bill employs a standard of serious danger to humans, and serious danger is defined as likely to cause death or grievous bodily injury. Most of the testing, of course, is done with animals. Is this a problem especially in terms of criminal liability?

Dr. EPSTEIN. I don't regard this as a problem at all for the following reasons: First of all, there is the consensus of the informed, independent scientific community that animal tests are reliable and in many instances the only possible surrogate for human experience. The majority of the carcinogens recognized in human populations, particularly in the last decade, were first and earlier identified in animal systems. Such recognition is more than amply reflected in both the legislative and regulatory process.

In the course of this year, a series of Federal agency groups, including the Regulatory Council which represents all those Federal agencies with responsibility in this area, have made it clear that they fully accept the validity and the appropriateness of animal tests as indicating strong presumption of potential human carcinogenic hazard.

Mr. GREGORY. Is this legislation likely to have the undesirable effect of discouraging research that apparently applies a subjective standard of discovery?

Dr. EPSTEIN. I think it will discourage those with an overt criminal or reckless intent in the absence of which I can only think this bill would have no impact on any serious or honest research work whether he or she be in industry or academia.

Mr. GUDGER. We will recognize Mr. Wolfe now.

Mr. WOLFE. I have no questions.

Mr. GUDGER. Then would you respond, please, to the question of counsel Steve Raikin for the majority.

Mr. RAIKIN. Dr. Epstein, you and the witness who will follow you, Professor Sethi, both favor what might informally be called corporate probationary periods forbidding convicted individuals from engaging in business for a set amount of time although there is variance on how that would work.

Could you expand briefly on how you envision that working and specifically how that would add to the deterrent effect of H.R. 4973 if we were to incorporate it?

Dr. EPSTEIN. I don't think in my written statement that I specifically addressed this. However, professionals such as physicians and engineers in industry, must clearly ascribe to the doctrine of primum non nocere—First, do no harm. I do however, discuss the whole question of revoking of professional licenses. If I operate on an individual and leave a pair of forceps in his abdomen or take out the wrong organ accidentally, it is not then unreasonable that society should inflict certain penalties, and perhaps my license should be revoked or I should be discouraged from such negligent or reckless acts in the future.

It would seem to me not unreasonable that accountants, engineers, chemists and others whose activities can have an adverse effect on human life and if they are grossly negligent or criminal in such acts, then one should consider a mechanism whereby one

discourages them from being allowed to discharge such professional responsibilities in the future.

One way of doing this would be to license industry professionals. We have licensed engineers or licensed chemists and we could have an equivalent process for industry professionals and corporate executives. You would license the man or woman for the particular job and if he or she were found to be guilty of overt knowing acts of nondisclosure, one would wish to revoke his or her license for a period of time to be settled by the appropriate professional bodies.

Mr. RAIKIN. Could you expand briefly on your suggestion that some sort of protection of whistle-blowers provision would be a useful addition to the bill?

Dr. EPSTEIN. Yes, I think so. I think that industry is as honest as all of us or as dishonest as all of us. There are honest, fine people, both inside and outside of industries, who on occasions may be subject to certain institutional pressures and constraints. These constraints can be the loyalty or discipline imposed by their industries, and retaliation for disclosure is not uncommon.

So clearly one wants to assure that responsible individuals in industry who are alive to their responsibilities to society in addition to industry are in no way retaliated against, and clearly it is to the interests of industry to encourage such acts of disclosure and to build up a climate where people will not be threatened.

However, there may well be some industries that still have not been sufficiently forceful or will not be in creating this appropriate moral climate. Under these circumstances one would wish to invoke legal safeguards against retaliation for those who fulfill their obligations to society besides to industry.

Mr. RAIKIN. Thank you, Mr. Chairman.

Mr. GUDGER. Other questions, gentlemen?

I want to thank Dr. Samuel S. Epstein for his very exciting and important testimony. I want to mention that his curriculum vitae and his list of publications are equally impressive and I am going to suggest that they be made a part of the record if no such order has previously been entered because his qualification to give the testimony is as outstanding as that testimony itself.

Thank you very much for being with us.

Dr. EPSTEIN. Thank you, sir.

Mr. GUDGER. The next witness before the committee is Dr. S. Prakash Sethi, who is professor of international business and business and social policy. He is also director of the Center for Research in Business and Social Policy, University of Texas at Dallas.

Being from the State of North Carolina, which is very proud of its university system, I have considerable respect and admiration for the University of Texas and know something about that great institution.

Dr. Sethi has authored or coauthored and edited 14 books and written more than 40 articles in professional journals on aspects of business and social conflict.

His articles have been translated into many foreign languages. His writings have also appeared in national news media such as the New York Times, the Wall Street Journal, Business Week and Saturday Review.

He has provided the committee with a written text from which perhaps he will be speaking this morning and I would like to state, without objection, we will enter into the record the complete written text and any supplemental material which he has filed with the committee.

Dr. Sethi, if you care to follow the text, that may be your decision, or if you prefer to speak, knowing that the text will be within our records, please proceed.

[The prepared statement of Dr. Sethi follows:]

PREPARED STATEMENT OF S. PRAKASH SETHI, PROFESSOR OF INTERNATIONAL BUSINESS AND SOCIAL POLICY, THE UNIVERSITY OF TEXAS AT DALLAS

CORPORATE LAW VIOLATIONS AND EXECUTIVE LIABILITY

Mr. Chairman: Thank you for your invitation for me to appear before your committee today.

No one can seriously question the need for deterring those corporate activities that adversely impact on worker health and safety, and manufacture products that are potentialy hazardous to consumers who use them. A multiplicity of laws and regulations testify to this nation's concern in protecting workers and consumers. At the same time, testimony before this Committee, scores of other investigations, hearings, and court cases, would indicate that a large gap exists between our intentions and performance.

There is a growing public concern—and legitimately so—that more effective measures are needed to hold corporations, and those who guide them, responsible for corporate activities that endanger public welfare and safety through violations of safety, anti-pollution and environmental protection laws. This concern is not confined to the United States, but is increasingly being expressed, and acted upon, in such other industrialized countries as France, West Germany, Sweden, United Kingdom, and Japan.

To the extent that the current bill H.R. 4973 would alleviate some of the problems of information collection and enforcement, I strongly endorse its intent of creating an environment of general deterrence and providing mechanisms that would induce corporations and executives to undertake, on their own, such preventive measures that would produce goods and services that are safety to their users and do not unduly harm workers' health, safey, and the environment.

An analysis of the enforcement provisions of this bill, however, leads me to conclude that the scope of duties and liabilities specified in the bill for the executives is too narrow. Thus it may have only limited success in ferreting out all serious law violations, identifying the causes for such violations and the managers who should be held responsible for them. Secondly, in view of the current evidence on convictions and sentences, both in the United States and abroad, I believe that the type and severity of penalties for violations provided in the bill may not be widely employed, thereby seriously limiting their deterrent effect.

I should also point out that in developing punitive measures, we should be extremely cautious that they do not so undermine the efficient functioning of the corporation that would adversely effect productivity, incentive for risk taking, economic growth, and thereby, society's welfare.

My remarks are aimed at addressing these twin issues, namely, the nature and scope of executive responsibility for compliance with various laws, and the types of penalties that may be most effective in deterring such law violations. With your permission, I would also like to submit a more detailed witten statement for the record at a later date.

In making my recommendations, I am very conscious of the fact that there is no such thing as a zero risk society. Every element of risk reduction—be it in the area of worker safety, environmental protection, or product safety—carries with it certain potential cost in terms of lower incomes, fewer jobs, less product innovation, and even loss of certain other rights such as employee privacy. The objective is therefore not to reduce all risks to zero—because such a goal is impossible—but to ensure that risks are taken openly and with conscious regard for the health and welfare of those who are going to be adversely effected. Furthermore, risks and benefits are carefully balanced from the perspective of all those concerned rather than from the perspective of only those who stand to profit from benefits but do not bear the responsibility for consequent personal and social costs.

Why the expanding scope of executive criminal liability?

At the heart of this movement toward holding managers personally responsible for corporate violations of the law, lies the struggle of both individuals and entire societies to come to grips with the contemporary reality of the corporation and to subject it to effective controls. It reflects, in some cases, society's frustration in molding the institution of the corporation in a certain direction and in using successively severe measures when conventional approaches fail to work.

The circumstances that have brought us to the present situation may be classified as the: failure of market institutions, failure of existing enforcement structures, inadequacy of existing legal philosophy, and, failure of the news media. Let me briefly dwell on these factors because they have a bearing on the type of remedies I plan to propose:

Failure of market mechanism

Inherent in traditional economic dogma is the notion that corporate behavior can be effectively controlled by the mechanisms of the marketplace. Customers will withhold their patronage from a company that misbehaves, refusing to purchase its goods and services, and the company will go out of business. In order for this system to work, however, the communication channels between business and society must be clear so that the necessary adjustments can be made. In today's complex economy, this condition rarely exists. As firms become large and diversified, and deal with a wide range of customers, they become increasingly immune to market discipline. The signals for change are often quite weak and diffused. They may not seem relevant when the decision-maker sees his competitors behaving in a similar, non-changing manner. The manager becomes a captive of the tyranny of small decisions.

Since society no longer can regulate business behavior through the marketplace, it tries to do so in other ways. The vast array of regulatory framework now surrounding business is designed to achieve this end. Along with the traditional controls directed toward illegal marketing practices, business now is subjected to regulations governing pollution control, environmental safeguards, in-plant worker safety, and protection of employees from job discrimination. These new process controls cause enormous amounts of regulatory delays and red tape. Yet such efforts are doomed to failure.

The regulators can never have the necessary expertise to anticipate future developments in technology, or to understand the original labyrinths through which management can work in fulfilling the legal requirements without making any substantive changes. The regulatory approach may get a reliable response in the short run, but this advantage is bought at the cost of an additional policing problem. It may also retard potential technological innovation and result in greater social costs.

The failure to change corporate behavior through regulation of output or modification of decision-making structures and processes leads to imposition of controls directly on managers by holding them personally responsible for corporate actions. Just as corporations reward and penalize their managers on their financial performance without regard to the specific management processes employed by the managers, society demands achievement of social performance goals thereby obviating the need for developing vast and self-defeating bureaucratic regulating superstructures. The assumption here is that imposing penalties on managers will induce them to apply the same ingenuity and resourcefulness that they use to further corporate growth and profits, to areas that are deemed socially desirable.

Failure of existing enforcement structures

It is no secret that corporate executives, regardless of their culpability, have not suffered the fate of other criminals in terms of incarceration for economic crimes. While the "law in books" pertaining to corporate crimes is not dissimilar to the laws regarding other types of crimes, the "law in action", i.e., enforcement, is characterized, in the case of corporate crimes, by slow, insufficient, and highly differential implementation.

Most of the laws dealing with corporate crimes are aimed at people with a high socio-economic status. They share an affinity through schools, clubs, professional backgrounds, and churches, for example, with the groups responsible for making laws and enforcing them—legislators, judges, and prosecutors. Executives often have an elaborate and widely accepted ideological rationalization for their offenses and they belong to a group with considerable economic and political power.

While crimes involving physical violence against individuals are sternly dealt with, economic crimes are considered social aberrations and are dealt with quite leniently. Incarceration is deemed unnecessary since these individuals are not considered a threat to society. Fines are often quite nominal, invariably paid by the

corporations employing them, and carry little economic hardship. More often than not, the executive continues to work at his old job and often finds himself an even better job with former competitors. This is true even when the executive serves a prison sentence.

An individual law violator finds support for his behavior in the executive's group norms. While the impact of a corporate crime may be quite serious for the society and often more violent in its consequences than a multiplicity of individually committed street crimes, the corporate personality diffuses the individual burden of guilt. Through a battery of accountants, lawyers, scientists, and other experts, management can demonstrate the bureaucratic imperatives of shared responsibility, thereby denying or seriously weakening the notion of personal obligation.

The manager's group norms do not consider a violation of social welfare laws—pollution controls, for example—as antisocial. The impact of violations is highly diffused and indirect, but the cost of compliance is immediate and direct. Management is constantly under pressure to minimize these costs and the statutes are considered nuisances or regulations imposed by overzealous bureaucrats. Support from his peer group tends to break down further a manager's self-perception as a law breaker. Further peer support comes from the executive's friends and neighbors who do not understand complex technical violations and therefore often attach no social stigma to illegal acts.

An important segment of corporate crimes is highly technical in nature. Only after the courts have spoken can one say whether or not a law is broken. It is often difficult to distinguish between business practices that represent an innovation and those that represent a threat to health or safety and are later stigmatized as a crime. Most corporate crimes remain non-criminal for a long time because of the inability of the criminal law and enforcement to keep pace with corporate practices. Thus compliance calls for a radical change in hitherto acceptable modes of corporate behavior, a process that brings resistance and resentment.

Inadequacy of existing legal philosophy

The traditional model of mens rea in criminal law poses severe problems when applied to corporate executives within the context of corporate behavior. Large corporations employing thousands of people and making millions of decisions impose impossible burdens on society to isolate and identify a particular individual to be held responsible where only the last link in the long decision chain is visible. Thus, to find the guilty individual, the corporation's veil of secrecy must be lifted—a task not easily done. Even if the entire corporate decision process were exposed to public scrutiny, it might still be impossible to isolate and identify the guilty person because of the collectivity of the actions that resulted in law violation and the lack of specific intent or direct knowledge on the part of thousands of people who may have contributed, in some miniscule sense, to that decision. For example, the black smoke billowing from a chemical plant is clearly in violation of environmental law. Who is to blame? The worker who failed to check a meter? The maintenance crew? The purchasing agent? The design engineer? Or the company president?

One alternative to this problem has been the imposition of strict criminal liability. Although the Supreme Court has apparently indicated that a legislatively-developed standard of strict liability is acceptable for criminal conviction, I do not believe this to be a desirable course of action because of its other undesirable side effects in terms of over-deterrence. Thus a standard should be developed that is more relevant within the corporate context, goes beyond the restrictive scope of specific criminal intent, and provides greater incentives for corporate executives to exercise the utmost care in supervision of personnel and facilities to prevent occurrence of corporate crimes.

Failure of the news media

Another factor in the differential treatment of corporate executives has been the inability of the mass media to explore and report complex issues relating to corporate crimes. Even the level of coverage of economic and business news, in general, is quite inadequate. Thus the news media fail to express and organize the moral sentiments of the community against these crimes.

PROPOSALS FOR EXPANDING AND IMPROVING H.R. 4973

Definition of "appropriate manager" and the scope of his responsibility

The bill severely limits the scope of its application by restricting the liability of an executive to non-disclosure pursuant to "discovery" of a potential danger associated with a product or business activity.

1. There is no provision in this bill to encompass the situation where an executive does not "discover" the existence of a dangerous situation. Such non-discovery may

occur because the executive developed a system of organization and communication which effectively insulated him from receiving information of illegal acts within his domain of authority. The 'knowledge requirement' offers the least amount of deterrance to those senior executives who have the most power to effect corporate policies and procedures, because of their ability to isolate themselves from day-to-day operational details.

2. The knowledge requirement does not prevent the occurrence of crimes caused due to reckless and negligent supervision. Negligent or reckless conduct should hold a superior criminally liable whenever he knew, or should have known, that an illegal act was occurring or would occur within his supervisory domain, and failed to take reasonable preventive action. The positive element of this concept is reasonable precautions against causing harm, and the negative element is failure to exercise that duty.

3. Reckless and negligent supervision requirement poses certain problems of evaluating the quality of management—after the fact—where even honest judgments of error may appear to be reckless decisions. Therefore, in order to be applied effectively and equitably, it would be important to show that the functional area where the illegal act occurred was within the responsiblity domain of the executive charged, and that he had the authority to prevent its occurrence. A fair and rational approach would also require that any decision regarding which executive within a corporation should be punished, be made partly contingent upon the nature of the sanction to be imposed and the degree of negligence or recklessness. To be socially acceptable, it would be necessary that an element of moral culpability would be present in the commitment of the act.

4. Two approaches are possible to accomplish the goals of maximum prevention of harmful acts, easy determination of responsibility of executives committing these acts, and, fairness in the imposition of penalties.

(a) Every law that proscribes certain activities in health, safety, and environmental areas, should require that the corporation pre-designate an executive who would be responsible for ensuring corporate compliance with that law. Since this would tantamount to pre-warning, the executive so designated could not offer a "lack of knowledge" defense. More important, since compliance would be this executive's sole responsibility, any violation would become a prima facie case for reckless and negligent supervision.

Corporations should be required to designate a person who has the technical competence to evaluate corporate compliance with the law, and who has the operational responsibility to take action in those areas of corporate activities where this particular law operates. Otherwise it is quite feasible that corporations may hire "front-men" for certain positions whose primary job would be to go to jail for the corporation, in return for guaranteed benefits for their families and jobs. This would offer little incentive for deterrence, but might provide a lucrative business for organized crime to supply suitable soldiers to the corporations.

This approach may have certain limitations in that more than one law may have a bearing on a specific corporate activity, or more than one corporate activity may be covered by a single law, thereby raising the problem of overlapping areas of responsibility and supervision.

(b) A practical solution to this problem would be for corporations to develop "Social Accountability Centers". A social accounting center is similar in purpose and goal as a profit center. The purpose of a profit center in a corporation is to group a set of complementary activities together and put them under the charge of one executive who manages this profit center as if it were a business autonomous entity. Profit centers are organized on a rational basis since the performance of a profit center has to be isolated and measured. Top management rewards a manager on the basis of his profit center's performance. It would seem logical that the profit center concept should be made the basis of a "social accountability center" whereby all harmful and dangerous acts would be charged to the manager of that center.

This approach might cause responsibility for compliance with certain laws to be distributed among more than one person within a corporation. However, it has the distinct advantage of segmenting areas of corporate activities in a manner that an executive's responsibility is clearly established.

Types of penalties

The second important aspect of H.R. 4973 has to do with types of penalties that could be imposed on corporations and individuals for corporate crimes. One of the primary reasons for resorting to prison sentences for corporate executives is their supposedly deterrent effect—both specific and general—in controlling corporate law violations. Since corporate activity is normally undertaken in order to reap some economic benefit, corporate decision makers choose courses of action based on a calculation of potential costs and benefits. Since a calculating criminal is the one

best deterred by punitive sanctions, it may be argued that such sanctions would have the greatest deterrent effect on corporate crimes. In order for this system to be effective, it must meet two criteria:

The proportion of violations discovered and convictions obtained should be large enough so as to significantly increase the odds in favor of discovery of a crime and conviction;

The size of penalty must have a realistic relation to the severity of the crime.

I do not believe that the penalty provisions in H.R. 4973 would create an effective deterrence mechanism for the following reasons:

(a) In the case of corporations, a small fine is not likely to deter violations when significant economic gains can be obtained by ignoring the law. In fact, inadequate penalties might become a license to violate the law. On the other hand, if a fine is very large, it is also likely to be counterproductive. Depending on the size of the firm and its market position, a company could pass the fine on to the consumer in terms of higher prices. A large fine could also result in significant tax savings so that society is, in fact, paying part of the fine through reduced tax revenues. A large fine would also reduce a firm's profits and might adversely effect its ability to raise additional capital and correct alleged violations. Thus, the people most hurt would be the workers, the stockholders, and the consumers. The threat of stockholders' suits against management is of little consequence as a deterrence because of poor chances of recovery.

(b) Similarly, fines levied against individual executives would not be very effective. They are likely to be paid by the company, in one form or another, because the gains to the corporation from law violations would be greater than the cost of fines.

(c) Imprisonment penalties which are quite severe are also unlikely to be very effect. Experience has shown that both juries and judges are unwilling to impose long prison sentences for corporate crimes because there is no general societal awareness of the seriousness of these crimes in terms of their harm to society and, consequently, there is no social climate of moral revulsion against the wrongdoers.

Stiff prison sentences imposed only in rare circumstances where violators are shown to be particularly guilty of gross negligence might provide some spectacular and newsworthy cases, their deterrent effect would be negligible because of heavy odds against the offender being caught and convicted.

A large number of corporate crimes remain hidden because of the difficulty in detection. If criminal penalties are viewed as unjust and severe, they could result in uniting corporate bureaucracies thereby drying up sources of internal information which are vital to prosecutors in developing evidence.

Alternative proposals

In order to provide maximum deterrence against corporate crimes, personal criminal penalties should be made an integral part of a prevention package. Such penalties should be used in moderation and in conjunction with other measures rather than as the last element in a sequential chain starting with censure and ending with imprisonment.

(a) The frequency and incidence of prison sentences should be increased significantly so that they convey to the public a true picture of the widespread nature of corporate crimes, if that is the case. The sentences should bear a close relationship to the severity of the crime so that juries would not be reluctant to impose them. The mere imposition of a prison sentence is likely to be quite effective. An unusually harsh sentence has an element of retribution and may elevate the executive from a wrongdoer to the status of a victim of circumstances, or worse still, a martyr.

(b) To create a societal consent toward the undesirability of corporate crimes, prison sentences could be accompanied with a public apology from the corporation and the executive, together with a description of their wrongful deeds. Such apologies are common in both Germany and Japan and seem to have been effective in bringing public attention—and public condemnation—to violators.

(c) The prison sentence should be combined with a probationary period. An executive who is convicted of criminal wrongdoing should be barred from holding an executive level position in a publicly-held company for a prescribed number of years following his release from prison. This would eliminate the practice of convicted executives accepting positions from competitors of their former employers and thus significantly raising the personal risks and costs for corporate crimes.

(d) Corporations and individuals should be denied of all benefits—direct and indirect—accrued to them as a result of an illegal activity following the pattern codified in 18 U.S.C. Sections 1961–1965. This would be in addition to the usual fines or jail sentences.

(e) Firms convicted of violations should be prohibited from doing business with other firms whose executives had been convicted of similar violations. Such restrictions are already imposed on Nevada's gambling industry, where firms known to

have been associated with mob-tied businesses are barred from operating in the state.

(f) Corporations whose operations have been in violation of criminal laws should be subjected to special reporting requirements. The company or its officers could, for example, be required to make regular periodic statements to the court stating that no violations existed. If violations were later proven, the firm or individual could be convicted of prejury as well as the violation, and penalties naturally would be more harsh.

And now some caveats

A society has a right to use criminal penalties and imprisonment of executives to deter corporate misdeeds. There may indeed by circumstances under which corporate executives are held to higher standards of accountability than those imposed on individuals acting in their personal capacities—a form of societal fiduciary relationship. Imposition of a criminal penalty, including jail, under conditions of vicarious liability is, however, harsh punishment and must be done with utmost care because it could result in otherwise unintended and socially undersirable consequences. It introduces a new element of uncertainty into an executive's discretion in dealing with corporate internal affairs and creates further strains on the interaction between corporations and other social groups.

Potential criminal liability will, in all likelihood, lead executives to ensure that they have knowledge of and control over any activities that could lead to their imprisonment. They may reject the option of decentralizing operations or delegating responsibility. In turn, the lower-echelon manager will feel a closer scrutiny by the "responsible" officer. This could limit initiative, stifle innovation, and sacrifice growth. Consumers may be denied the fruits of the economies of size, availability of products in closer proximity, and access to information. On the other hand, it could be argued that by compelling the executive to maintain closer supervision and control, the company will be more responsible to society's needs; thus expansion will only come with a clear and reasoned justification for such growth.

The trend toward harsher penalties for corporate executives comes at a time when opinion polls indicate that business credibility in the public eye is extraordinarily low. The public desire that rich and poor be punished equally for their crimes may be a reflection of the increased attention being paid to the question of "white-collar" crime.

Nevertheless, it seems clear that the movement toward incarceration of executives has not been given the kind of public exposure and discussion it deserves in light of its unknown and potentially significant effects. I am hopeful that the deliberations of your committee would go a long way toward achieving this end.

Thank you.

TESTIMONY OF DR. S. PRAKASH SETHI, DIRECTOR, CENTER FOR RESEARCH IN BUSINESS AND SOCIAL POLICY, SCHOOL OF MANAGEMENT AND ADMINISTRATION, UNIVERSITY OF TEXAS AT DALLAS

Dr. SETHI. With your permission, I would like to follow the text and maybe at certain portions I might digress a little from it.

Mr. Chairman, thank you very much for your invitation for me to appear before your committee today.

No one can seriously question the need for deterring those corporate activities that adversely impact on worker health and safety, and manufacture products that are potentially hazardous to consumers who use them.

A multiplicity of laws and regulations testify to this Nation's concern in protecting workers and consumers. At the same time, testimony before this committee, court cases and scores of other investigations, would indicate that a large gap exists between our intentions and performance.

There is a growing public concern, and legitimately so, that more effective measures are needed to hold corporations, and those who guide them, responsible for corporate activities that endanger public welfare and safety through violations of safety, antipollution, and environmental protection laws.

This concern is not confined to the United States, but is increasingly being expressed, and acted upon, in such other industrialized countries as France, West Germany, Sweden, United Kingdom, and Japan.

To the extent that the current bill H.R. 4973 would alleviate some of the problems of information collection and enforcement, I strongly endorse its intent of creating an environment of general deterrence and providing mechanisms that would induce corporations and executives to undertake, on their own, such preventive measures that would produce goods and services that are safe to their users and do not unduly harm workers' health, safety, and the environment.

An analysis of the enforcement provisions of this bill, however, leads me to conclude that the scope of duties and liabilities specified in the bill for the executives is too narrow. Thus, it may have only limited success in ferreting out all serious law violations, identifying the causes for such violations, and the managers who should be held responsible for them.

Second, in view of the current evidence on convictions and sentences, both in the United States and abroad, I believe that the type and severity of penalties for violations provided in the bill may not be widely employed, thereby seriously limiting their deterrent effect.

I should also point out that in developing punitive measures, we should be extremely cautious that they do not so undermine the efficient functioning of the corporation that would adversely affect productivity, incentive for risk taking, economic growth, and thereby, society's welfare.

My remarks are aimed at addressing these twin issues; namely, the nature and scope of executive responsibility for compliance with various laws, and the types of penalties that may be most effective in deterring such law violations.

With your permission, I would also like to submit a more detailed written statement for the record at a later date on the subject.

In making my recommendations, I am very conscious of the fact that there is no such thing as a zero risk society. Every element of risk reduction, be it in the area of worker safety, environmental protection, or product safety, carries with it certain potential costs in terms of lower incomes, fewer jobs, less product innovation, and even loss of certain other rights such as employee privacy.

The objective is therefore not to reduce all risks to zero—because such a goal is impossible—but to insure that risks are taken openly and with conscious regard for the health and welfare of those who are going to be adversely affected.

Furthermore, risks and benefits are carefully balanced from the perspective of all those concerned rather than from the perspective of only those who stand to profit from benefits but do not bear the responsibility for consequent personal and social costs.

WHY THE EXPANDING SCOPE OF EXECUTIVE CRIMINAL LIABILITY

At the heart of this movement toward holding managers personally responsible for corporate violations of the law, lies the struggle of both individuals and entire societies to come to grips with the

contemporary reality of the corporation and to subject it to effective controls.

It reflects, in some cases, society's frustration in molding the institution of the corporation in a certain direction and in using successively severe measures when conventional approaches fail to work.

The circumstances that have brought us to the present situation may be classified as the failure of market institutions, failure of existing enforcement structures, inadequacy of existing legal philosophy and, failure of the news media.

Let me briefly dwell on these factors because they have a bearing on the type of remedies I plan to propose.

FAILURE OF MARKET INSTITUTIONS

Inherent in traditional economic dogma is the notion that corporate behavior can be effectively controlled by the mechanisms of the marketplace. Customers will withhold their patronage from a company that misbehaves, refusing to purchase its goods and services, and the company will go out of business.

In order for this system to work, however, the communication channels between business and society must be clear so that the necessary adjustments can be made.

In today's complex economy, this condition rarely exists. As firms become large and diversified, and deal with a wide range of customers, they become increasingly immune to market discipline. The signals for change are often quite weak and diffused.

Since society no longer can regulate business behavior through the marketplace, it tries to do it in other ways. The vast array of regulatory framework now surrounding business is designed to achieve this end. Along with the traditional controls directed toward illegal marketing practices, business now is subjected to regulations governing pollution control, environmental safeguards, in-plant worker safety, and protection of employees from job discrimination.

These new process controls cause enormous amounts of regulatory delays and redtape. Yet, such efforts are doomed to failure.

The regulators can never have the necessary expertise to anticipate future developments in technology, or to understand the organizational labyrinths through which management can work in fulfilling the legal requirements without making any substantive changes.

The regulatory approach may get a reliable response in the short run, but this advantage is bought at the cost of an additional policing problem. It may also retard potential technological innovation and result in greater social costs.

The failure to change corporate behavior through regulation of output or modification of decisionmaking structures and processes leads to imposition of controls directly on managers by holding them personally responsible for corporate actions.

Just as corporations reward and penalize their managers on their financial performance without regard to the specific management processes employed by the managers, society demands achievement of social performance goals thereby obviating the

need for developing vast and I believe self-defeating bureaucratic regulating superstructures.

The assumption here is that imposing penalties on managers will induce them to apply the same ingenuity and resourcefulness that they use to further corporate growth and profits, to areas that are deemed socially desirable.

The second aspect of the problem is what I call the failure of existing enforcement structures.

It is no secret that corporate executives, regardless of their culpability, have not suffered the fate of other criminals in terms of incarceration for economic crimes.

While the law in books pertaining to corporate crimes is not dissimilar to the laws regarding other types of crimes, the law in action, that is, enforcement, is characterized, in the case of corporate crimes, by slow, inefficient, and highly differential implementation.

Most of the laws dealing with corporate crimes are aimed at people with a high socioeconomic status. They share an affinity through schools, clubs, professional backgrounds, and churches, for example, with the groups responsible for making laws and enforcing them—legislators, judges, and prosecutors.

Executives often have an elaborate and widely accepted ideological rationalization for their offenses and they belong to a group with considerable economic and political power.

While crimes involving physical violence against individuals are sternly dealt with, economic crimes are considered social aberrations and are dealt with quite leniently. Incarceration is deemed unnecessary since these individuals are not considered a threat to society. Fines are often quite nominal, invariably paid by the corporations employing them, and carry little economic hardship.

More often than not, the executive continues to work at his old job and often finds himself an even better job with former competitors. This is true even when the executive serves a prison sentence.

Mr. GUDGER. I apologize for interrupting you. You hear these bells ringing in the background. This is a call for each of us who has the responsibility to come forward and vote on a bill now pending.

I am going to adjourn for about 10 to 15 minutes. I will return just as soon as I have discharged my duty on the floor by casting that vote. So if you will be at ease for about 10 to 12 minutes, I should be back here.

[Brief recess.]

Mr. GUDGER. Professor Sethi, if you are ready to proceed, we are on page 5 of your written testimony.

Dr. SETHI. When we stopped I was talking about what I call failure of existing enforcement structures, and I was mentioning that executives do receive very lenient treatment.

An individual law violator finds support for his behavior in the executive's group norms. While the impact of a corporate crime may be quite serious for the society and often more violent in its consequences than a multiplicity of individually committed street crimes, the corporate personality diffuses the individual burden of guilt.

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Through a battery of accountants, lawyers, scientists, and other experts, management can demonstrate the bureaucratic imperatives of shared responsibility, thereby denying or seriously weakening the notion of personal obligation.

The manager's group norms do not consider a violation of social welfare laws—pollution controls, for example—as antisocial. The impact of violations is highly diffused and indirect, but the cost of compliance is immediate and direct.

Management is constantly under pressure to minimize these costs, and the statutes are considered nuisances or regulations imposed by overzealous bureaucrats. Support from his peer group tends to break down further a manager's self-perception as a lawbreaker.

Further peer support comes from the executive's friends and neighbors who do not understand complex technical violations and therefore often attach no social stigma to illegal acts.

An important segment of corporate crimes is highly technical in nature. Only after the courts have spoken can one say whether or not a law is broken. It is often difficult to distinguish between business practices that represent an innovation and those that represent a threat to health or safety. Most corporate crimes remain noncriminal for a long time because of the inability of the criminal law and enforcement to keep pace with corporate practices.

Thus, compliance calls for a radical change in hitherto acceptable modes of corporate behavior, a process that brings resistance and resentment.

The next issue of why criminal penalties are important is because of the inadequacy of existing legal philosophy.

The traditional model of "mens rea" in criminal law poses severe problems when applied to corporate executives within the context of corporate behavior. Large corporations employing thousands of people and making millions of decisions impose impossible burdens on society to isolate and identify a particular individual to be held responsible where only the last link in the long decision chain is visible.

Thus, to find the guilty individual, the corporation's veil of secrecy must be lifted—a task not easily done. Even if the entire corporate decision process were exposed to public scrutiny, it might still be impossible to isolate and identify the guilty person because of the collectivity of the actions that resulted in law violation and the lack of specific intent or direct knowledge on the part of thousands of people who may have contributed, in some miniscule sense, to that decision.

For example, the black smoke billowing from a chemical plant is clearly in violation of environmental law. Who is to blame? The worker who failed to check a meter? The maintenance crew? The purchasing agent? The design engineer? Or the company president?

One alternative to this problem has been the imposition of strict criminal liability. Although the Supreme Court has apparently indicated that a legislatively developed standard of strict liability is acceptable for criminal conviction, I do not believe this to be a desirable course of action because of its other undesirable side effects in terms of overdeterrence.

Thus, a standard should be developed that is more relevant within the corporate context, goes beyond the restrictive scope of specific criminal intent, and provides greater incentives for corporate executives to exercise the utmost care in supervision of personnel and facilities to prevent occurrence of corporate crimes.

FAILURE OF THE NEWS MEDIA

Another factor in the differential treatment of corporate executives has been the inability of the mass media to explore and report complex issues relating to corporate crimes. Even the level of coverage of economic and business news, in general, is quite inadequate. Thus, the news media fail to express and organize the moral sentiments of the community against these crimes.

What I would like to do is briefly talk about the two proposals that I have for expanding and improving the scope of H.R. 4973.

The first issue deals with the definition of appropriate manager and the scope of his responsibility.

I believe the bill severely limits the scope of its application by restricting the liability of an executive to nondisclosure pursuant to discovery of a potential danger associated with a product or business activity.

One. There is no provision in this bill to encompass the situation where an executive does not discover the existence of a dangerous situation. Such nondiscovery may occur because the executive developed a system of organization and communication which effectively insulated him from receiving information of illegal acts within his domain of authority.

The knowledge requirement offers the least amount of deterrence to those senior executives who have the most power to effect corporate policies and procedures, because of their ability to isolate themselves from day-to-day operational details.

Two. The knowledge requirement also does not prevent the occurrence of crimes caused due to reckless and negligent supervision. Negligent or reckless conduct should hold a superior criminally liable whenever he knew, or should have known, that an illegal act was occurring or would occur within his supervisory domain, and failed to take reasonable preventive action. The positive element of this concept is reasonable precautions against causing harm, and the negative element is failure to exercise that duty.

Three. Reckless and negligent supervision requirement poses certain problems of evaluating the quality of management, mostly after the fact, where even honest judgments of error may appear to be reckless decisions.

Therefore, in order to be applied effectively and equitably, it would be important to show that the functional area where the illegal act occurred was within the responsibility domain of the executive charged, and that he had the authority to prevent its occurrence.

A fair and rational approach would also require that any decision regarding which executive within a corporation should be punished be made partly contingent upon the nature of the sanction to be imposed and the degree of negligence or recklessness.

To be socially acceptable, it would be necessary that an element of moral culpability must be present in the commitment of the act.

Four. Two approaches are possible to accomplish the goals of maximum prevention of harmful acts, easy determination of responsibility of executives committing these acts, and fairness in the imposition of penalties.

(*a*) Every law that proscribes certain activities in health, safety, and environmental areas should require that the corporation predesignate an executive who would be responsible for insuring corporate compliance with that law.

Since this would be tantamount to prewarning, the executive so designated could not offer a lack-of-knowledge defense.

More important, since compliance would be this executive's sole responsibility, any violation would become a prima facie case for reckless and negligent supervision.

Corporations should be required to designate a person who has the technical competence to evaluate corporate compliance with the law and who has the operational responsibility to take action in those areas of corporate activities where this particular law operates.

Otherwise, it is quite feasible that corporations may hire "front men" for certain positions whose primary job would be to go to jail for the corporation, in return for guaranteed benefits for their families and jobs. This would offer little incentive for deterrence, but might provide a lucrative business for organized crime to supply suitable soldiers to the corporations.

This approach may have certain limitations in that more than one law may have a bearing on a specific corporate activity, or more than one corporate activity may be covered by a single law, thereby raising the problem of overlapping areas of responsibility and supervision.

(*b*) A practical solution to this problem would be for corporations to develop social accountability centers. A social accountability center is similar in purpose and goal as a profit center. The purpose of a profit center in a corporation is to group a set of complementary activities together and put them under the charge of one executive who manages this profit center as if it were an autonomous business entity.

Profit centers are organized on a rational basis since the performance of a profit center has to be isolated and measured. Top management rewards a manager on the basis of his profit center's performance.

It would seem logical that the profit center concept should be made the basis of a social accountability center, whereby all harmful and dangerous acts would be charged to the manager of that center.

This approach might cause responsibility for compliance with certain laws to be distributed among more than one person within a corporation. However, it has the distinct advantage of segmenting areas of corporate activities in a manner that an executive's responsibility is clearly established.

The second important aspect of H.R. 4973 has to do with types of penalties that could be imposed on corporations and individuals for corporate crimes. One of the primary reasons for resorting to prison sentences for corporate executives is their supposedly deterrent effect—both specific and general—in controlling corporate law violations.

Since corporate activity is normally undertaken in order to reap some economic benefit, corporate decisionmakers choose courses of action based on a calculation of potential costs and benefits.

Since a calculating criminal is the one best deterred by punitive sanctions, it may be argued that such sanctions would have the greatest deterrent effect on corporate crimes.

In order for this system to be effective, it must meet two criteria:

One. The proportion of violations discovered and convictions obtained should be large enough so as to significantly increase the statistical odds in favor of discovery of a crime and conviction.

Two. The size of penalty must have a realistic relation to the severity of the crime.

I do not believe that the penalty provisions in H.R. 4973 would create an effective deterrence mechanism for the following reasons:

A. In the case of corporations, a small fine is not likely to deter violations when significant economic gains can be obtained by ignoring the law. In fact, inadequate penalties might become a license to violate the law.

On the other hand, if a fine is very large, it is also likely to be counterproductive. Depending on the size of the firm and its market position, a company could pass the fine on to the consumer in terms of higher prices. A large fine could also result in significant tax savings so that society is, in fact, paying part of the fine through reduced tax revenues. A large fine would also reduce a firm's profits and might adversely affect its ability to raise additional capital and correct alleged violations.

Thus, the people most hurt would be the workers, the stockholders, and the consumers. The threat of stockholders' suits against management is of little consequence as a deterrence because of poor chances of recovery.

B. Similarly, fines levied against individual executives would not be very effective. They are likely to be paid by the company, in one form or another, because the gains to the corporation from law violations would be greater than the cost of fines.

C. Imprisonment penalties which are quite severe are also unlikely to be very effective. Experience has shown that both juries and judges are unwilling to impose long prison sentences for corporate crimes because there is no general societal awareness of the seriousness of these crimes in terms of their harm to society and, consequently, there is no social climate of moral revulsion against the wrongdoers.

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One. The frequency and incidence of prison sentences should be increased significantly so that they convey to the public a true picture of the widespread nature of corporate crimes, if that is the case.

The sentences should bear a close relationship to the severity of the crime so that juries would not be reluctant to impose them. The mere imposition of a prison sentence, I believe, is likely to be quite effective. An unusually harsh sentence has an element of retribution and may elevate the executive from a wrongdoer to the status of a victim of circumstances, or worse still, a martyr.

Two. To create a societal consent toward the undesirability of corporate crimes, prison sentences could be accompanied with a public apology from the corporation and the executive, together with a description of their wrongful deeds. Such apologies are common in both Germany and Japan and seem to have been effective in bringing public attention—and public condemnation—to violators.

Three. The prison sentence should be combined with a probationary period. An executive who is convicted of criminal wrongdoing should be barred from holding an executive level position in a publicly held company for a prescribed number of years following his release from prison. This would eliminate the practice of convicted executives accepting positions from competitors of their former employers and thus significantly raising the personal risks and costs for corporate crimes.

Four. Corporations and individuals should be denied of all benefits—direct and indirect—accrued to them as a result of an illegal activity following the pattern codified in title 18, United States Code, sections 1961–65. This would be in addition to the usual fines or jail sentences.

Five. Firms convicted of violations should be prohibited from doing business with other firms whose executives have been convicted of similar violations. Such restrictions are already imposed on Nevada's gambling industry, where firms known to have been associated with mob-tied businesses are barred from operating in the State.

Six. Corporations whose operations have been in violation of criminal laws should be subjected to special reporting requirements. The company or its officers could, for example, be required to make regular periodic statements to the court stating that no violations existed. If violations were later proven, the firm or individual could be convicted of perjury as well as the violation, and penalties naturally would be more harsh.

Before I close let me offer some caveats.

I believe a society has the right to use criminal penalties and imprisonment of executives to deter corporate misdeeds. There may indeed be circumstances under which corporate executives are held

to higher standards of accountability than those imposed on individuals acting in their personal capacities—a form of societal fiduciary relationship.

Imposition of a criminal penalty, including jail, under conditions of vicarious liability is, however, harsh punishment and must be done with utmost care because it could result in otherwise unintended and socially undesirable consequences. It introduces a new element of uncertainty into an executive's discretion in dealing with corporate internal affairs and creates further strains on the interaction between corporations and other social groups.

Potential criminal liability will, in all likelihood, lead executives to insure that they have knowledge of and control over any activities that could lead to their imprisonment. They may reject the option of decentralizing operations or delegating responsibility.

In turn, the lower echelon manager will feel a closer scrutiny by the "responsible" officer. This could limit initiative, stifle innovation, and sacrifice growth. Consumers may be denied the fruits of the economies of size, availability of products in closer proximity, and access to information.

On the other hand, it could be argued that by compelling the executive to maintain closer supervision and control, the company will be more responsible to society's needs; thus expansion will only come with a clear and reasoned justification for such growth.

The trend toward harsher penalties for corporate executives comes at a time when opinion polls indicate that business credibility in the public eye is extraordinarily low. The public desire that rich and poor be punished equally for their crimes may be a reflection of the increased attention being paid to the question of "white collar" crime.

Nevertheless, it seems clear that the movement toward incarceration of executives has not been given the kind of public exposure and discussion it deserves in light of its unknown and potentially significant effects.

I am hopeful that the deliberations of your committee would go a long way toward achieving this end.

Mr. GUDGER. Professor Sethi, I would like to ask whether you know of any other industrialized country, such as West Germany, Great Britain, Japan, which has enacted laws with provisons having any similarity to H.R. 4973 or any of the features contained in your alternatives to the forms of punishment or forms of penalty which are prescribed in H.R. 4973?

Dr. SETHI. The most prominent cases are France and Sweden, and to some extent West Germany. These countries have very strict laws, and a corporation is never held criminally liable. It is always the executive who is isolated and identified as such.

In England, they depend very much on the traditional tort laws. In Japan, they are now beginning to introduce new laws where executives will be held criminally liable for pollution law violations.

Mr. GUDGER. In your comments you suggest that the knowledge requirement does not prevent crimes as a result of negligent or reckless supervision, and therefore I think you are implying your support for some penalty for reckless or negligent conduct beyond civil liabilities.

Dr. Epstein spoke to the same subject in the course of his testimony, and in response to a question which was addressed to him.

Will you comment as to your feelings, as to just what this bill should contain—which it perhaps does not, dealing with criminal accountability—reckless or negligent lack of supervision?

Dr. SETHI. The problem comes from a dual set of pressures placed on corporate executives. The pressure to cut costs, and the pressure to meet deadlines. The top executive in an organization does not want to know why the job is not being done. In a decentralized organization, lower level executives are supposed to carry out assignments independently and not need to much supervision. That is why they are executives and not clerical or administrative employees.

The attitude of top executives generally is: "Don't bother me with details but get the job done."

The executive therefore, is under tremendous pressure to perform, and he cuts corners where he can afford to cut them; namely, if the probability of being caught and convicted, is very low then he is not going to give the area of compliance in the health, safety, and pollution laws as much attention as he gives to the areas of protecting profits or making sure that the assembly line works at the rate it is supposed to work.

This is probably the largest area where preventive measures can be effective. So we must have a measure in the bill which provides for reckless or negligent supervision.

Mr. GUDGER. I think it is your feeling that there needs to be a designated official who is to be held accountable?

Dr. SETHI. That is true.

Mr. GUDGER. And where there has been a failure of disclosure or an introduction in the market of a product with known hazards without disclosure of that hazard, or without withholding that product, when it is patently defective, then that individual should be the one who is to be held before the courts and made presumptively responsible.

Dr. SETHI. That is right.

Mr. GUDGER. Would you speak a little further as to the possibility that the corporation could create a scapegoat for that situation and could have its supervisory personnel just willfully push forward someone who would probably be least sensitive to criminal accountablity, the chairman of the local board of stewards of his Methodist or Baptist Church, or someone who is highly reputable in the community, but really is a good-guy type, may have some knowledge which might qualify him for a degree of accountability but he may not have the personality or the attributes of exercising firm responsibility.

Dr. SETHI. This is a very real concern. In fact, this scapegoat strategy is used in Japan very commonly.

When the government and the industry both feel that there is no way they could satisfy public opinion against some of the more serious crimes, more often than not, they would take one of the very senior executives who is close to retirement, and he would make a public apology and public admission of guilt. He would resign from the job and say, since I was the manager, it was my problem. Thereafter, he a very important person within the company, because he protected the company from public embarrassment.

If you go back to my testimony, I made the suggestion that such person not only should have the technical competence but operational responsibility as well. Therefore, you really could not use a front man.

If you have, for example, in a GM assembly plant one person who is a plant manager and the other person is just a front man with little competence for operational ability. You would assume it is the plant manager who has the responsibility and not one of his staff assistants.

I would put the responsibility for compliance on the same person who has the responsibility for making profit for the company in that particular area.

Mr. GUDGER. Then you are saying that if the designated person is in effect a scapegoat because of lack of technical knowledge or lack of administrative authority, then we would get back to the appropriate manager, as you did in this bill?

Dr. SETHI. Yes, sir. Otherwise you could imagine seeing the Wall Street Journal full of ads. Wanted, as vice president for going to jail for the company. I suspect for $100,000 a year you could get them by the dozen.

Mr. GUDGER. So actually the appropriate manager, as used in the bill, is a useful term perhaps if there is a breakdown of your designated responsible person?

Dr. SETHI. I would simply try to make it more precise so that it meets with the person who has the operational responsibility for that segment of a company's business.

Mr. GUDGER. I am going to yield now to counsel.

First I will ask minority counsel, Mr. Wolfe.

Mr. WOLFE. I have no questions, Mr. Gudger.

Mr. GUDGER. Thank you.

I will now yield to majority counsel, Mr. Raikin.

Mr. RAIKIN. Professor Sethi, I would like to quickly, dealing with brief answers, run through about ten questions really fast.

In your view, would a corporate official who says in effect "just do it, some sort of criminal illegal behavior, but don't tell me about it," would he be in your view committing a knowing failure to disclose?

Dr. SETHI. It depends. Most successful executives should exactly do what you are saying they should be doing. Namely, they should delegate responsibility. They should not be bothered with details. This does not necessarily mean they are condoning illegal behavior. This may simply be concentrating on more important corporate decisions.

Mr. RAIKIN. Would that be a knowing failure to disclose?

Dr. SETHI. Yes, if an analysis of the decisionmaking structure shows that the executives were deliberately concealing information themselves that would incriminate them.

If they were putting heavy pressures on a junior executive without making sure that he has the necessary resources to do the job, or knowing fully well that the job could not be done within the time resources allocated, then the senior executive should be held

responsible, if the company is found to have violated health, safety, or pollution related laws.

Mr. RAIKIN. In your view, should corporate officials be subject to the same standards for convictions, including convictions for crimes analogous to manslaughter and criminal negligence as everybody else in society?

Dr. SETHI. The corporate executives, yes.

Mr. RAIKIN. As described by Dr. Epstein, should independent testing agencies, retained by manufacturers to test the safety of products for their likelihood to cause cancer or other diseases, be held liable if they participate knowingly and cover up the lethal defects under the Miller bill?

Dr. SETHI. Yes, as an independent entity or a profitmaking firm. Such a firm would be subject to the laws as they exist. It should also be subject to the reckless or the negligence provision.

Mr. RAIKIN. There would be exceptions to your asssertion. Ideally you have to have management authority before——

Dr. SETHI. I would also hold the corporate manager responsible whose job it is to hire that agency to do the work. If that agency is doing sloppy work, to me it would be a prima facie case of saying that the corporate executive did not do the affirmative duty of effective supervision.

Mr. RAIKIN. If the independent testing agency or an executive of that agency could be shown to have participated knowingly in a coverup of information of a lethal defect in a product, you wouldn't have any problem holding that person liable under the Miller approach, would you?

Dr. SETHI. Not at all.

Mr. RAIKIN. Would you favor building into the penalties a feature borrowed from the RICO statutes empowering the court to confiscate the gains derived from a knowing coverup?

Dr. SETHI. I agree. I have made that suggestion in my testimony.

Mr. RAIKIN. Could you elaborate on why you believe fines are an ineffective deterrence to illegal corporate behavior? Is it because the fines could be tax deductible as has been the case in several instances in the past?

Dr. SETHI. All of these. If you consider manager and the corporation as rational, calculating entities, then all you have to do is look at what is the cost of the fine, discounted for the probability of that fine being imposed, the potential beneifts that would accrue by violating the law, and you would see that the fines really are not very effective. Even if you take the Ford case where they had the largest fine imposed by a court of $125 million, that fine amounted to less than 1 month's revenue for Ford. Half of that fine would come out of a reduction in their tax liability. Another part would come out of the insurance companies. I might add that this fine was later reduced to $6 million, and the case is still under appeal.

Mr. RAIKIN. We come back to the desirability of prison sentences. A minimum 2-year prison sentence is not too severe for the most blatant knowing coverup.

Dr. SETHI. That is true.

Mr. RAIKIN. Your point was it may be desirable to have a higher tier in penalty here in terms of imprisonment for knowing coverups and a lesser tier to spread out liability along the lines of criminal behavior.

Dr. SETHI. That is true, because, one, I feel the knowing cases are likely to be small and, two, of the very small number of cases, the ones that would be actually caught, investigated, prosecuted, and convicted, is going to be even smaller.

So while one person in a thousand might actually go to jail, the probability of that, of you being that person, is so small that for all intents and purposes it is not a very effective deterrence.

Mr. RAIKIN. Throughout your testimony you have discussed penalties for corporations only in terms of their deterrent value. Could it be argued that there are other equally valid sentencing rationales, specifically the notion in the criminological term of retribution or so-called just desserts, in other words, a company or corporate executive might deserve to be penalized if he allows a hazardous product to be sold to consumers?

Dr. SETHI. In the case of corporations retribution does not make sense to me. In the case of individuals, it might be relevant in extreme cases, but maybe, I am just too calculating a person, also.

I am primarily thinking not in terms of what happened in the past, but how could I prevent its occurrence in the future. Therefore, I would go for lower sentences and apply them to a larger number of cases, rather than a very noteworthy sentence, but applied to very fewer cases.

Mr. RAIKIN. A recent study by Prof. Marshal Clinard has shown that during the 2-year period included in his analysis, over 60 percent of the largest U.S. corporations had at least one enforcement action completed against them and almost half of the corporations were involved in one or more serious or moderate violations.

In light of this, wouldn't it be your suggestion that convicted firms be prohibited from doing business with firms convicted of similar violations? Would this be inconsistent with your concern for severely inhibiting economic growth and development? Remember, I am talking about minimal penalties.

Dr. SETHI. I don't believe so. Although I have not seen the study, we don't know to what extent and what proportion of those enforcement actions were civil actions versus criminal action.

Two, we don't know to what extent some of the actions were really technical violations in the sense that the corporations did not fulfill particular forms or submit reports or that type of thing.

Three, we also do not know which of those would be considered as either knowing information or reckless or negligent supervision, and so the actual proportion of cases that would fall in the three catgories we have been talking about might indeed be very small.

Mr. GUDGER. I have one question that I don't believe your comments addressed in any great depth.

Dr. Epstein in his testimony suggested that there be a theme of individual responsibility under which managers and directors and those having accountability, whether under the interpretation of the term "appropriate manager" or however that accountability is, to vest, that they would be required to securely license and be subject to having those licenses revoked as a form of punishment.

Now, my question to you is this. I believe there has been also developed here, either in your testimony or in the testimony of others, a form of corporate probation where the person who has the managerial responsibility and has been found guilty of an offense would suffer the penalty of no longer being employable in that type of corporate activity as a form of punishment.

Will you comment on Dr. Epstein's idea of licensure and on this idea of corporate probation?

Dr. SETHI. I have trouble with the idea of licensing, for a variety of reasons. One, if you look at the number of lawyers or doctors that have been disbarred or whose licenses have been suspended, it is very, very small. Most of the licensing enforcement comes from the professional group that gives the license, and there is a natural reluctance in terms of disbarring the person from the profession through the self-regulation mechanism. How many CPA's have been disbarred you can count over the years.

Two, I do not know how you would license a manager. He takes training or he might be a high school dropout who became a millionaire through innovative means. How would you license him and how would you take his license away?

Three, I think all it would do is create another large enforcement structure with thousands of people for licensing of everyone. Would you license every staff manager, every consultant he hires? How would you delicense them?

To me, it is far better simply to say that you would not be able to hold a position of responsibility similar to the one where you were held accountable and found wanting, because this is not so difficult. If a bank teller is found to be stealing from an account, you don't hire him back as a bank teller. The same goes for a bank manager. If you know he was convicted for embezzlement, you would not hire him as a bank manager. Why shouldn't the same apply to corporate managers? To me, that is a far greater deterrent than the whole processing of licensing.

Mr. GUDGER. Do you think that the bill could benefit from an amendment suggesting that upon determination of guilt under the bill the trial judge should in all instances impose such a penalty?

Dr. SETHI. I would strongly favor that, yes.

Mr. GUDGER. I understand that counsel has one further question.

Mr. RAIKIN. In general, Professor, why would you say that it is so important, or would you say it is important, to create an affirmative duty to disclose and to punish the failure to disclose, as the Miller bill does, and not just make it a crime to knowingly violate specified health, safety, and environmental laws with no specific affirmative duty, which is the approach of the Senate Judiciary Committee in section 1617 and section 1853 of the Senate proposed Federal criminal code?

Dr. SETHI. Affirmative duty to disclose has two prongs. One is that it is after the fact. Some of the damage has already taken place. The product may be introduced into the market, they got some data back, so you really do not have the preventive type of deterrent.

Mr. RAIKIN. The duty could arise before the product is marketed, could it not?

Dr. SETHI. But he may not have known about it. He knew about it only after the fact and the cause may have been sloppy management and he gets off scot-free just by telling you that the product did cause damage. So there is not enough prevention.

Plus, what happens to the self-incrimination? If he really was involved in terms of sloppy management and not deliberate participation in terms of conspiracy? The burden of proof clearly goes from him to the Federal agency to disseminate the information.

Mr. RAIKIN. Do you favor the notion of penalizing willful knowledge?

Dr. SETHI. Absolutely, no question about it. All I am saying is that it is very limited in its scope and application. What I am suggesting does not take anything away from the Miller bill. All it does is add to it.

Mr. RAIKIN. Thank you, Mr. Chairman.

Mr. GUDGER. You would then add to the Miller bill not only liability for failure to disclose, but liability to knowingly manufacture and deliver to the market a defective product, and I presume willful failure to withdraw from the market a product known later and after the time of manufacture and distribution to have become defective or have defective and hazardous description?

Dr. SETHI. Yes, sir. You see, I feel that the largest impact in terms of negligence is not in the very flagrant cases of poisoning, such as kepone, but in terms of design defects, because you may not kill 200,000 people but you might cause injury to more than that number of people and design defects really get into the question of processes, the control and management aspect of it, and that is where the importance of the bill should lie in terms of the product introduced into the market and not necessarily only in the testing phase of it.

In some cases we find that the damage has shown up 20 years after the fact, and no amount of testing could have shown that to be the case, because nobody would have done the testing for 20 years.

Mr. GUDGER. Then you are saying at that time when this product is perhaps like asbestos built into the walls of the school buildings, there would be a criminal liability on the part of those who had manufactured that product without that knowledge, or would there be a liability to go in and correct it, or liability to go in and disclose? What would be the test of liability?

Dr. SETHI. When the product was introduced, if a person had reason to know or should have known that these negative toxic side effects are likely to occur, then it is his liability and, he should not have introduced the product; or corrected it.

Two, if he did not know, then you can not charge him either for willful or reckless or negligent supervision. But suppose in the field a company gets some data showing that certain damages were occurring. Then you get into the area of supervision and possible or affirmative disclosure. At every stage, you have a different set of liabilities and obligations.

Mr. GUDGER. Certainly, I can see this in the civil field, but I am having a little difficulty following you down to the time when the product innocently in manufacture has come into use. Then it would seem that the duty would evolve upon others who were in

possession of knowledge to act, not upon the original nature of the product at a time when he was innocent of knowledge.

Dr. SETHI. Let's take the Pinto case. It is a very good example. There was no criminal intent as such.

Mr. GUDGER. Are you talking about the case involving the gear lever?

Dr. SETHI. No, I am talking about the Pinto case, where you had the fuel tank explosion.

Mr. GUDGER. All right.

Mr. RAIKIN. The question of criminal intent is now before a court of law in Indiana. You are certainly not in a position to make a conclusory statement.

Dr. SETHI. No. All I would say is in this case you could show that they knew the potential costs involved in terms of injury. Whether that should be considered under negligence or reckless supervision or not is your province.

Mr. RAIKIN. Hypothetically, if an automobile manufacturer in the course of the manufacture of that automobile obtained evidence that upon even minor rear-end collision there would be gasoline leakage and the almost certainty of explosion in consideration of the passengers, and if that automobile company at that point made a conscious, knowing, willful or perhaps even, as you and Dr. Epstein suggest, reckless decision to cover up that evidence of the lethal defect, you would not have any problem, would you, in saying that in that case, if those facts obtained, there should be criminal corporate liability in the sense that the Miller bill suggests?

Dr. SETHI. I would say yes, but then I would add one exception.

Mr. RAIKIN. Yes, you would have trouble.

Dr. SETHI. No. I would not have any trouble. But I would like to add one exception. Every aspect of a complex product, when it is first tested, you work on what we call probabilities, you know how many times this car is likely to get into an accident and what is the probability that a person who is in the car would die. This is not a single probability. You have a whole distribution. For example, the chances may be 10 in 100, that 50 persons would die. Based on what percentage point you want to take on that probability distribution you build that much extra safety into the product, which means that the cost of the product goes up by factor. Ford in this case obviously picked a different point on the probability scale than you and I would have picked. That kind of thing has to be determined very carefully.

Mr. GUDGER. Thank you very much, Professor. It has been a pleasure to hear your testimony and receive the benefit of your observations.

There being nothing further for hearing before the committee today, the committee stands adjourned.

[Whereupon, at 12:10 p.m., the subcommittee adjourned.]

APPENDIX

SELECTED CHAPTERS FROM "THE POLITICS OF CANCER," BY SAMUEL S. EPSTEIN, M.D.

SAMUEL S. EPSTEIN, M.D., is Professor of Occupational and Environmental Medicine at the School of Public Health, University of Illinois at the Medical Center, Chicago. He has been Chief of the Laboratories of Environmental Toxicology and Carcinogenesis at the Children's Cancer Research Foundation in Boston, Senior Research Associate in Pathology at Harvard Medical School, and Swetland Professor of Environmental Health and Human Ecology at Case Western Reserve University Medical School. An authority on toxic and carcinogenic hazards due to chemical pollutants, he is the author of over two hundred scientific publications and four books; has served as consultant to various Congressional committees, federal agencies, and organized labor; and is president of the Rachel Carson Trust and chairperson of the Commission for the Advancement of Public Interest Organizations.

Cancer in its many forms is undoubtedly a natural disease. It is probably one of nature's many ways of eliminating sexually effete individuals who would otherwise, in nature's view, compete for available food resources without advantage to the species as a whole.

F. J. C. Roe, Consultant to the American Industrial Health Council.
February, 1978.

Chapter Eight
How to Improve Industry Data

The overwhelming bulk of benefit and risk data, on the basis of which most regulatory decisions are based, comes from the industries being regulated. These data are either generated and interpreted by in-house scientists or by commercial laboratories and universities under contract. In-house scientific staff are not immune to pressures from research and development and marketing departments anxious to hurry their product or process into commerce. Industrial contracts with commercial laboratories and universities are usually awarded secretly, without bids having first been solicited on the open market, a practice hardly consistent with the ethos of competitive capitalism. The contractee, anxious about the award of future contracts, is also not immune to unspoken pressures to produce information or interpretations consistent with the perceived interests of the contracting industry. Consultants, generally from prestigious universities or research institutes, provide data with an additional mantle of authority. The

industrial interests of these consultants, often unknown to the public and to their own institutions, are either not disclosed to the agencies they advise, or, if disclosed, are usually kept confidential. A similar tendency operates in testimony before law courts and congressional committees.

Faults with Industry Data

Constraints on data, from gross inadequacy, biased interpretation, manipulation, suppression and outright destruction, are commonplace, especially when profitable products or processes are involved.[1] Evidence of such constraints now justifies *a priori* reservations about the validity of data developed by institutions or individuals whose economic interests are affected, especially when the data base has been maintained as confidential at industry's insistence.

Decision-making at all levels of government presupposes the availability of a body of information, on the basis of which the merits of alternate policies can be analyzed. If this data base is constrained or invalid, resulting decisions will also be constrained or invalid. This threatens the very fabric of democratic government.

Constraints in the information base will be illustrated in three general areas relating to its generation, interpretation, and suppression or destruction, with particular reference to problems of occupational and environmental cancer.

Constraints in the Generation of Data

The most common problem with industrially generated data is its poor quality. Complementing this are faults of design and performance consciously or unconsciously built into toxicological and epidemiological studies. These tend to produce results influenced or predetermined by short-term marketing considerations.[2]

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Deeply concerned by the inadequacy of data submitted in 1967 to the FDA by industry in support of food additive petitions, Commissioner Herbert Ley complained:

> Almost half of the food additive petitions originally submitted to the Food and Drug Administration have been incomplete or have not adequately supported the regulation requested and, therefore have required subsequent supplementation, amendment, withdrawal or denial.[3]

There is substantive evidence that the situation has not improved over the last decade.

Problems related to improper initial design of animal cancer tests include:

1. Using too few animals
2. Exposures in excess of the maximally tolerated dose, resulting in premature animal deaths before onset of cancer
3. Doses too low for the size of the animal test group, resulting in failure to obtain a statistically significant incidence of tumors
4. Deliberate premature sacrifice of animals for other "studies" during the course of the main test, thus depleting the number of animals remaining alive and at risk for cancer
5. Premature termination of the test before sufficient time has elapsed for the animals to develop tumors.

A second set of performance problems relates to husbandry. These include:

1. Poor housing, diet, and care, resulting in infections, sickness, and premature death
2. Failure to insure that each test and control group receive appropriate prescribed treatments as originally intended
3. Failure to inspect cages regularly so that dead animals become decomposed, resulting in the possibility that tumors may be missed at autopsy
4. Inadequate autopsies

5. Failure to examine appropriate tissues and organs for histological (tissue) study
6. Poor record keeping
7. Alteration, falsification, and even destruction of records.

The following examples illustrate common patterns of experimental deficiencies and misconduct. A 1969 review of seventeen industry-sponsored studies on the carcinogenicity of DDT by consultants to the Carcinogenicity Panel of the Mrak Commission on Pesticides concluded that fourteen of these studies were so inherently defective as to preclude any determination of carcinogenicity.[4]

Having spent $500,000 on the carcinogenicity and toxicological testing of the cosmetic food additive Red #40 by Hazleton Laboratories, which concluded that it was safe, Allied confidently submitted these data to FDA in 1970 and embarked on an ambitious advertising and marketing program. Not only had Hazleton failed to perform the customary mouse carcinogenicity test, but their rat test was of little value, as most animals died early in the test from intercurrent infection, not leaving enough alive to have revealed any but a massive carcinogenic effect.[5]

Carcinogenicity tests in rats of aldrin/dieldrin sponsored by Shell and of chlordane/heptachlor sponsored by Velsicol produced results that were claimed negative by the sponsors. In fact, these results were hardly interpretable because such high and toxic doses of both pesticides were fed the animals that many died early in the experiments, before they could have developed cancer.[6]

Other data submitted by Shell and Velsicol were used to claim that their pesticides were not carcinogenic in mice, and that the liver lesions induced in them were not really cancers, but just non-malignant nodules. Review by independent experts, however, proved just the contrary.[7] Faced with such major discrepancies and under pressure from Senator Kennedy's Subcommittee on Administrative Practice and Procedures, EPA finally reviewed other industry data on pesticides. Twenty-four currently used pesticides were selected on the basis of their highest permissible residues (tolerances) on common foods. Their extensive toxicological files, which had been previously submitted to EPA by a

variety of manufacturers, were then independently reevaluated. In an EPA report of April 9, 1976, it was concluded that with one possible exception these data were so inadequate that it was not possible to conclude whether any of the pesticides were safe or whether there would be any hazard in eating common foods with now legal residues.[8]

These and other grave deficiencies in the EPA data base on pesticides were discussed in a recent Congressional Staff Report:

> EPA almost exclusively rules upon data submitted by the pesticide companies. This data is the informational linchpin in the Agency's regulatory program. Yet in spite of repeated warnings, beginning at least 5 years ago, EPA has failed to take corrective action designed to discover and supplement further data.[9]

More serious than inadequacies of data are the numerous examples of fraud, such as those described in the *Congressional Record* of July 30, 1969.[10] Manipulation of data has been established with such drugs as MER/29, for which officials of Richardson-Merrill Company were criminally convicted; Dornwall, for which Wallace and Tiernan Company were found guilty of submitting false data; and Flexin, about which McNeil Laboratories omitted toxicity data on drug-related liver damage, including eleven deaths, in their submissions to the FDA.

On January 20, 1976, then FDA Commissioner Schmidt testified before Senator Edward Kennedy (D-Mass.) that Hazleton Laboratories (Vienna, Va.), under contract to G. D. Searle Company, reported on non-existent histological findings in carcinogenicity tests on the drug Aldactone.[11] Hazleton was also charged with falsifying data on the artificial sweetener Aspartame.*

Schmidt further testified on April 8 that investigation of Hazleton tests revealed a wide range of problems including ". . . large numbers of autolyzed tissues; failure to assay test substances; failure to assay treatment-diet mixture; failure to adequately review records and verify their accuracy; the use of a statistical method

* Following approval of Aspartame in July, 1974, FDA issued a stay after questions were raised on the reliability of the data. In May, 1979, FDA rejected a request by Searle to remove the stay on marketing approval pending an adjudicatory hearing.

that included autolyzed tissues, on which no observation had been made in the denominator for determining the number of lesions found; lesions reported at necropsy for which slides had not been made; tumors reported microscopically for which slides have never been made."†

A striking example of inept design is the fiasco of nitrilotriacetic acid (NTA).[12] In 1970, Monsanto and Procter and Gamble were poised to launch a new type of detergent onto the market, based on NTA instead of phosphates. This would have resulted in the annual discharge of approximately five billion pounds of the new detergent into the surface waters and ultimately into the drinking waters of the United States. The industries concerned had spent about ten years investigating the toxicological and ecological effects of NTA, concluding that it was non-carcinogenic and that it degraded in water into harmless constituents. In fact, the industries had not done a single test to determine the mechanism of degradation of NTA in water, nor of the possible interaction of such degradation products in water with other water pollutants. The industry had also failed to appreciate that degradation was incomplete over a wide range of operating conditions with the resulting likelihood that drinking water could become contaminated with the detergent. These and other considerations led to the "voluntary" withdrawal of NTA from the market with a loss of some $300 million to the industries concerned.‡ The detergent was subsequently shown in studies sponsored by the National Cancer Institute and the National Institute of Environmental Health Sciences to produce cancer of the kidney and ureter in mice and rats.

There are similar examples throughout the field of safety test-

† Following similar statements by the author in a recent article, "Polluted Data" (*The Sciences*, July/August, 1978, pp. 16–21), despite the written Congressional record, Roy M. Dagnall, Vice President and Director of Research Hazleton Laboratories, wrote to the editors of *The Sciences* protesting that "this is not true and at no time have any such charges been made to anyone except Epstein in the article in question," *The Sciences*, May/June, 1979, pp. 2–28.

‡ The major precipitating event to the withdrawal of NTA from the market was the report that the author prepared as a consultant to the Senate Committee on Public Works which raised substantial questions on safety of the new detergent, besides challenging the claim that its use would prevent eutrophication in lakes, which was the main basis for its proposed large-scale use as an alternative to phosphate detergents.

ing, whether of drugs, pesticides, food additives, industrial chemicals—even motor cars. For instance, in 1972 Ford Motor Company manipulated emission control certification tests on their new fleet of cars. With approval of the Nixon administration and Department of Justice, the industry managed to ward off a subsequent criminal prosecution and jail sentence by paying a $7 million fine.[13]

Industry has manipulated economic as well as scientific data. It is now common practice for an industry "threatened" by an impending regulation or standard designed to protect against occupational cancer, environmental pollution, or some other adverse effect to protest first that the measure is unnecessary and then that it is so expensive it will put them out of business. In this they are supported by economic consultants whose analyses apparently confirm the industry contention. For example, the economic impact analyses of the anticipated costs of meeting the proposed "no detectable level" vinyl chloride standard in the workplace, undertaken by Foster D. Snell and Arthur D. Little in the summer of 1974, estimated costs of up to $90 billion and job losses of 2.2 million, supporting the industry claim that the standard would be too expensive and impractical.[14] These estimates have turned out to be grossly exaggerated, quite apart from neglecting savings to industry from recovery of VC that would otherwise be lost to the outside air, and also major costs to society from VC-induced cancer and other diseases in the workplace and surrounding communities.

Spearheaded by the Manufacturing Chemists Association and Dow Chemical Company, an essential strategy in the industry attempt to block toxic substances legislation, which had been languishing in Congress for six years prior to its passage on October 11, 1976, was the claim that it would cost too much. In 1975, industry asserted that these costs would be in the range of $2 billion a year. In contrast, EPA and the General Accounting Office estimates ranged from $80 to $200 million.

Constraints in Interpretation of Data

Explaining away awkward data is part of the now familiar scenario of constraints. Over the years, the industry position on

carcinogenicity data has crystallized into a set of five defensive propositions.

These have been aired on two major occasions:[15] at the 1973 meetings of the Department of Labor Advisory Committee on Occupational Carcinogens, by industries including Dow, Du Pont, Rohm and Haas, and Esso Research, in addition to the Manufacturing Chemists Association and the Synthetic Organic Chemical Manufacturers Association; and at the cancellation/suspension hearings on aldrin/dieldrin, by Shell Chemical Company, and on chlordane/heptachlor, by Velsicol Chemical Company. These five propositions are:

1. *"Tumorigens are less dangerous than carcinogens."* This argument was used at the pesticide hearings to explain away the allegedly "benign liver tumors" induced by DDT, aldrin/dieldrin, and chlordane/heptachlor which were hence claimed by industry to be "tumorigens," not carcinogens. Independent review established that these "tumors" are in fact cancers, which in some cases metastasized to the lungs; it was also shown that they produced cancers in a wide range of sites other than the liver and hence are clearly carcinogens. There is no conceivable basis for drawing any scientific and regulatory distinctions between allegedly "benign tumors" and cancers induced by administration of carcinogens.

2. *"Animal carcinogens are less dangerous than human carcinogens."* In other words, the results of animal tests must be validated by deliberate and continued human exposure before instituting rigorous controls. This argument was vigorously proposed for occupational carcinogens such as dichlorobenzidine and ethyleneimine, for which there are as yet no human data, and is still pressed, even though the activity of most recently recognized "human" carcinogens, such as diethylstilbestrol and vinyl chloride, was first demonstrated in animal tests.

3. *"Most chemicals are carcinogenic when tested at relatively high concentrations."* This is not consistent with available information. Mice or other animals can be fed with massive doses of most chemicals and they will not develop cancer. For instance, in an NCI contract study by Litton Bionetics from 1963 to 1969, approximately 140 industrial compounds and pesticides, selected be-

cause of strong suspicions of carcinogenicity, were tested at maximally tolerated doses in two strains of mice. Less than 10 percent of these chemicals were found to be carcinogenic.[16]

Further, of a total of some 7,000 compounds listed in the NCI's "Survey of Compounds which Have Been Tested for Carcinogenic Activity" only about 1,000 have been reported to be carcinogenic. By current standards only half of those tests are estimated to be valid, and a total of about 700 compounds are now accepted as carcinogenic. The compounds on the NCI list were selected on the basis of known similarity to proven carcinogens.

4. *"Safe levels of exposure to carcinogens can be determined."* It is alleged that no or negligible risks result from exposure to "low levels" of occupational or environmental carcinogens. These low levels are generally determined on the basis of the sensitivity of available monitoring techniques, technical expediency, or other poorly articulated concepts. The American Conference of Governmental Industrial Hygienists has in the past assigned acceptable "threshold limit value" levels for carcinogens such as asbestos, BCME, and nickel carbonyl, but expert national and international scientific committees and regulatory agencies are agreed that there is no mechanism for setting thresholds or safe levels for any chemical carcinogen.

5. *"Human experience has demonstrated the safety of occupational exposure to 'animal carcinogens' or to 'low' levels of human carcinogens."* These claims are generally based on a lack of positive evidence of excess cancer deaths, or on the basis of undisclosed or partially accessible records covering small working populations at risk, with undefined turnover rates and short periods of follow-up. Clearly, such data do not permit development of valid inferences, and fail to recognize inherent limitations of epidemiological techniques.

Dow and Du Pont were insistent at the 1973 Department of Labor Advisory Committee meetings on occupational carcinogens that their own experience had proved the safety of three widely used "animal carcinogens," ethyleneimine, 1-naphthylamine, and methylene-2-bischloroaniline (MOCA).* After repeated chal-

* In September, 1978, Du Pont announced its intent, based on economic and safety considerations, to phase out the manufacture of MOCA by the end of the year.

lenge to produce the underlying epidemiological data, the industries finally admitted that they had destroyed the workers' records after ten years exposure as a matter of company policy, thereby making it almost impossible to detect a human carcinogenic effect.[17]

While these assertions cannot withstand elementary scientific scrutiny, they have nonetheless been vigorously and effectively asserted in various public forums and adjudicatory proceedings. They are myths, spawned by pressures on industry scientists and academic consultants to develop and interpret safety data on chemical carcinogenesis consistent with short-term marketing interests, and are calculated to minimize the significance of the effects of human exposure to occupational carcinogens.

Apart from explaining away carcinogenesis, attempts have also been made to explain away other chronic toxic effects, including birth defects (teratogenicity). An example of this is a 1971 Dow publication on the teratogenicity in rats of the herbicide 2,4-D.[18] The summary and text of the publication state that it was tested in pregnant rats and found to be non-teratogenic while tabular data indicates the production of a wide range of congenital defects of the skeleton. However, since some of the affected progeny were shown to be capable of surviving in early infancy, Dow decided that the defects were of no particular consequence and could be dismissed. To bolster this position, Dow redefined the standard term teratology as congenital defects that are fatal or preclude optimal function. If generally applied, this definition would exclude thalidomide-type defects and most congenital heart defects.

Suppression or Destruction of Data

Occasionally data that can't be designed out of existence or interpreted away are suppressed or even destroyed. Known instances of this are legion. The carcinogenicity of the organochlorine pesticide kepone, besides its toxic effects on the reproductive and central nervous systems, were discovered by studies sponsored by

the manufacturer, Allied Chemical Co., in the early 1960s.[19] Allied suppressed this information for about a decade, until workers at Life Sciences in Hopewell, Virginia, an Allied spinoff corporation, developed crippling neurological and other diseases from exposure to very high levels of kepone in grossly deficient working conditions.

In December, 1972, Velsicol was informed by its own consultants that chlordane/heptachlor were carcinogenic.[20] However, the company suppressed this information, resulting in their criminal indictment by a Chicago federal grand jury in December, 1977.[21]

Reserve Mining Company testified in court in the early 1970s that there were no alternate sites which could be used for the daily disposal of 67,000 tons of asbestos-laden taconite tailings into Lake Superior. In fact, the company had previously developed detailed plans for land disposal sites.

The carcinogenicity of vinyl chloride in the liver of rats was discovered in late 1972, but the Manufacturing Chemists Association (and Maltoni) withheld this knowledge for more than eighteen months, until the human evidence could no longer be ignored.[22]

In the course of meetings of the Department of Labor's 1973 Advisory Committee on Occupational Carcinogens, Dow and Du Pont admitted routine destruction of workers' records, including those exposed to occupational carcinogens.[23]

Industrial Biotest Labs, Northbrook, Illinois, a subsidiary of Nalco Chemical Company, faced with federal investigation in April, 1977, for fraud and submission of questionable test data, destroyed files dealing with toxicological and carcinogenicity testing of thousands of federally approved products including drugs, pesticides, food additives, and industrial chemicals.[24] The president of the company, A. J. Frisque, has admitted that he ordered the shredding of laboratory documents immediately prior to the initiation of the investigation, but claimed that this was due to a "misunderstanding."

FDA and EPA investigators have established that Industrial Biotest submitted falsified data on potential carcinogens to the government. It has also been established that at least four unidentified major pesticide manufacturers were aware of this

fraud when they submitted the test data in product registration applications.[25]

Industrial Biotest has also been charged by Rep. Thomas Downey (D-N.Y.) with having mismanaged toxicological tests by "shoddy amateurish" laboratory practices on irradiated food in a U. S. Army project dating back to 1953, which has so far cost the taxpayer about $51 million.[26] More recently, Industrial Biotest and Nalco have been sued by former industrial clients, including Syntex Pharmaceutical and Wesley-Jesson, Inc., for alleged breach of contract and misrepresentation of test data.† On September 23, 1978, the Swedish EPA banned eight pesticides, including captan and metabromuron, that had been registered on the basis of tests conducted at Industrial Biotest. According to Miljöcentrum, the major Swedish public interest movement headed by Björn Gillberg, the Swedish EPA had been aware for many years of problems of misconduct at certain American laboratories, but failed to take action until finally forced to do so by the Ombudsman in response to a complaint of a coalition of environmental groups. The EPA and other concerned U.S. regulatory agencies have not yet revealed the identities of the pesticides and other products registered on the basis of tests at Industrial Biotest Laboratories, nor has there yet been any indication as to whether or when such registrations will be revoked or cancelled.‡

As recently divulged in the asbestos "Pentagon Papers," the asbestos industry, under the leadership of Johns-Manville, has for decades successfully suppressed and manipulated information on the carcinogenicity and other hazards of asbestos. Involved in this conspiracy network were senior industry executives, their medical staff, attorneys, insurance companies, trade associations, scientific consultants, and commercial laboratories. Apart from detailing the mechanics of data suppression, these documents are the most revealing insight of corporate mores yet.

† Nalco has been attempting to sell the Industrial Biotest facilities in Northbrook and Wedges Creek, Illinois, since June, 1978. The third IBT facility in Decatur has been purchased by Whittaker Corporation and renamed Toxigenics.

‡ In July, 1978, IBT established a Validation Assistance Team (VAT) in cooperation with EPA, FDA, and its industry sponsors in attempts to salvage possibly-useful data from remaining records of past studies.

Extremely grave questions are being raised about the moral standards or ethical behavior of the business world today.

W. Michael Blumenthal, ex-President Bendix Corp., Treasury Secretary, May 25, 1975.

How to Improve Industry Data

What Not to Do

The reaction of industry to recently escalating evidence on the constraints of their data base has been one of angry denial followed by grudging acceptance of the possibility of an occasional unfortunate "slip-up." The present response, from which we can probably expect only "more of the same," is to increase their own toxicological and carcinogenicity testing capabilities. One of the earliest manifestations of this approach was the creation in 1974 of the Chemical Industry Institute of Toxicology, supported by the leading chemical industries. The Institute has recently moved to a new $10 million facility in Raleigh, North Carolina. The institute is headed by Leon Goldberg, a long-time industrial consultant dedicated to such standard myths as the "benign" nature of liver tumors induced by carcinogenic pesticides. Golberg, asserting that the institute is oriented toward the "public good," is highly critical of EPA for their "crisis approach" to toxic chemicals and of the NCI because their carcinogenicity testing procedures are "likely to produce false positives."[27] The institute's current research activities are being done by outside consulting

laboratories, prominent among whom has been Industrial Biotest Laboratories.

Industry is responding to the recent passage of toxic substances legislation with a massive expansion of its facilities.[28] Du Pont recently enlarged its toxicological capabilities in Newark, Delaware, by about 70 percent. Dow increased its Midland, Michigan, facility by 50 percent, and Monsanto, which until now has contracted out its testing to independent laboratories, is building a new facility in St. Louis. Shell recently announced the creation of a new toxicology laboratory in Westhollow, Houston, to be headed by Donald Stevenson, the leading figure of the Shell toxicology team who attempted to discount the liver cancers induced by mice by aldrin/dieldrin at the 1974 EPA hearings.

There is no apparent basis for assuming that any of these new ventures will be less constrained by their direct linkage to industry than any of their predecessors, or any less a threat to long-term industrial interests.

What to Do

Approaches now being considered and developed by FDA, EPA, NCI, and other agencies include formalization of protocols or guidelines, formalized inspection, selective auditing and monitoring, licensing of testing laboratories, and unannounced sample testing, with increased penalties for manipulation or suppression of data.* Congress has recognized this problem by allocating an extra $16.6 million to the FDA in 1977 to insure quality control of the data submitted to the agency in support of the products it regulates. But contracts still seem to be awarded to laboratories found guilty of such practices, and products registered on the

* A recent move in the direction of providing guidelines for epidemiologic studies has been made by the Guidelines Committee, Epidemiology Work Group, of the Interagency Regulatory Liaison Group. The committee issued a draft "Documentation Guidelines for Epidemiologic Studies: Cohort Studies," on May 31, 1978. These guidelines, while flexible, recommend minimum criteria for satisfactory epidemiologic studies to be used in investigating environmental and occupational health hazards. These include availability of full supporting documentation and definition of follow-up procedures and methods of statistical analysis, discussion of potential bias, and disclosure of sponsorship and source of funding.

CONTINUED

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basis of their prior tests have not been banned or otherwise restricted. These approaches, however helpful, do not address the inherent conflict of interest, which remains unchanged. Another useful approach developed by Senator Gaylord Nelson (D-Wisc.) with particular reference to drug testing is based on the concept of "third party testing" by federal laboratories at cost to the industry concerned.

Radical approaches are clearly required to free testing from the crippling constraints of corporate influences. One possible approach is based on the introduction of the following type of neutral "buffer" between those who test and those whose product is being tested:

> There is a growing consensus of opinion on the need for legislation to ensure impartial and competent testing of all synthetic chemicals for which human exposure is anticipated. The present system of direct, closed-contract negotiations between manufacturing industries and commercial and other testing laboratories is open to abuse, creates obvious mutual constraints, and is thus contrary to consumer, and long-term industrial interests. One possible remedy would be the introduction of a disinterested advisory group or agency to act as an intermediary between manufacturers and commercial and other testing laboratories. Various legal and other safeguards would have to be properly developed to avoid or minimize potential abuses and conflicts of interest in the operation of this intermediary group. Manufacturers would notify the advisory group or agency when safety evaluation was required for a particular chemical. The advisory group would then solicit contract bids on the open market. Bids would be awarded on the basis of economics, quality of protocols, and technical competence. The progress of testing would be monitored by periodic project site visits, as routine with Federal contracts. At the conclusion of the studies, the advisory group would comment on the quality of the data, make appropriate recommendations, and forward these to the regulatory agency concerned for appropriate action. . . . Additionally, quality checks during testing would ensure the high quality and reliability of data, and minimize the need to repeat studies, and thus also reduce pressure on involved federal agencies to accept unsatisfactory data and *post hoc* situations. This approach would not only minimize constraints due to special client interests, but would also serve to upgrade the quality of testing in commercial and other testing laboratories.[29]

Industry could be protected from the possibility of incompetent work by requiring a contractee to post an indemnifying bond, should tests have to be repeated because they were bungled or for any other reason. Some form of limited liability provisions could also be built into a buffer system. This could insure that industry complying with these requirements would be protected from possible open-ended future testing needs, and also from legal responsibility for future adverse effects not predicted by properly conducted tests.

These proposals seem more consistent with the avowed industrial practice than is the present practice of secret award of unbidded contracts to commercial testing laboratories.† It would also free top-level corporate management from the influence of those in the lower corporate structure who are over-responsive to short-term marketing interests at the expense of long-term stability and growth.

Finally, there must be greater appreciation of the enormity and public health consequences of the manipulation or suppression of toxicological, epidemiological, and other data on health, safety, and exposure. Mechanisms should be developed for banning products registered on the basis of tests by commercial or other laboratories indicted of malpractice. Medical malpractice suits are now commonplace; the strong threat of laboratory malpractice suits is clearly needed to police the practice of industrial toxicology and safety assessment. Homicide or assault by toxic chemicals is a serious variant of white-collar crime. The recognition and social stigmatization, including maximum criminal penalties, of those involved in these crimes is long overdue.

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† This problem has been clearly recognized in a November, 1978, Congressional report on "Cancer Causing Chemicals in Food" (Subcommittee on Oversight and Investigations of the House Committee on Interstate and Foreign Commerce):

> EPA should develop a system for pesticide safety testing which removes testing from the manufacturers' own labs and places it in the hands of independent, impartial laboratories.

Future Trends

With increasing recognition of the questionable validity of the scientific data base of industry, it is likely that their future strategies will become more sophisticated (such as performing carcinogenicity tests with low test doses on the grounds that this is "realistic," and challenging the significance of carcinogenicity results in mice and of allegedly "benign" tumors). However, there has been a recent, more fundamental shift in industry tactics. It has now become less useful to minimize (in various ways) scientific evidence of hazardous effects, than to argue for the acceptance of these effects on the basis of economic and cost/benefit considerations (such considerations generally reflect exaggerated compliance costs, while failing to adequately, if at all, recognize externalized costs of failure to regulate). Industry has found massive support for this new strategy of economic manipulation in the recent anti-inflation policies of the administration, whose Council on Wage and Price Stability depends largely on industry economic analyses as a basis for policy. Further support for the industry position has also come from the October, 1978, Fifth Circuit Appeals Court decision, overturning the new OSHA benzene standard, largely on economic grounds.

Industry is now better equipped to play the economics game rather than the science game, particularly as there is very little expertise on industry economics outside of industry. The ability of federal agencies to estimate compliance costs of abatement technologies is poorly developed. Academic economists, with traditional myopic preoccupations with the GNP, and often with close consulting ties to industry, have little comprehension of or interest in the concept of externalized costs. A new breed of economic activists oriented toward disease prevention and public health has yet to emerge, although there are isolated spokesmen for these considerations.‡

‡ See the recent exchange on cost-benefit analysis between Murray L. Weidenbaum (Center for the Studies of American Business, Washington University, St. Louis), expressing traditionalist industry positions, and Nicholas A. Ashford (Center for Policy Alternatives, MIT), expressing broader societal concerns.[80]

CHAPTER 8
How to Improve Industry Data

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I hope we shall crush in its birth the aristocracy of our monied corporations which dare already to challenge our government to a trial of strength, and bid defiance to the laws of our country.

Thomas Jefferson, 1816.

Chapter Ten
Non-governmental Policies

Until recently, industry and labor have been the only major non-government influences on Congress and regulatory agencies in all areas of public health and safety, whether relating to the general environment, consumer products, or the workplace. In the last decade a new element has emerged, the public interest movement, which, in spite of trivial material resources compared to those of industry, has begun to transform the climate of decision making. A discussion of the three—industry, labor, and public interest groups—and also of additional influences with respect to environmental and occupational carcinogenesis follows.

Industry

American industry early gained a reputation for innovation and flexibility. These are among the qualities that established interna-

tional preeminence for the U.S. free enterprise system. Nowhere has this flexibility been better seen than in the major chemical industries, which have learned to deal with shifting supplies of raw materials and shifting demands of the market.

In spite of this, industry has failed to adequately comprehend the magnitude of health and safety problems entailed in the manufacture and handling of hazardous, particularly toxic or carcinogenic, chemicals. Industry has also failed to comprehend the enormous costs to society of the cancer and other diseases resulting from the use of toxic and carcinogenic chemicals. Industry is not alone in this failure of comprehension, which must also be shared by government and the public. Such failure of comprehension, coupled with historic imbalances reflecting industrial dominance of decision making with regard to its own products and processes, appears to be the major determinant of current industry policies. In analyzing industry policies and problems of constraints in their data, these considerations appear preferable to alternate simplistic theories based exclusively on machiavellianism.

Top management has also failed to be aware of the shortcomings in its own modes of developing health and safety information. As a result, marketing decisions and all-but-irreversible economic commitments are often made on the basis of information that subsequently proves to be defective or based solely on short-term marketing considerations. The conflicts inherent in this tend to limit the interests and incentives of industry to develop equally effective but less hazardous alternative products and processes—hence to stifle needed innovation.

Big industry faces two distinct types of problems in developing control technology. First, there are the difficulties of effectively refitting old plants with add-on devices to allow them to handle toxic chemicals more safely. It is now generally recognized that in many instances this just may not be practical. This does not exclude the possibility of materially decreasing risk by improving work practices. Part of the problem here is the fact that some industries, particularly steel, have in the past failed to plow back profits into renovating old plants.* This problem of old plants with old technology must be dealt with on an industry-by-

* The 1976 OSHA hearings on coke oven emissions made it clear that the newer Japanese coke ovens are better designed than their U.S. equivalents.

industry basis. There are no simple solutions or general formulae. It is clear, however, that old plants cannot be allowed to function as before at the continued expense of human health. While they are being phased out, at a pace influenced by industrial economics and public health concerns, improved work practices and engineering controls must be instituted on an interim basis.

The second (and relatively easier) set of problems faced by big business are those involved with the design of new plants. This is where industry can be expected to exhibit bold innovation. Health and safety considerations must be designed into plants at the earliest possible stages. The substitution of safer products and processes must be exploited to the fullest to avoid the use of carcinogenic chemicals. If it can be proven that there are no practical alternatives to the use of a carcinogen, then closed systems must be devised and engineered with all possible precision and safeguards, including constant monitoring with highly sensitive instrumentation. Costs of such controls are a useful incentive to the innovative development of safer alternatives.

The problems of small industry are probably the most difficult and complex. Many of these operate marginally and cannot afford to install expensive engineering controls.† Many also employ poorly educated and transient, non-unionized labor. While some improvement in work practices to reduce risks is feasible, there are clearly practical limitations as to what can be done in the small plant. To add to these pressures, large corporations have historically sided with government in efforts to regulate and destroy competition from small business. It is clear that small business must be gradually weaned away from handling hazardous chemicals. It is also clear that they should be encouraged in this direction and in the direction of improved work practices by special treatment, including tax subsidies and interim variances.

Industry, like labor, represents a heterogeneous array of interests and objectives. Such diversity, however, tends to be replaced by a common front of intransigence in response to proposed regulation of toxic and carcinogenic chemicals. A complex of in-

† It must be stressed that most epidemiological investigations that have so far demonstrated carcinogenic hazards in the workplace, have been undertaken in large chemical corporations that have some degree of protective controls, as opposed to small industry.

terrelated factors seems involved in this posture. These include the near-automatic rejection of federal controls (without a parallel rejection of tax subsidies and other forms of corporate protectionism); preoccupation with short-term marketing interests (often in conflict with needs for hazard controls) rather than consideration of long-term growth and stability; excessive reliance on narrowly based, self-interested recommendations of in-house marketing and scientific staff and their consultants on problems of health and safety; and a tendency to wait for health and safety problems to arise (which they then deal with defensively) rather than developing anticipatory strategies based on long-term considerations.

Strategies

In support of the status quo, industry has evolved a complex set of strategies to use individually or in concert to meet the needs of any particular circumstance. These are illustrated by the various case studies discussed in this book. The essence of all of them is to minimize the reality of risks due to a particular product or process, to maximize the social benefits, and to exaggerate the costs and difficulty of regulation. The elements of these strategies are sometimes presented frankly as industry positions, but they often come to us from industry spokesmen and academic consultants as "professional" viewpoints, with no hint of who employs the professionals.

Minimizing the Risk This standard ploy is exemplified by the Quebec Asbestos Mining Association's position. The association has publicly asserted that asbestos disease is a reaction of poor working conditions in the past which have been so improved that there is now little or no risk. Similarly, the Manufacturing Chemists Association and the academic consultants of industry have testified that benzene-induced leukaemias and other toxic effects reflect high exposures in the past and that now, based on the relatively low exposures encountered under modern working conditions, there is no cause for concern. As a further example, Rohm and Haas, as recently as 1974, denied that exposure to BCME has

caused any worker deaths following exposure at their plant. Other illustrative positions include the claim, by such organizations as the Nutrition Foundation and the Council on Agricultural Science and Technology, that there is no risk in being exposed to "relatively low levels" of chemicals found to be carcinogenic in humans, and that there are no substantive risks of exposure to chemicals found to be carcinogenic in animals and for which there are as yet no human data.‡

Diversionary Tactics These are generally based on insistence on degrees of precision and legal definition that cannot possibly be met in carcinogenesis tests or in epidemiological studies. Such a demand is often coupled with rejection of experimental carcinogenicity test data and alternative proposals for long-term prospective human studies over the next few decades, pending which, it is claimed, regulatory action should be suspended.

On January 11, 1978, the day HEW Secretary Joseph Califano announced a new "war on smoking," Senator Wendell Ford (D-Ken.), on behalf of his tobacco-producing state, told a news conference that Califano should instead direct the earmarked antismoking funds "into well-founded scientific research. The American people can make their own decisions," implying that still more research was needed and that government should do this research but should not set policy based on its results.

A December 13, 1977, meeting of the Toxicology Forum, an industry-sponsored group of toxicologists and geneticists, decided that saccharin should be given top priority for new studies. These new studies, the group concluded, should be directed to identify "impurities" in commercial saccharin, which members apparently

‡ Paralleling the attempts of the petrochemical industry to minimize the hazards of its products and processes are the skyrocketing insurance premiums and the growing difficulty of the industry in obtaining product liability insurance. Some industry trade associations are now considering establishing their own insurance companies in the Bahamas. Another proposed solution, especially favored by the asbestos industry, is the establishment of a no-fault insurance, possibly based on federal subsidies and akin to the limited liability secured for the nuclear power industry by the Price-Anderson Act. Such a move would perpetuate for the consumer the double indemnity of contracting cancer from industrial chemical carcinogens and paying for its costs.

had convinced themselves were responsible for the carcinogenic and mutagenic activity of saccharin.

Propagandizing the Public The media blitz orchestrated by the Calorie Control Council following the FDA's proposal to ban saccharin was unprecedented in regulatory history. The payoff obviously was worthwhile, for the unexpected and tumultuous public response led to a moratorium on its regulation. The council's use of such high-priced public relations firms as Hill and Knowlton reflects the determination of an industry faced with potential control. The council's propaganda is an outgrowth of an evolving media campaign, in which the chemical and oil industries are striving to improve their public images with all the techniques of modern mass advertising.

"Assuming a leadership role" on behalf of the chemical industry, Monsanto Chemical Company has recently launched a major public advertising campaign directed to the importance and safety of synthetic chemicals. Synthetic chemicals, it is claimed, are no different from all other naturally occurring chemicals to which mankind has been exposed for millions of years, and are essentially harmless in the absence of massive exposure or careless misuse. More specifically, the campaign consists of attacks against standard uses of maximally tolerated doses, against the Delaney Amendment, and against other regulatory controls of carcinogenic chemicals, all of which are categorized as irrational and emotional. A Monsanto pamphlet called "The Chemical Facts of Life" explains that the purpose of the campaign is "to explore the benefits and risks of chemicals—to find a clear path through the labyrinth of information and misinformation about chemicals which may help or harm health and the environment."[1]

Monsanto is spending about $5 million this year and is planning to spend similar amounts annually over the next five years on spots on national television, newspaper ads, and pamphlets. Some 500,000 pamphlets have been distributed so far, even to high school children. The campaign has been well planned and seems to limit possibilities of asking for equal time under the Fairness Doctrine. Following protest by the Environmental Defense Fund, Monsanto initially agreed to limit somewhat the scope of its campaign. One sixty-second national television spot features a speaker

identified as an agricultural chemist drinkin
and asserting the dependence of the modern
such as di-hydrogen oxide—water. He then go
herbicide Vegadex,* explaining that while one
this, it benefits crop growth in several ways. Tu
images of weeds being killed and healthy crops
speaker allows that "no chemical is totally safe all t
maintains that chemicals such as Vegadex are neces
cumstances of worldwide food shortages, and concludes
out chemicals life would not be possible.
The Monsanto campaign is not a public service. The c
would do better to stress concerns that the chemicals they
produce should be well tested to avoid future problems
those posed by the toxicity and carcinogenicity o
such as Vegadex and nitrilotriacetic acid. Mo
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had convinced themselves were responsible for the carcinogenic and mutagenic activity of saccharin.

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"Assuming a leadership role" on behalf of the chemical industry, Monsanto Chemical Company has recently launched a major public advertising campaign directed to the importance and safety of synthetic chemicals. Synthetic chemicals, it is claimed, are no different from all other naturally occurring chemicals to which mankind has been exposed for millions of years, and are essentially harmless in the absence of massive exposure or careless misuse. More specifically, the campaign consists of attacks against standard uses of maximally tolerated doses, against the Delaney Amendment, and against other regulatory controls of carcinogenic chemicals, all of which are categorized as irrational and emotional. A Monsanto pamphlet called "The Chemical Facts of Life" explains that the purpose of the campaign is "to explore the benefits and risks of chemicals—to find a clear path through the labyrinth of information and misinformation about chemicals which may help or harm health and the environment."[1]

Monsanto is spending about $5 million this year and is planning to spend similar amounts annually over the next five years on spots on national television, newspaper ads, and pamphlets. Some 500,000 pamphlets have been distributed so far, even to high school children. The campaign has been well planned and seems to limit possibilities of asking for equal time under the Fairness Doctrine. Following protest by the Environmental Defense Fund, Monsanto initially agreed to limit somewhat the scope of its campaign. One sixty-second national television spot features a speaker

identified as an agricultural chemist drinking from a glass of water and asserting the dependence of the modern farmer on chemicals such as di-hydrogen oxide—water. He then goes on to discuss the herbicide Vegadex,* explaining that while one would never drink this, it benefits crop growth in several ways. The screen flashes images of weeds being killed and healthy crops growing. The speaker allows that "no chemical is totally safe all the time," but maintains that chemicals such as Vegadex are necessary in circumstances of worldwide food shortages, and concludes that without chemicals life would not be possible.

The Monsanto campaign is not a public service. The company would do better to stress concerns that the chemicals they plan to produce should be well tested to avoid future problems such as those posed by the toxicity and carcinogenicity of its products, such as Vegadex and nitrilotriacetic acid. Monsanto should also consider the judgment of its executives and consultants, on the basis of whose advice this mass campaign was presumably authorized.

Blaming the Victim Simply stated, the argument is, "Modern industrial working conditions are so safe that if a worker gets hurt or sick it must be his or her fault and not the fault of the industry." The culprit is either the worker's bad habits, such as smoking, or the worker's genetic susceptibility to effects which any normal person would shrug off. Applications of this perspective have taken many forms. Perhaps its latest variant is the stance of

* Vegadex, or sulfallate, is a chlorinated dithiocarbamate derivative used as a selective pre-emergence herbicide on vegetable crops. It is structurally similar to a number of other pesticides which were shown to be carcinogenic more than nine years ago. In January, 1978, Vegadex was shown to be positive in the Ames test,[2] and in the following March the NCI bioassay program published a report showing that the herbicide is carcinogenic to rats and mice, inducing breast cancers in females of both species, tumors of the stomach in male rats and of the lung in male mice.[3]

Recent production data for Vegadex are unknown, as this is considered proprietary information. However, a 1971 report estimates U.S. production as about 500,000 kg annually. As the NCI report points out, "The potential for exposure to sulfallate is greatest for agricultural workers, but may also be considerable for workers in sulfallate production facilities. Residents of agricultural communities may be exposed to airborne residues following spraying operations. The herbicide is readily taken up by plant roots . . . and the general population may be exposed via ingestion of residues in food crops."

Johns-Manville's Paul Kotin, in shifting attention from what *chemicals* cause cancer to what *people* get cancer. Kotin has helped resurrect the notion of the "hypersusceptible worker," one who, by his own constitutional or genetic makeup, is at higher risk for occupational disease than fellow workers. Starting from the plausible premise that all biological organisms, including humans, vary in their response to external stimuli such as toxic substances or carcinogens, he then advances the following proposition:

> The workplace, no matter how elegantly controlled, cannot assure uniformity of protection to all workers because of susceptibility variation. . . . A safe, acceptable workplace for hypersusceptible workers is as much a cultural concept as it is a scientific one. . . . It is still the responsibility of management to deny the worker the "right" to place himself at increased risk.[4]

Kotin jumps from the variability premise to the assertion of management's "right" to assign sturdier individuals to riskier jobs, overlooking the difficulty, if not impossibility, of making such judgments on scientifically sustained grounds, especially regarding carcinogenesis. However, the viewpoint has superficial appeal, as it rationalizes management's right to make arbitrary work assignments, and leaves open the possibility that management will somehow attempt to predict or decide in advance which workers are cancer-prone.

Another blame-the-victim ploy tries to shift the responsibility for workplace disability from uncontrolled exposure to lifestyle. Thus, industries (other than the tobacco industry, of course) are quick to blame lung cancer on smoking and in so doing try to absolve dusts and chemicals in the workplace from any role in the disease.

There is no question that smoking markedly increases the susceptibility of asbestos workers to lung cancer, but the risk of the non-smoking asbestos worker is also significantly greater than that of the person who does not work with asbestos. Also, smoking has no relation to other malignant diseases caused by asbestos such a pleural or peritoneal mesotheliomas.

Similarly, alcoholism programs in industry focus almost solely on family and marital problems as a cause of drinking, rather than looking into frustrations on the job as a possible factor. Recent studies on heart disease are focusing on so-called Type-A behavior (characterized by a hard-driving, aggressive, competitive personality), which is considered to predispose to coronary disease. An employer may thus be provided with a rationale for blaming the disease solely on the employee, without considering that the behavior itself may also be influenced by stresses inherent in the work.

An equally insidious blame-the-victim scheme, characteristic of the cosmetic approach of some industry to occupational hazards, involves exaggeration of the known problems of small numbers of people with genetic or enzyme deficiencies. It would be useful to industry to have it proven that those workers who contract occupational illness were genetically defective and thus hypersusceptible.† A deficiency in the respiratory enzyme alpha-1-antitrypsin, for example, is claimed to be associated with chronic obstructive lung disease:

> if susceptible subjects can be identified during pre-employment screening and are effectively excluded from hazardous occupations, some cases of chronic bronchitis may be prevented.[5]

However, a 1975 University of Arizona study demonstrated no association between deficiency of the enzyme and symptoms of chronic obstructive pulmonary disease or reduced lung function, and furthermore, found the frequency of this deficiency in the population to be trivial.[6]

Controlling Information The overwhelming majority of decisions made by regulatory agencies is based on information provided by the industries themselves being regulated. In retrospect, it seems strange that this practice has persisted so long, and that in fact it still persists. In every case study documented in this book, the relevant data base is inadequate or constrained by incompetence, biased interpretation, or even manipulation and suppression. There is no basis for believing that such examples are uncommon.

† Another example is the genetically determined condition of hyperinducible aryl hydrocarbon hydroxylase, affecting 10–40 percent of the general population, which appears to increase susceptibility to lung cancer.

Influencing Policy The methods by which industry influences the legislative and regulatory processes, both in the passage and enforcement of standards, are legion. Even after scientific evidence can be developed which shows that a chemical is carcinogenic, the ensuing regulatory process and development of exposure standards are strongly influenced by industrial lobbyists and trade associations. Throughout the last stages of the writing of toxic substances legislation, lobbyists from the Manufacturing Chemists Association were in daily conference with congressmen and their staffs.[7] Out of that experience emerged a semi-autonomous lobbying group which promises to challenge the environmental legislative and regulatory process for many years to come.

Exhausting the Agencies Once an agency has determined to regulate, or has been obliged to regulate by concerns of labor or public interest groups, a common tactic of industry is to resort to protracted legal action. This is done in the full knowledge that legal proceedings on one particular chemical product or on one standard alone may extend over years, during which no regulatory control can usually be imposed. The legal costs incurred by the industry during such proceedings are usually small compared to the continued sales profits. One or two cases such as aldrin/dieldrin can exhaust the legal resources of an agency, which are small compared to the virtually limitless legal and other resources that industry can muster.

Insistence on the case-by-case approach has been a favored industry tactic. Basic questions on carcinogenesis have to be argued over again and again for every separate proceeding (such as for the chlordane/heptachlor case, which revived all the same set of problems settled before in the aldrin/dieldrin hearings). This seems the basis for industry's vigorous opposition to the "cancer principles" and to the generic approach to regulation of carcinogens proposed by OSHA.

In late 1977, the Manufacturing Chemists Association spun off the American Industrial Health Council to "assist" OSHA and other agencies in developing policies on carcinogens.[8] Convinced that "OSHA may be developing the national standard for the identification and regulation of carcinogens" in the environment as well as the workplace, the council provides technical and eco-

nomic analysis on behalf of its member industries. Its counterproposal to OSHA's "generic" carcinogens standard would set up two major categories of carcinogens: "human carcinogens" (Category I) and "animal carcinogens" (Category II). Within each category, it would differentiate high, intermediate, and low-potency agents. More tellingly, it would require OSHA to establish apparent no-effect levels for carcinogens, to assess both risks and benefits before setting workplace exposure levels, and to emphasize the use of controls based on personal protective equipment. This is in contrast to OSHA's and labor's policy favoring stricter work practices. The council's proposals would lay the foundation for unending legal challenges to future attempts to regulate any occupational carcinogen.

The position of the American Industrial Health Council rests on claims that there is no evidence of any recent increase in cancer incidence, that most cancer is due to smoking and diet, that the incidence of occupational cancer is low, only in the region of 5 percent,‡ that the role of industrial chemical carcinogens in oc-

‡ The scientific quality of the testimony of industry and its consultants is not impressive. Union Carbide's Browning, in response to a question as to whether his company had a regular ventilation inspection and maintenance program, whether they just awaited complaints of workers, or what else they waited for, jocularly answered: "Well, we pick up the bodies." James J. Jandl, Professor of Medicine at Harvard (who testified in earlier OSHA hearings to the effect that only hypersusceptible workers develop leukaemia following benzene exposure), when asked to comment on the value of carcinogenicity tests in rodents took a somewhat moderate view from Browning and responded:

> . . . this is a very faulty system. First of all, these are bad seed animals. They are inbred in the most obscene way, mother and son, father and daughter, brother and sister, and this is done by people who enjoy that, for many, many generations. . . . there has to be some equity achieved by the amount of dose given to these poor little critters to compensate for their short life span. . . .

Richard Wilson, Professor of Physics at Harvard, expressed his view that "compensation or hazard pay" is a preferable alternative to government regulation of occupational carcinogens. Harry B. Demopoulos of New York University Medical School recommended that OSHA could more effectively prevent cancer by controlling smoking, besides alcohol, in the workplace (Demopoulos is author of an unpublished document "A Rational View of Cancer in New Jersey," widely circulated by the New Jersey Chamber of Commerce, which contains unsupported statements such as "only a small number of cancers are industrially related," and "asbestos is a weak carcinogen . . . handled with precautions that lead to low exposures of workers such that cancers will not develop").

cupational cancer is small, and that the costs of regulation as proposed by OSHA are excessive. These cost estimates were developed by Foster D. Snell Inc., Division of Booz, Allen & Hamilton (in a report released on February 27, 1978), whose earlier cost analyses on meeting the "no detectable level" vinyl chloride standard were shown to be grossly exaggerated. The study claimed that the cost of controlling suspect carcinogens could range between $9 billion and $88 billion in capital investment, and between $6 billion and $36 billion in annual operating expenses. However, HEW Secretary Califano, in his September 11, 1978, address to a national AFL-CIO conference on occupational health, commented:

> It is in my judgment myopic to argue that programs to protect workers are inflationary . . . if we do not count in our calculations what those programs buy: safety, health, and often greater productivity.

Apart from the inherent distortions in these claims, they ignore the growing evidence of the occurrence of cancer in the general community due to discharge or release of carcinogens from the workplace to the external environment. They also ignore the likelihood of inducing cancer in the children of exposed pregnant workers, besides in the workers themselves. Finally, apart from inherent questions on the validity of economic impact analyses by industry, they ignore the much greater costs to society of failure to regulate industrial chemicals in the workplace, let alone in the general environment.

The debate as to the overall importance of occupational carcinogens as a cause of cancer was, to all intents, effectively settled with the release of the September 15, 1978, HEW report, "Estimates of the Fraction of Cancer in the United States Related to Occupational Factors." In an anonymous October document, AIHC attempted a rebuttal on undocumented grounds including that the HEW exposure estimates were based on past exposures that were much higher than allowed in current "more responsible" industrial practices. Fred Hoerger of Dow Chemical Company

and an AIHC spokesman told a news conference on October 26 that "The whole [HEW] paper is exaggerated speculation [with] erroneous assumptions in elementary statistics and elementary epidemiology." In a subsequent interview, David Rall, one of the senior author's of the report, commented, "In general, this is what you'd expect from industry, we're comfortable with our study" (Washington *Post*, October 26, 1978). The American Petroleum Institute (API), however (in a supplemental post-hearing brief of December 19, 1978), adopted a more progressive stance:

> API has always viewed the "cancer epidemic" question as irrelevant, since API supports the general goals of OSHA in improving its ability to regulate carcinogens. Whether occupational sources are partly responsible for 1 percent or 40 percent of all human cancer makes no difference in the context of developing regulatory procedures to control occupational carcinogens.

The inability of the industry during and after the hearing process to substantively challenge the scientific basis of the OSHA proposals, has become generally apparent.* This inability led to the decision by industry to shift the focus of debate from science in OSHA to economics in Congress, where the issues are clouded by other considerations including the national mood of deregulation. This reflects a more broadly based strategy that industry has recently evolved in opposition to environmental regulation.

The industry position on the allegedly heavy costs of regulation in general and occupational carcinogens in particular has gained the sympathy of the present administration. A Regulatory Analysis Review Group, with representation from the Council of Economic Advisors and the Council on Wage and Price Stability, is now requiring agencies to justify all proposed regulation that is perceived to be inflationary, even if this is unproven. The Group chaired by Council of Economic Advisors Charles L. Schultze, in September, 1978, selected the "generic" carcinogen policy as one of the handful of "very expensive regulations" it would study. On

* The overall conclusions of the HEW report were supported by two AIHC consultants, Revel A. Stallones and Thomas Downs (of the University of Texas School of Public Health). AIHC failed to include the Stallones-Downs review in its post-hearing submissions to OSHA.

October 24, the Group issued a report criticizing OSHA for proposing too inflexible a regulatory scheme, and one that did not pay adequate attention to the costs of regulation. As yet, OSHA and other regulatory agencies have failed to develop and present a sufficiently strong case for the opposing position: that the costs of regulation are trivial in relation to the costs of failure to regulate, which are highly inflationary though still largely unrecognized.

The Flight of the Multinationals In the past, when faced by the prospect of local regulatory controls, industry has moved or has threatened to move to Southern states, which have traditionally been more receptive to industrial interests and less concerned with occupational health and environmental considerations. With the passage of the 1970 Occupational Health and Safety Act, the opportunity for such evasions in the United States became more limited.† U.S. industry with multinational connections then shifted tactics to exporting their hazardous industries abroad. "Runaway" shops were created in lesser developed countries such as Brazil or Taiwan, where there are virtually no regulatory controls and where cheap and unorganized labor is amply available. More surprising, however, is the increasing flight of segments of the chemical industry to runaway shops in eastern Europe, where regulatory controls and opportunities for public protest are minimal compared to the United States.

The growing flight from regulation poses major threats to foreign workers, and to the environmental quality outside the United States, besides reflecting on the corporate ethics of the industries involved. It also poses two sets of threats to the U.S. economy: loss of jobs and unfair advantage in competition with those segments of industry complying with pollution control regulations in the United States. In some industries, the flight from regulation is already established.[9] In others, it appears imminent. The greatest flight is seen in the asbestos textile industries, which are being increasingly located in Mexican border towns and in Taiwan and South Korea. There are also indications that other asbestos manu-

† However, the chemical industry in New Jersey, is threatening to move elsewhere if the state perseveres in attempts at regulation, with particular reference to limiting the discharge of carcinogenic chemicals into the environment of the surrounding community.

facturers, particularly of friction products such as brake linings and disc pads, will follow this course. Other flights involve arsenic-producing copper smelters and the plastics, benzidine dye, and pesticide industries.‡

Vigorous legislative initiatives, such as federal chartering of giant multinational corporations, are urgently needed.[10] Federal chartering would impose specific restrictions on giant industries where four or fewer firms account for over 50 percent of sales in some major markets, and would restructure them internally to prevent such corporate abuses as bribery, illegal domestic and foreign political contributions, price-fixing, monopolistic practices, regulatory violations (including manipulation or suppression of data), and the export of hazardous products and processes. The broad objectives of the proposed federal corporate chartering would be to achieve corporate accountability to the U.S. government and people

> to assure more corporate democracy by giving greater voice or authority, for example to shareholders over the decision of managers; to require greater disclosure of the social and financial performance of companies; to deconcentrate industries and restore competition; to assure employees their civil rights and liberties by a bill of rights for employees.[11]

The recent proposal of the Council on Environmental Quality to require industry to file environmental impact statements before exporting hazardous products and processes is also an overdue approach to this problem. Patterns of flight need to be carefully monitored by federal groups and other concerned interests, including organized labor and responsible industry.* Assistance should also be requested from international organizations such as the World Health Organization and international labor groups.

An issue related to the flight of the multinational corporations is the common practice of export of products whose use is not permitted in the United States, such as the pesticide leptophos, or

‡ Following legal action by a coalition of environmental groups, the Agency for International Development announced in 1976 that it would no longer sponsor the export of pesticides banned in the U.S.

* The information available on hazard export is extremely scanty, though the trend is already well established.

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products whose use has been banned in the United States, such as the pesticide dieldrin and children's sleeping garments treated with the flame retardant Tris. In January, 1978, Senator Gaylord Nelson (D-Wisc.) called for a ban on export of pesticides whose use is prohibited in the United States, after samples of imported agricultural products show residues of these pesticides. This whole area needs comprehensive legislation to prevent exposure of foreign workers and consumers to products manufactured by the U.S. industry but considered too hazardous for use here.† A critically related issue which demands vigorous international initiatives is the growing promotional campaign of the tobacco industry in the Third World.

Technological Innovation and Regulation

Some segments of industry have repeatedly expressed concerns that the mounting tide of federal regulation over the last two decades is impeding or stifling technological innovation. The Manufacturing Chemists Association and Dow Chemical Company have claimed that requiring chemicals to be tested prior to their introduction into commerce, in accordance with current requirements of toxic substances legislation, is acting as an obstacle to industrial innovation. (These claims have particularly involved the manufacture of pesticides and contraceptive drugs.) Such claims ignore costs to society of the failure to regulate and they do not bear critical scrutiny even on narrowly defined economic grounds. Costs of carcinogenicity and other chronic toxicity testing and costs of toxic substances legislation are small in relation to the profits of the chemical industry.

Ever sensitive to changing national moods, industry demands for deregulation have recently become more clamorous and linked to concerns on Proposition 13, inflation, alleged free-spending by runaway regulation agencies, and growing big government intrusion into free enterprise. Industry has taken out full-page advertisements in leading national newspapers complaining that "the

† Banned products, being exported include Tris, DDT, cyclamates, and Red #2.

spiraling costs of regulation," both compliance and administrative, are inflationary and are stifling innovation.‡ The industry position is buttressed by articles and letters in leading journals and newspapers from prominent academic spokesmen, and by restrictions on health and environmental regulations newly imposed by the Regulatory Analysis Review Group of COWPS.[12] Apart from the self-serving nature of industry demands for deregulation, these reflect the myopia of traditional economists preoccupied with immediate costs of compliance, rather than with the usual heavier and externalized costs of failure to regulate, such as the recognized $30 billion annual costs of cancer (apart from its much greater unrecognized costs), the multibillion dollars costs of impending law suits on asbestos, and the costs of environmental degradation.[13]

In an address to the Third National Conference on Health Policies on May 22, 1978, Congressman Rogers (D-Fla.) commented on the dichotomous attitude of industry to costs:

> Yet the contrast is startling between the runaway spending for health care and the resistance of most of American business to spending for environmental health protection. At a dizzying pace, hospitals race to build new beds and new wings, acquire CAT (computerized axial tomography) scanners, open-heart surgery units, and cardiac catherization units—all to treat disease once it occurs.
>
> On the other hand, last year's total environmental control expenditures for all American industry totalled less than $40 billion, that is, less than 20 percent of the Nation's total health care spending. And American industry fought every inch of the way against every environmental health requirement. Every dollar invested to reduce deadly coke-oven emissions, to control arsenic and lead from copper smelters, to block unnecessary radiation exposures, to capture chem-

‡ Organizational inertia and vested interests in existing technology are likely to be rate-limiting factors in the development of new technologies. Additionally, it must be recognized that the immediate costs of compliance may be disproportionately great for small business which cannot usually capture the economies of scale available to big business adopting control technologies, and may thus exert monopolistic influences. It is, however, clear that advancing information on hazards of occupational carcinogens has not been paralleled by advances in process and compliance technology. (For a critical analysis of the impact of regulation on technological innovation, see N. A. Ashford, *et al.* "The Implications of Health, Safety and Environmental Regulations for Technological Change," Department of Commerce Contract No. NB-79-SAC-A0030, January 15, 1979.)

ical plants' carcinogenic discharges, to curb toxic sulfates and nitrate particles from coal combustion, has come only after protracted political and legal struggles.

Industry demands for deregulation in pollution and preventive health areas are in interesting contrast with their insistence on continued economic regulation to protect monopolistic practices.[14] In spite of all the praise lavished by industry and its public-regulations machinery on the concept of free competition in a deregulated market, industry fights vigorously to foster "economic socialism" whenever its interests are threatened, as illustrated by the opposition of the trucking industry to proposed deregulation by the Interstate Commerce Commission, and the American Medical Association (on behalf of the medical industry) to advertising. As Chairman Michael Pertschuk of the Federal Trade Commission commented in October, 1978:

> Such regulations are not sanctioned by law, but rather are carried on in defiance of the law—not as *government* regulation of business, but as anti-competitive and inflationary *business* regulation of business. And where these forms of business-inspired regulation do remain inbedded in the law, it is because those businesses and professions regulated have stoutly defended their ancient right to be shielded from the discomforts of free competition.

In recent Congressional testimony, Secretary of Commerce Juanita Kreps emphasized that every industry leader agitated by "government intrusion" should understand that industry cannot responsibly demand less regulation without also addressing those social issues that prompted the need for regulation.

> To the extent business helps [through improved corporate social performance] to deal with issues that might otherwise prompt government regulation, it serves its own economic interests.*

* However, a December 20, 1978, draft report on "Environmental Health and Safety Regulations" of a Department of Commerce Advisory Subcommittee (of the Advisory Committee on Industrial Innovation) demonstrated lack of comprehension of Secretary Kreps' warning. The committee (which in its exclusive composition of industry appears to violate at least the intent of the Federal Advisory Committee Act) claimed that federal regulations have a severe negative impact on industrial productivity and industrial inno-

CHAPTER 10
Non-governmental Policies

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CORPORATE CRIMINAL LIABILITY

MONDAY, FEBRUARY 4, 1980

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON CRIME,
COMMITTEE ON THE JUDICIARY,
Washington, D.C.

The subcommittee met, pursuant to notice, at 9:45 a.m., in room 2237, Rayburn House Office Building, Hon. John Conyers, Jr. (chairman of the subcommittee) presiding.

Present: Representatives Conyers, Gudger, Miller, Hyde, and Sensenbrenner.

Also present: Representative George Miller.

Staff present: Hayden W. Gregory, counsel; Steven G. Raikin, assistant counsel; Diane Clarke, assistant counsel; Deborah K. Owen, associate counsel; and Phyllis Henderson, secretary.

Mr. CONYERS. The Subcommittee on Crime will come to order.

Today, we begin our third hearing on H.R. 4973 to amend title 18 of the United States Code to impose criminal penalties for nondisclosure by business entities on lethal defects in products and business practices.

Our hearing today will consist of two panels of distinguished leaders of the consumer and church-sponsored corporate responsibility movement who will offer their analysis of H.R. 4973 and discuss ethical and legal issues and specific cases relevant to the legislation.

May I draw attention to the fact that since this bill has been introduced, a number of leaders of the business community have begun to forthrightly step forward to endorse the general concept behind the legislation. The chairman and president of Monsanto, John Hanley, has had this to say very recently, and I quote him: "I believe we should strongly support harsh legal penalties for chiseling managers who willfully and unreasonably endanger the lives or health of others."

There have been cases—too many of them—which have given industry a black eye. Individual managers who knowingly and recklessly concealed clear and ongoing conditions of serious worker or consumer dangers should be recognized as the villains they are. The associate director of Government Regulation for the National Association of Manufacturers, Mr. Howard Byne, has stated, and I quote again: "It would be almost un-American to oppose the intent behind the Miller bill."

The Business Round Table, recognizing the growing public demand for governmental action, has recently reached an agreement with the Department of Justice on a similar criminal provi-

sion which the Senate Judiciary Committee has incorporated into their criminal code legislation.

Today's distinguished panel of witnesses, representing as they do the religious and consumer communities, are not by any means alone in their support of the legislation, and I would like to introduce Mr. Timothy Smith, the executive director of the Interfaith Center on Corporate Responsibility, an organization related to the National Council of Churches.

The Interfaith Center is a coalition of 180 Roman Catholic orders and dioceses and 17 Protestant denominations and institutions.

These churches have incredible amounts of money and investments in major American corporations and for the last 10 years have been using the leverage afforded by their investment to encourage corporations in which they own stock to act more in accordance with the public interest. Mr. Smith has been working with the church on these issues since the late 1960's.

Father Michael Crosby is a member of the Midwest Capuchin Franciscans, a group of Roman Catholic brothers headquartered coincidentally in Detroit, Mich. He is project coordinator of the National Catholic Coalition for Responsible Investment which coordinates corporate responsibility projects through the Justice & Peace Center in Milwaukee, Wis.

Father Crosby has studied and analyzed these kinds of concerns for a long period of time. He has authored a book on the subject and has been active in the areas of corporate responsibility since 1973.

Ms. Patricia Young is a member of the Committee on Mission Responsibility Through Investment, the United Presbyterian Church. She represents the United Presbyterian Church on the Board of the Interfaith Center on Corporate Responsibility. She has been active for nearly 15 years on issues of hunger and malnutrition and for the past several years has worked on corporate responsibility issues.

Her work has taken her to the African Continent twice and most recently to the United Nations meeting in Geneva last October.

Before we begin, the Chair has received a request to cover this hearing in whole or in part by television broadcast, radio broadcast, photography, or by other similar methods, and in accordance with committee rule v(a), permission will be granted unless there is no objection.

Hearing none, such coverage will be permitted.

PANEL: TIMOTHY SMITH, EXECUTIVE DIRECTOR, INTERFAITH CENTER ON CORPORATE RESPONSIBILITY, NEW YORK, N.Y.; REV. MICHAEL H. CROSBY, O.F.M. CAP., PROJECT COORDINATOR, NATIONAL CATHOLIC COALITION FOR RESPONSIBLE INVESTMENT, MILWAUKEE, WIS.; PATRICIA YOUNG, COMMITTEE ON MISSION RESPONSIBILITY THROUGH INVESTMENT, UNITED PRESBYTERIAN CHURCH, U.S.A.

Mr. CONYERS. We welcome you all. Our first witness will be the executive director, Mr. Timothy Smith. You may begin in your own way, sir.

Mr. SMITH. Thank you, Mr. Conyers. I and my colleagues are pleased to be here today to testify on this important piece of

legislation. Obviously with a membership as rich and broad as the Interfaith Center on Corporate Responsibility, it would be inappropriate to pretend any of us are speaking for all of them today. However, I hope we can reflect on the experiences that we have had over the last decade on corporate responsibility issues within the churches and mirror some of the thinking, experience, and lessons that run as a common stream through our history.

The church agencies that compose the Interfaith Center on Corporate Responsibility are the stewards of virtually billions of dollars of wealth in pension funds and endowments. To be faithful stewards of those funds, these church agencies understand that they must pay serious attention to the social bottom line as well as the financial bottom line.

It is important, as partial owners of American corporations, that we raise serious questions with companies, urging them to maximize benefits to society and minimize social injury. As a result, over the last decade church agencies have engaged in a number of approaches to corporations, raising questions in these regards, writing letters to management, filing shareholders' resolutions, negotiating with top management, sending factfinding delegations into the field to gather information, and on occasional legal actions.

The issues that the churches have been raising over the last decade are various. They include things as diverse as the issue of bank loans and investments in South Africa, to environmental questions in the United States, from international bribes and political contributions to the energy question, to the abuse of baby formula promotion and marketing overseas, to the advertising of junk foods to young children in the United States.

Let me turn at this point to some specific comments on the legislation proposed. I believe that H.R. 4973 is a reasonable and fair proposal. In a real sense, this legislation will not have an effect on most of corporate America. But it is, unfortunately, all too relevant for those corporations and their top managers who have put their narrow corporate interest before the public good.

In making decisions that do direct harm to individuals or society, these corporate decisionmakers add to the growing credibility gap facing America's corporations. Thus, I hope this may be legislation that socially sensitive corporations may applaud. As you all know, many of the managers of America's corporations are deeply, socially motivated individuals. Harmful decisions they may make are not made from malevolence.

Socially harmful decisions, made by caring individuals, are often made because the restrictions of decisionmaking within the corporation do not allow a free examination of the social costs and benefits of specific decisions. There are not enough occasions for managers to speak up and argue that a decision may aid the bottom line but will hurt society and the corporation, itself, in the long run.

One frightening lesson from hundreds of discussions with top management during the last decade is that far too seldom is the ethical criteria, the social factors, the human rights question an open and ongoing part of a corporation's decisionmaking process. There are, as we all know, many companies that are trying to integrate these social factors into their decisionmaking.

For example, a section of the Chase Manhattan Bank's code of ethics, states: "Strict attention should be given to the legal, moral, and social implications of all loan and investment decisions on a global basis. We should seek to avoid business with identifiable harmful results and assure that we always carefully evaluate the long term, as well as the short term, meaning of our decisions."

There are many companies, that are trying to put these kinds of social criteria in place in their decisionmaking and do social impact analysis as they make decisions.

One of the obvious ways to alter the decisionmaking process at the top levels is to insert checks and balances, costs and benefits that encourage the right decisions and discourage the destructive decisions.

How do we encourage the manager who wants to make the moral choice or discourage the manager willing to make the socially destructive decisions?

When the level of destruction is at the high level described in this bill, when bodily injury may result, it is vital that a manager know that society will not condone their acquiescence in such acts. Conversely, he or she may not be able to say to their colleague that they should rethink a specific decision because of the legal liabilities possible.

In short, I believe the legislation would add a new ingredient to the decisionmaking process.

Recently, religious investigators have begun raising questions directly related to the type of corporate misconduct raised in this bill. A shareholder resolution recently filed with Dow Chemical by eight religious groups regarding the impact on potential public health consequences of the herbicide 2,4,5-T, restricted by the EPA in an emergency suspension action may underline this issue.

Although many reputable scientists have questioned the safety of 2,4,5-T, Dow's chairman, in a letter to religious investors, dismissed critics of the controversial herbicide as belonging primarily to two groups, extreme activists among the environmentalists, and marihuana smokers who feared that 2,4,5-T will destroy California's marihuana crops.

We are surprised and shaken that the chairman of Dow Chemical should view this matter in such a light.

Another issue that the churches are raising this year with the International Chemical Workers Union deals with the question of genetic and reproductive hazards in the workplace. A shareholder's resolution has been filed with American Cyanamid on that issue.

Another issue we are all familiar with relates to Occidental and their ownership of Hooker Chemical. Again a shareholder resolution has been filed this year by church investors asking Occidental Petroleum to establish policies and procedures to safeguard our companies from future environmental contamination and public health hazards that affect our companies' profitability and viability.

Mr. SMITH. As a part of the overall effort churches are involved in this year, several ICCR members have joined with the Institute for Public Representation in petitioning the SEC in the fall of 1979, asking them to institute a requirement that lawyers for a corporation would be required to report illegal actions or probable illegal

actions not only to top management, to inside directors, but to the whole board of directors as well.

The logic of the petition is that such disclosure to outside directors would discourage certain unethical conduct and make cover-ups all that much more difficult. Obviously, Mr. Chairman, cover-ups would be virtually impossible if counsel or other members of top management were required to report to an appropriate Government agency as requested in this bill.

It is noteworthy, I think, that this particular legislation does not create any agency, or burden companies with any ongoing reporting requirements. In that light, we would hope that H.R. 4973 could not be misconstrued as yet another example of costly, burdensome Government regulation.

In conclusion, I believe that legislation of this sort is necessary to protect the public's health and safety. It recognizes the need for adequate checks and balances on important centers of economic power. It encourages persons of conscience within corporations and discourage decisions that put the public interest last. It is legislation whose time has come.

I thank you, Mr. Chairman, for this opportunity to summarize this testimony, and I submit the whole written testimony for the record today.

[Mr. Smith's complete statement follows:]

STATEMENT

BY

EXECUTIVE DIRECTOR

INTERFAITH CENTER ON CORPORATE RESPONSIBILITY

Mr. Conyers, my name is Timothy Smith and I serve as the Executive Director of the Interfaith Center on Corporate Responsibility (ICCR). The ICCR is related to the National Council of Churches and is composed of approximately 180 Roman Catholic orders and dioceses and 17 Protestant denominations and institutions.

Obviously with a membership as rich and as broad as this it would be inappropriate to pretend that I am speaking for all of them today. As autonomous Church bodies ICCR's members are fully capable of speaking for themselves. However I hope as an individual who has worked over the last decade on corporate responsibility issues for the Churches that I can properly mirror some of the thinking, experiences, and lessons that run as a common stream through our history. I submit this testimony in that spirit.

The Roman Catholic orders and Protestant institutions that compose ICCR are deeply concerned about the quality and type of society in which we live. They have wisely recognized that to be relevant to people's needs in the 1970's and the 1980's the Church has an obligation to address the realities of economic life. They are compelled to speak to the economic realities where government is the decision maker and also where corporations are the power centers. To do so is not a choice it is an obligation, a requirement of relevance!

The Church agencies which compose ICCR are the stewards of virtually billions of dollars of wealth in pension funds and endowments. To be faithful stewards of those funds these Church agencies understand that they must pay serious attention to the social bottom line as well as the financial bottom line. It is important as partial owners of American corporations that we raise serious questions with companies urging them to maximize benefits to society and minimize social injury. It would be the height of hypocrisy for a Church to reap financial dividends from a corporation if certain actions by that corporation caused serious injury or harm to society.

For these reasons the Church agencies that work co-operatively through ICCR have over the last decade developed major programs to encourage the decisions of corporate America to be more accountable to society's welfare. These actions include:

*writing letters to management
*arranging meetings between management and religious investors
*sending fact finding delegations to investigate company operations first hand
* organizing public hearings to give visibility to particular companies or issues

*legal actions
*research and publication of materials
*boycotts
*testimony before congress
*constituency education efforts
*filing of shareholder resolutions

The corporate responsibility issues addressed by Church investors over the last decade have broadened considerably. They include:

* bank loans and investments in South Africa
* international bribes and political contributions
* energy issues particularly nuclear power
* Equal Employment Opportunity
* the abuse of baby formula promotion and marketing overseas
* advertising of junk foods to young children
* occupational health and safety questions
* the effects of dangerous herbicides and pesticides
* wages and working conditions of agricultural workers overseas

One of the most important vehicles by which religous investors raise social issues with U.S. corporations is the filing of shareholder resolutions which can be brought before a company's annual stockholders meeting. SEC regulations restrict the length and subject matter that may be addressed in these resolutions.

Though many resolutions sponsored by church investors request the establishment of review committees or changes in particular corporate policies, a large number of our resolutions have dealt specifically with disclosure of information. Almost without exception, corporations have opposed these disclosure resolutions in their proxy statements asking stockholders to vote against them. Scores of companies routinely contest to the SEC any resolution dealing with social responsibility issues.

From 1971 through 1980, religious investors have sponsored approximately 500 shareholder resolutions with well over 100 major U.S. companies. While some companies have written disclosure reports in return for withdrawal of resolutions, we have witnessed only one case when management supported a shareholder initiative and asked the shareholders to vote for the resolution.

Let me turn to some specific comments on the legislation proposed. I believe HR 4973 is a reasonable and fair proposal. I am pleased to see the serious support it enjoys from representatives of both parties. Indeed, the question of corporate morality addressed in this legislation transcends traditional Democratic or Republican politics. Instead the legislation creatively grapples with the establishment of some meaningful deterrents to corporate decisions that cause grave social and individual injury.

In a real sense this legislation will not have a real effect on most of corporate America. But it is unfortunately all too relevant for those corporations and their top managers who have put their narrow corporate interest before the public good. In making decisions that do direct harm to individuals or society, these corporate decision makers add to the growing credibility gap facing America's corporations. Thus this may be legislation that socially sensitive corporations will applaud.

Instead of ascribing guilt to an amorphous corporate entity, HR 4973 rightly recognized that decisions within companies are made by specific individuals who weigh various pros and cons in making particular business decisions. This bill creates a new set of checks and balances in regard to the corporate decision making process.

During the last decade church leaders have held discussions and serious negotiations with the top managers of corporations on a wide variety of corporate social responsibility issues. These are the very decision makers who will be impacted by this legislation. I believe we have some sense of the dilemmas, sensitivities and struggles that perplex them and the blind spots that obscure their decisions. As you all know many of these managers are socially motivated individuals. Harmful decisions they may make are not made from malevolence. Socially harmful decisions, made by caring individuals, are often made because the restrictions of decision making within the corporation do not allow a free examination of the sound costs and benefits of specific decisions. There are not enough occasions for managers to speak up and argue that a decision may aid the bottom line but will hurt society and the corporation itself in the long run.

One frightening lesson from hundreds of discussions with top management during the last decade is that far too seldom is the ethical criteria, the social factors, the human rights question an open and ongoing part of a corporation's decision making process. There are corporations where serious attempts are made to analyze the social impact before making particular decisions.

I believe that Control Data, the Minneapolis based computer firm is an example of such a corporation. Based on an analysis of the negative social impact of one particular computer sale, management in Minneapolis withdrew a bid to sell a computer a government agency in a repressive country.

Chemical Bank, after a thorough review of the consequences of various types of lending to South Africa, determined that all loans but trade lending would be prohibited.

In both these companies, offices of corporate responsibility are assigned to impact these kinds of decisions.

Chase Manhattan's Board, after a several year study, issued a general policy statement in 1977 called the Chase Code of Ethics. This code stated in part:

> " Strict attention should be given to the legal, moral and social implications of all loan and investment decisions on a global basis. We should seek to avoid business with identifiable harmful results and assure that we always carefully evaluate the long term, as well as the short term, meaning of our decisions".

Ralston Purina issued a report two years ago at church stockholders' request, analyzing the social impact of their agribusiness operations in Latin America.

Dozens of companies have prepared disclosure reports in response to shareholer resolutions on their EEO problems and progress regarding Equal Employment Opportunity.

On the other hand there are far too many corporations who do not only seek ethical thinking or sound analysis before making a decision, they actively discourage it. Pastors frequently hear parishioners confide that they feel morally comprimised in corporations which franically search for maximum profits despite the costs for society.

One of the obvious ways to alter the decision making process at the top levels, is to insert checks and balances, costs and benefits that encourage the right decisions and discourage the destructive decisions. The great theologian Rheinhold Neibuhr reminded us in "Moral man and Immoral Society" that institutions operate on the basis of self interest (for a corporation the primary self interest is profit), and to change their behavior you have to relate to that sense of self interest. We also explained that moral people caught in institutions with different purposes are often forced to make decisions they would not make in their individual lives.

How do we encourage the manager who wants to make the moral choice or discourage the manager willing to make the socially destructive decisions?

When the level of destruction is at the high level described in HR 4973, when bodily injury may result, it is vital that a manager know that society will not condone their acquiescence in such acts. Conversely he or she may now be able to say to their collegues that they should rethink a specific decision because of the legal liabilities possible. In short, we have added a new ingredient to the decision making process.

Our experience in talking to corporation representatives regarding bribes and political contributions is that top management took this issue much more seriously and instituted far reaching policies when they either faced real legal sanctions or penalties from the corporations. For instance, all IBM managers know that instant dismissal is the price they will pay for disobeying company policy on bribes or political contributions.

In short the penalties outlined in HR 4973 maywell be an important incentive for managers to act in a more socially responsible manner.

Several other experiences that church investors have faced during their efforts to encourage corporate responsibility may be important to this committee.

Our requests for disclosure of non-competitive information which would help religious investors, the public and management itself better evaluate particular corporate responsibility issues have met with a variety of reactions.

Several information seeking resolutions have produced a threatened, antagonistic response from top level management. Requests for information relating to the overseas operations of Castle & Cooke, which were raised by a group of missionary priests working in and around the company's Philippine operations, provoked a series of speeches by the corporation's President referring to religious investors as Marxists and Radicals. In one speech Castle & Cooke President J.D. Kirchhoff stated in reference to church shareholders "the Kremlin has found a new outlet for its well known technique of harvessing the religious cadres it detests to the political conspiracies it hatches". When asked at a press conference to describe a legitimate criticisms of U.S. multinationals operating overseas Mr. Kirchhoff replied that the only ligitimate criticism he could think of was not making sufficient profits.

Recently religious investors have began raising social responsibility questions directly related to the type of corporate misconduct raised in HR 4973. A shareholder resolution recently filed with Dow Chemical by eight religious groups for uses on the potential public health consequences of the herbicide 2,4,5-T, which was restricted last year by the EPA in an emergency suspension action. Although many reputable scientists have questioned the safety of 2,4,5-T, Dow's chairman dismissed critics of the controversial herbicide in a letter to a church investors as belonging primarily to two groups: extreme activists among the environmentalists and marijuana smokers who fear that 2,4,5-T will destroy California's marijuana crops.

Genetic and reproductive rights are one other focus of religious investors in 1980.

Presently, American Cyanamid has implemented a policy which excludes women from certain work areas because of their child-bearing capacity. Their policy is termed a "fetus protecting " policy, and is based upon a belief that a female employee may be unaware of being pregnant and inadvertently expose the developing fetus to toxic substances which are harmful to the fetus. While they are not harmful to the female employee. Critics of this company policy charge that rather than ensuring a safer working environment, the company has transferred female employees to other jobs within the company.

The International Chemical Workers Union (ICWU) and five church shareholders have requested that American Cyanamid undertake a complete study of all chemicals used or produced by the Company which may cause reproductive or genetic harm, because it is their contention that such toxins may also be transmitted to the fetus via the male reproductive system. They request that American Cyanamid conduct studies on both male and female exposure. It should also be noted that American Cyanamid is not the only chemical or lead company which has such a policy of exclusion.

In another instance, the ICWU recently asked the federal government to ban the production and use the herbicide Orzalin, the rights of which are owned by the Eli Lilly Company. The union asserts that the babies of workers that produced the chemical (in a Rensselaer, N.Y. Factory) suffered birth defects and early deaths. In this case, all produciton workers inthe plant were males. It appears that there is some basis for concern that children of male production workers in chemical workers are also at risk.

I have enclosed in the appendices this testimony shareholder resolutions that have been filed with Dow Chemical Occidental Petroleum and American Cyanamid.

As you can see, too often a church stockholder's requests for information or a single change in corporate policy are not met until compliance but a stonewall, If even investors in a company are unable to get basic data affecting employees health or the public welfare then the time for legislation requiring such disclosure has certainly come.

As part of this overall effort several ICCR members joined with the Institute for Public Representation in petitioning the SEC in the Fall of 1979 asking them to institute a requirement that lawyers for a corporation would be required to report illegal actions or probable illegal actions, not only to top management, but to the Board of Directors as well. The logic of the petition is that even such disclosure to outside directors would discourage certain unethical conduct and make coverups more difficult. Obviously coverups would be virtually impossible if counsel or other members of top management were required to report to appropriate government agencies as requested in this bill.

It is noteworthy that this particular legislation does not create any agency or burden companies with any ongoing reporting requirements. In that light, we would hope that HR 4973 could not be misconstrued as "yet another example of costly burdensom government regulation".

In conclusion I believe that legislation of this sort is necessary to protect the public's health and safety, it recognizes the need for adequate checks and balances on important centers of economic power, to encourage persons of conscience within corporations and discourage decisions that put the public interest last. It is legislation whose time has come!

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Mr. CONYERS. Thank you, Mr. Smith, for being precise and cogent.

We now turn to Father Crosby. We will incorporate your submitted testimony into the record without objection, and you may proceed in your own way.

Reverend CROSBY. Thank you, Mr. Conyers. I am happy to be here representing the Catholic groups around the United States who are involved in the effort to promote corporate responsibility because of our ethics. Central to the ethical question is the issue of disclosure which is at the heart of this bill.

Requirement of disclosure is essential, and the need for information from managers is essential. The January and February 1977 issue of the Harvard Business Review shows clearly that managers today are viewing ethical problems as central questions in running today's corporations. Fifty-seven percent of the interviewees reported they had personally been confronted with conflict between what was expected of them in business, and what was expected of them as moral persons. And most of these conflicts, these managers said, came in the area of honesty and communication, or disclosure.

Most of the nearly 200 shareholder resolutions filed through the Interfaith Center in New York in the last 10 years have merely asked for disclosure—information about this action as related to that, whatever it may be.

Yet only once did any corporation or bank support our disclosure request in the proxy statements and ask shareholders to vote for what we asked to be disclosed. Some companies have disclosed information in agreements if shareholders' resolutions were withdrawn. Yet far too often simple information requests requiring social reporting are vigorously fought.

I would like to give you an example. By the end of 1979, the Electric Boat Division of General Dynamics was cited for 246 alleged job safety and health violations. My community sponsored a shareholder resolution asking for disclosure for more details about these citations. Instead of disclosing the information, the company attacked the motivation of my province, based in your city, which had filed a resolution.

Writing to the SEC, it stated:

> Looking at the subject in broader perspective, the consistent and widespread advocacy of shareholder proposals by religious orders should be a matter of increasing concern * * * . The basic questions are whether these religious groups are genuinely interested in advancing the interests of their fellow and sister shareholders or whether they have something quite different in mind.

We have nothing "different in mind" except realizing a normal return on our investments, along with making sure that this normal return is not at the expense of what we religious groups stand for as our ultimate bottom line: a just moral order predicated on truth.

Truth about facts and realities can be ascertained only by disclosure. By insinuating that people who request basic data have devious motives, corporations obstruct the questions for that truth which is necessary for a just moral order.

In a statement for the January 1, 1980, World Day of Peace, Pope John Paul II noted that peace is based on justice, but that justice or societal order is based on truth. He said, and I quote:

> Selective indignation, sly insinuations, the manipulation of information, the systematic discrediting of opponents—their persons, intentions, and actions—blackmail and intimidation: these are forms of nontruth working to develop a climate of uncertainty aimed at forcing individuals, groups, governments, and even international organizations to keep silence in helplessness and complicity, to surrender their principles in part or to react in an irrational way.

We do not believe that we have to surrender our principles as followers of the Judeo-Christian ethic in raising these questions of corporations in which we own stock. As stockholders, we are responsible because we receive the dividends. We don't want those dividends to be part of practice that are going to adversely affect our values.

As representatives of groups with theological and ethical background we bring into this hearing opinions on matters of reparations, penitence, sanctions or penalties.

In fiscal 1976, defendants in 30 cases of corporate crime either were convicted, pleaded guilty or nolo. Those cases involved commerce in excess of $1.6 billion a year. Only 1 of the 30 cases found two defendants sentenced for a total of 2½ months' imprisonment. The average cost in terms of prison time for all the defendants in all of those completed cases equaled 1 day in prison for each $21 million worth of commerce affected. Yet our prisons are full of poor people who have stolen less than $21. Law and order should not stop at the boardroom door.

According to Business Week, a former executive of a company convicted of criminal activity stated his cost benefit analysis in blunt terms. He said: "When you are doing $30 million a year and stand to gain $3 million by fixing prices, a $30,000 fine doesn't mean much * * *. Face it, most of us would be willing to spend 30 days in jail to make a few extra million dollars. Maybe if I were facing 1 year or more, I would think twice."

This piece of legislation might help such people think twice. And we would support it in that sense. Our experience with corporate resistance to disclosure leads us to believe the probability of individuals being caught and sentenced for violation of this law will be somewhat minimal. However, if very serious punishments are included in this bill, we believe it will have more teeth and its purpose will be better achieved.

Hearing a Catholic like myself speak this way, one might be tempted to think I am controlled by the Old Testament's lex talionis, or an eye for an eye, and a tooth for a tooth. However, I am more influenced by viewing the managers of these corporations from the perspective of a steward. The Greek word for steward is oikonomos, or housekeeper. This concept is the basis for economy.

Keeping a house in order is the purpose of any economy, and if that order is to be just, that justice must be based again on disclosure, or truth. This word offers a foundation for why we see a need to bring ethics into keeping our house in order.

The gospel teaching on stewardship found in Matthew and Luke can be summarized by saying that the steward is first of all responsible for the affairs and interests of others.

Second, the steward performs actions affecting others. These actions are subject to a greater authority such as this piece of legislation.

Third, faithfulness and dedication to this higher good is demanded always of the steward.

Fourth, stewards must always be prepared to disclose activities and give account of their stewardship.

Fifth, the reward for good stewardship is a greater responsibility and trust; the sanction for scandalous and poor stewardship is punishment fit for the crime.

The activities covered by this bill relate to criminal activities by managers supposed to be acting as social stewards. It is not a matter of a simple economic faux pas. Until those who commit such crimes are dealt with as if they were truly criminals who have abused the social trust, other business persons and the public will not regard them as criminals, and we shall have lost the social stigma and scandal that is so much a part of general deterrence. Activities noted in this bill do not refer to crimes of passion committed on the spur of the moment. These are the external, physically frightening activities—usually limited to members of one's family—which we find our citizens concerned about. However, in contrast to crimes in the streets, these crimes in the suites reflect cold, calculated, premeditated decisions.

In referring specifically to some of the points of this bill we would like to note—besides our overall support—that the bill seems vague on which governmental agencies need to receive a report regarding actions that may seriously affect people's health in the environment.

Also, we are wondering if the bill is speaking of activities that are limited just to Americans. If so, then we must be concerned about evidence as late as 1976 discussing congressional investigators who issued a blistering indictment of pharmaceutical makers, charging them with exposing humans to unnecessary risks in testing new drugs.

Furthermore, if this bill deals with activities within the United States, will it be equally applicable to corporate activities outlawed in the United States but that are continued by corporations abroad? We raise this question particularly in light of disclosures related to the chemical and pharmaceutical industries that we have worked with.

You already are familiar, from previous testimony, about the case of Robins' export of the Dalkon Shield IUD and the sale of Upjohn's, Winthrop's, and Shering's forms of dipyrone, after these were taken from the U.S. market because of their harmful effects.

If we are to follow the biblical mandate to love and treat our neighbor as ourselves and not to hinder life, this biblical and human tenet cannot stop at the Rio Grande or the Port of New York.

This bill has been drafted to deal with specific corporate activities that may never be easily practiced again. And in this sense we would also like to comment on section (b)(6)'s restricted definition of serious bodily injury.

As yesterday's New York Times noted regarding chemicals, there are going to be some actions by corporations in the petrochemical field and the pharmaceuticals that might not have physical effects that are going to cause pain. We would think this bill should take that into consideration, especially when you deal with such problems affecting the body as sterilization, forms of cancer that don't directly cause pain, but necessarily affect bodily health and life and limb.

With these considerations, I would like to thank you for having us testify, and we submit the whole statement for the full consideration of your committee.

[Reverend Crosby's complete statement follows:]

PREPARED STATEMENT OF REV. MICHAEL H. CROSBY, O.F.M. CAP., CORPORATE RESPONSIBILITY AGENT, MIDWEST CAPUCHIN FRANCISCANS; PROJECT COORDINATOR, NATIONAL CATHOLIC COALITION FOR RESPONSIBLE INVESTMENT; MEMBER OF THE BOARD, INTERFAITH CENTER ON CORPORATE RESPONSIBILITY; AND MS. PATRICIA YOUNG, MEMBER, COMMITTEE ON MISSION RESPONSIBILITY THROUGH INVESTMENT, UNITED PRESBYTERIAN CHURCH, U.S.A.; MEMBER OF THE BOARD, INTERFAITH CENTER ON CORPORATE RESPONSIBILITY

CORPORATE LAW VIOLATIONS AND EXECUTIVE LIABILITY

My name is Michael H. Crosby. I am a member of the Midwest Capuchin Franciscans, a group of Roman Catholic brothers with headquarters in Detroit. Through the Justice and Peace Center in Milwaukee I coordinate the corporate responsibility efforts of 23 Catholic groups in the Midwest, and act as Project Coordinator of the National Catholic Coalition for Responsible Investment. Its members from 180 dioceses and religious orders work actively with 17 Protestant denominations through the Interfaith Center on Corporate Responsibility (ICCR) in New York to press for changes in corporate practices to promote as much social good and as little social injury as possible. I have been a Board member since 1973. In this testimony I am supported by Ms. Patricia Young, also a member of the Board of ICCR, as well as a member of the Committee on Mission Responsibility through Investment of the United Presbyterian Church, U.S.A.

We want to begin our comments by assuring support of this piece of long-overdue legislation. The overall purpose of this bill is sound, as are its underlying assumptions. These reflect the best tradition of our nation's jurisprudence as well as a solid Judaeo-Christian tradition.

This legislation requires disclosure by managers of practices by their corporations that can incur bodily injur. The requirement of disclosure of essential information by managers is central to the success of this bill. The January-February, 1977 issue of Harvard Business Review shows clearly that managers view ethical problems as central questions in today's corporations. Fifty-seven percent of the interviewees reported that they had personally been confronted with conflicts between what was expected of them in business and what was expected of them as moral persons. Most of these conflicts came in the area of "honesty in communication". [1]

A second reason why we support your efforts to require disclosure from top corporate managers within the corporations by creating sanctions for knowingly refusing to disclose detrimental behavior is based on our experience. Most of the nearly 200 shareholder resolutions filed by church stockholders in the last ten years merely ask for information regarding various issues having social responsibility impact. Yet, with but one exception, has any corporation or bank supported our disclosure requests in the proxy statements and asked shareholders to vote for those while some companies have disclosed information in agreements if shareholder resolutions were withdrawn; too often simple information requests requiring social reporting are vigorously fought.

For instance, this year, after discussions with representatives of General Dynamics workers we filed a shareholder resolution asking the Company, among other items, to disclose material related to the physical safety and health of its workers at its Electric Boat Division which, by the end of 1979, was cited for 246 alleged job safety and health violations.

Instead of disclosing this information, the company attacked the motivation of my Province, which had filed the resolution. Writing to the SEC it stated:

"Looking at the subject in broader perspective, the consistent and widespread advocacy of shareholder proposals by religious orders should be a matter of increasing concern. . . The basic questions are whether these religious groups are genuine-

[1] Confer also. "On Business Ethics," the Wall Street Journal, March 31, 1977, p. 18.

ly interested in advancing the interests of their fellow and sister shareholders or whether they have something quite different in mind." [2]

We don't see General Dynamics' concern about our motivation mutually excluding our shareholder interests in normal financial return from our underlying interest in the promotion of social good and avoidance of social injury.

A just moral order is predicated on truth. In turn, truth about reality is ascertained only by disclosure. By insinuating devious motives to requests for basic data, corporations obstruct the quest for truth which leads to justice.

In his statement for the January 1, 1980 World Day of Peace, Pope John Paul II noted that peace is based on justice, while justice or societal order is based on truth. He said:

"Selective indignation, sly insinuations, the manipulation of information, the systematic discrediting of opponents—their persons, intentions, and actions—blackmail and intimidation: these are forms of non-truth working to develop a climate of uncertainty aimed at forcing individuals, groups, governments, and even international organizations to keep silence in helplessness and complicity, to surrender their principles in part or to react in an irrational way." [3]

In 1976 church shareholders discovered that Bristol Myers had made misstatements of fact and distortions of truth in its proxy statement arguing against one of our resolutions asking for disclosure of information regarding practices on the sale of infant formula having detrimental effects on infants' health. Which manager(s) wrote this corporate misstatement? Who was accountable for these manipulations of truth which bore on the health of innocent victims? Never did we discover the source of the misinformation. Meanwhile the Interfaith Center on Corporate Responsibility was forced into a costly court battle which drained our resources. The Company could simply make legal expenses responsible to others except those very ones whose corporate ethics perpetuated the action.

In a related action, my Province filed a shareholder resolution last year with Mobil Corporation following reports that the Company had overcharged consumers for oil and conspired with others to fix prices. We simply sought disclosure of more information regarding these allegations. Mobil urged the shareholders to vote against our request. Over 98 percent of them went along. Meanwhile the company agreed to settle various charges totally over $32 million for setting the prices for cardboard boxes between 1960–1978. No officer was held criminally accountable for this criminal activity. Perhaps excesses such as this would not occur if executives were held liable.

Later, the Company took out an ad, to attack those seeking disclosure of its activitites having possible criminal implications, spending tens of thousands of dollars. Doing exactly what Pope John Paul II warned about, it ran an op-ed piece on the editorial page of the New York Times. The ad showed how various papers did not report Mobil's vindication on some allegations of price fixing. Paradoxically, the very same day Mobil ran this ad in the times, the front page of the Times carried a report on Mobil, alleging possible criminal activities regarding the very same issues. These allegations totalled $1.2 billion in overcharges for oil.[4]

Mobil has been in the forefront of the effort to stonewall and keep corporations from being more accountable. For instance, on February 14, 1978, it spent more thousands of dollars attacking those who raise questions of corporate activities in this ad which appeared in The Wall Street Journal. It begins:

"We are continually amazed at the powers ascribed to business by its critics. Apparently they see our society as having few flaws that could not be righted if only business operations were restructured to reflect their personal visions." [5]

This same issue of the Wall Street Journal, wherein Mobil castigates those raising questions regarding possible wrongdoing as a corporation finds the following headlines: "Why the Pinto Jury Felt Ford Deserved $125 Million Penalty: Film of Test Crash is Stressed Along With Cost Savings; 'A Lousy, Unsafe Product'." Again, "Outlaws Legacy: How a Film-Flam Man Causes a Big Shake Up In Commodity Options: Lloyd Carr Firms Ability to Fend Off Regulators Points to Likely Reforms: Game Akin to Crap Shooting." Again a lead paragraph of a page three article states, "Southern Bell Telephone Company pleaded guilty to a charge of misapplying corporate funds through falsified expense vouchers." The Corporation pleaded guilty; but no individual was named; corporate accountability without personal

[2] John P. Maguire (Secretary, General Dynamics Corporation), "Letter to Securities and Exchange Commission, January 18, 1980, p. 11.

[3] Pope John Paul II, 1980 Day of Peace Statement, January 1, 1980, in The Wanderer, January 3, 1980, p. 6.

[4] Richard D. Lyons, "U.S. to Accuse Mobil and Hess of a Billion in Overcharges on Oil," the New York Times, December 13, 1977, p. 1.

[5] "Business and Pluralism," the Wall Street Journal, February 14, 1978, p. 2.

accountability merely transfers any fines and discredit to the consumers and shareholders who end up paying. Turn the page and another headline shouts: "Practices That Saved Patrick Petroleum Up to $300,000 Interest Probed by SEC."

Such items of concern are not arising from radicals and malcontents. Daily they are part and parcel of the Bible of the American Corporation's daily news, the Wall Street Journal. Americans must stop viewing the corporation as a moral entity in and of itself, and, thus, liable for all wrongdoing of humans who commit the crimes, rather than individual decision-makers.

Irving Kristol has stated well that:

"Business ethics, in any civilization, is properly defined by moral and religious traditions, and it is a confession of moral bankruptcy to assert that what the law does not explicitly prohibit is therefore morally permissible. Yet, curiously enough, this is what businessmen often seem to be saying—therewith inevitably inviting government to expand its code of prohibitions. And the reason this has happened is that businessmen have come to think that the conduct of business is a purely 'economic' activity, to be judged only by economic criteria, and that moral and religious traditions exist in a world apart, to be visited on Sundays perhaps."

Kristol goes on to say that:

"To the degree that the business community protests against this situation, it is in terms of an abuse of power. It is indeed an abuse of power—but power will, in the end, always rush in to fill any available moral vacuum. It is that vacuum which is at the root of the problem. The business community should itself get interested, in a serious way, an intellectually thoughtful way, in the issue of 'business ethics.' There are some, if not many, theologians and philosophers who have no particular animus against business and who have worthwhile things to say on the matter. But the business community, for the most part, doesn't know who they are—or even that they exist." [6]

As representatives of groups with theological and ethical background we have opinions on matters of reparations, "penance," sanctions or penalties that are raised in this legislation. We stand in support of the concrete suggestions proferred this committee by S. Prakash Sethi in his December 13, 1979 statement (esp. pp. 7–13), which concludes:

". . . it seems clear that the movement toward incarceration of executives has not been given the kind of public exposure and discussion it deserves in light of its unknown and potentially significant effects. I am hopeful that the deliberations of your committee would go a long way toward achieving this end." [7]

In fiscal 1976, defendants in 30 criminal cases involving corporations who either were convicted, pleaded guilty or no contest involved commerce in excess of $1.6 billion per year. Only one of the thirty cases found two defendants sentenced for a total of 2½ months imprisonment. The average cost in terms of prison time for all defendants in all those completed cases equaled one day in prison for each $21 million worth of commerce affected. Yet our prisons are full of poor people who have stolen less than $21.00. Law and order cannot stop at the Boardroom door.

According to Business Week, a former executive of a company convicted of criminal activity stated his cost benefit analysis in blunt terms:

"When you're doing $30 million a year and stand to gain $3 million by fixing prices, a $30,000 fine doesn't mean much . . . Face it, most of us would be willing to spend 30 days in jail to make a few extra million dollars. Maybe if I were facing a year or more, I would think twice." [8]

One of the arguments against imposing prison sentences on such criminals is that the public has not cried for such action. Yet, has it done so regarding persons convicted of violating the migratory bird laws? More of these lawbreakers were sentenced to prison, for longer terms, than those who violated our nation's antitrust laws for billions of dollars!

The little available empirical evidence supports the conclusion that the strong deterrent of an extended jail term cuts crime more than fines or suspended sentences. This is why we support this key part of this piece of legislation. For example, a study of violations of price controls during World War II found that in jurisdictions where jail terms were imposed for such violations, general compliance with

[6] Irving Kristol, "Business Ethics and Economic Man," the Wall Street Journal, March 20, 1979, p.18.

[7] S. Prakash Sethi, "Statement before Subcommittee on Crime of the House Committee on the Judiciary," December 13, 1979, p. 13.

[8] Donald Phillips, quoted in "Leavened Prices at Phoenix Bakeries," Business Week, June 2, 1975, p. 48.

the law was achieved. In other areas where fines and suspended sentences were imposed, the laws were openly flaunted.[9]

We have noted that our experience with disclosure leads us to believe that the probability of being caught for violations of this law will be low. Experience of corporations using their financial and legal resources to tie matters in the courts for years shows that the probability for convictions will be low. Thus, if very serious punishments are included in this bill can we find reason to believe it will be applicable. Service, and lectures to business people, along with confiscation of the profits realized by the corporation for the criminal activity for communal distribution might be some sanctions you might consider.

Hearing a Catholic like myself speak this way one might be tempted to think I am controlled by the Old Testament's "lex talionis" or "an eye for an eye." However, I am more influenced by my understanding of the manager of these corporations from the perspective of a steward. The Greek word steward is "oikonomous" or housekeeper. The word is the foundation for our English word for economy, keeping the house in order. The gospel teachings on stewardship found in Matthew and Luke can be summarized as follows:

1. The steward is responsible for the affairs and interests of others.
2. The steward performs actions affecting others, but these are subject to a greater authority.
3. Faithfulness and dedication to this higher good is demanded of the steward always.
4. Stewards must always be prepared to disclose their activities and to give an account of their stewardship.
5. The reward for good stewardship is a greater responsibility and trust; the sanction for scandalous and poor stewardship is punishment fit for the crime.

The activities covered by this bill relate to criminal activities by managers who ought to act as social stewards. It is not a matter of a simple economic faux pas. Until those who commit such crimes are dealt with as if they were truly criminals who have abused the social trust, other business persons and the public will not regard them as criminals, and we shall have lost the social stigma and scandal that is so much a part of general deterrence. Activities noted in this bill do not refer to crimes of passion committed on the spur of the moment. These are the external, physically frightening activities (usually limited to members of one's family) which we find our citizens concerned about. These economic crimes reflect cold, calculated, pre-meditated decisions wherein the benefits expected outweigh the risks of being caught, punished, or sued.

Economists have even gone so far as to have created a formula (NG=[1−p] R−C −pF) which indicates that if the probability of getting caught and convicted is low, the punishment will have to be much greater than criminal revenues to achieve deterrence.[10]

We would also note that the bill seems vague on which governmental agency needs to receive a report regarding actions that may seriously affect people's or environmental health.

Also, are we speaking of activities that are limited just to Americans? If so, then we must be concerned about evidence as late as 1976 showing that "Congressional investigators have issued a blistering indictment of . . . pharmaceutical makers . . . charging them with exposing humans to unnecessary risks in testing new drugs." [11]

If this bill deals with activities within the United States, will it be able to be applied to corporate activities, outlawed in the United States of corporations, but continued abroad? We raise this question particularly in light of disclosures related to the chemical and pharmaceutical industries. You already are familiar with the case of A. H. Robins export of the Dalkon Shield IUD and the sale of Upjohn's, Withrop's, and Shering's forms of dipyrone, after these were taken from the U.S. market because of their harmful effects.

If we are to love and treat our neighbor as ourselves and not to hinder life, this biblical and human tenet cannot stop at the Rio Grande.

In conclusion, it is clear that, as we support this bill strongly, we also suggest a strengthening of its language to meet our ever-changing business world. As it stands, if the wording of this bill is so tightly and restrictively worded, it might end

[9] N. Clinard, the Black Market 59–60, 243–45 (1952) cited in Chamblaiss, "Types of Deviance and the Effectiveness of Legal Sanctions," 1967 Wisconsin Law Review, 703, 713.

[10] NG equals expected net gains for crime. R equals expected revenues from successful criminal activity (or level of seriousness). C equals expected costs of criminal activity (including opportunity costs). P equals probability of apprehension and conviction (1-p) equaling probability of success. F equals amount of punishment.

[11] Richard Halloran, "U.S. Agency Finds Drug Testing Lax Says F.D.A., Makers and Others Expose the Public to Needless Risks," the New York Times, July 21, 1976, p. 1.

up like the much bally-hooed campaign lobbying bill. The lobbying bill incurs guilt only to those corporate executives who have a meeting with a legislator at which time they make a specific request for a specific cause along with a specific offer of reward. It has proven very difficult to prosecute under this bill. Yet influence continues.

In the sense I can appreciate some comments about this bill which indicate it would be suicidal for any business groups like Business Roundtable and the National Association of Manufacturers not to go on record opposing this bill. I would hope that this bill, which is trying to legislate harmful activities will not be like closing the barn door after the cows are out, as well as when we don't know they will never return to the same place and activity because the modus operandi of feeding and milking cows has changed.

Obviously the huge corporations need to have built-in checks and balances before they will adequately include the public interest in their decisionmaking. I believe this legislation is one important step in this direction.

STATEMENT BY PATRICIA YOUNG

My name is Patricia Young. I represent the United Presbyterian Church on the board of the Interfaith Center on Corporate Responsibility. For a number of years I have worked with ICCR on a range of corporate responsibility issues—concerns such as equal employment, food and nutrution, environment and health, energy and computer technology.

In the course of our work I have visited operations of U.S. firms in this country and in Africa. I have met with corporate executives and address corporate annual meetings. I have attended international assemblies, and I have testified at other Congressional hearings.

I am pleased to join Brother Crosby and Mr. Smith in presenting some general observation. As a lay person I do not treat lightly the opportunity to speak on moral issues in a legislative setting.

Today I am pleased to testify in support of H.R. 4973—as a church member and as a citizen—not only because I believe it is compatible with social responsibility goals, but also because it is in the best tradition of legislative protection of the general welfare.

In rapidly growing numbers the religious community has become involved in corporate responsibility activity. This is a natural outgrowth of our call to witness to our faith in every aspect of life—including economic. One way we are a part of the nation's economic life is as shareholder in corporations. Shares of stock constitute a form of ownership. Ownership conveys benefits and responsibilities. We appreciate the benefits in the form of dividends that can be used for mission. We accept responsibility for company policies and practices that effect lives and livelihood, positively or negatively. We believe our corporate responsibility work is a form of mission in itself.

In our pursuit of responsible stewardship of our shared ownership, we have developed criteria and guidelines. These begin with efforts to be informed. As one aspect of our search for knowledge and understanding, we have meetings with corporate management, and we file resolutions asking for information. Sometimes we have been able to procure some of the data as the result of the dialogue, and sometimes as the result of the resolutions. In all but one case the corporations have resisted our efforts to gain information which we felt to be the obvious prerogative of owners and necessary to enable us to carry out our particular "owner" obligations.

Our experience suggests that there may be resistance as well to divulging information such as that called for in your legislation. The instinct to protect one's self interest (individual or corporate) will be at war with the instinct to protect others. Personal faith, company ethics, eco-justice convictions and legal penalties will intermingle as an employee makes a decision to disclose knowledge of hazardous products or processes.

I am in agreement with the purpose of the bill. If adopted it would be a significant reinforcement for the historic Judeo-Christian values of accountability and honesty. Surely it could be extremely helpful in this new era of interdependence when it is even more obligatory for each person to act responsibly on behalf of the planet and posterity. Each of us is under judgment for anything we do to contribute to a damaged future for others.

Society has an idealistic goal that all segments will serve the common good. At the same time, society usually finds it realistic to undergird its vision of a just society with sacred and secular safeguards—with moral and legal codes.

The value and ethical questions that influence human activity are hardly new. They are rooted in the ancient codes of all religious traditions. "Do unto others

. . ." has a parallel in every religious faith. Some corollary values include the value of each human life, the value of life over property, the value of concern for each other, the value of our finite global homeland.

The "Golden Rule" approach to life is as relevant to business practice as it is in personal relationships. On a rapidly shrinking and fragile planet its observance by everyone grows more urgent every day. In our lifetime the enormity of the threats that confront us—in ghastly injuries, mega-numbers and multi-generational impact—do not permit any of us to hide behind institutional barricades or academic evasions.

More and more we are recognizing that altruism and pragmatism are interchangeable—that the highest values are the only values that may in the end enable humanity to survive. If we value our own life we will have to value others. What endangers others endangers us.

The actions of a person with knowledge, not revealed, of a product or a process that can do damage to human life cannot be justified with an equation. Quantitative calculations about relative values of one life versus a thousand are not acceptable by religious or humanistic standards.

The act of repressing knowledge of a product or a process that could endanger life because of allegiance to a policy that values profit and de-values persons should not be condoned in any human arena.

When a person with knowledge and position hides information that a product or a process can harm one or many, that individual has broken a sacred trust. Position and knowledge are power. There should be no excuse for abuse of such power. Interoffice memorandums buried in microfilm vaults cannot exercise acts of omission or commission.

Our responsibility one to another becomes by logical extension a responsibility to persons living around continental corners and in future centuries. On our tiny round home—the earth—the circle of conscience and the circle of contamination are both closed systems. Either we or our descendents will reap what we saw—in policies or poisons.

No one of us is immune from temptation. We need all the affirmative incentives we can provide to encourage us to respond in the most optimal fashion to the circumstances of our opportunity in history.

Here in H.R. 4973 governmental responsibility and corporate accountability intersect with the values of faith. It can provide one additional guidepost by which human behavior in the market place will be challenged to meet the demands of new times and ancient precepts.

Mr. CONYERS. Thank you, Father Crosby. Ms. Young, would you care to make additional statements? Please do.

Ms. YOUNG. For a number of years I have worked with ICCR on a range of corporate responsibility issues. In the course of our work I have visited operations of U.S. firms in this country and in Africa. I have met with corporate executives and addressed corporate annual meetings and attended international assemblies and testified at other congressional hearings—as a matter of fact, just last week on the infant formula issue.

I am pleased to join Brother Crosby and Mr. Smith in presenting some general observations which will be in some cases repetition, but will serve, I hope, to underscore the points we are trying to make today.

As a lay person, I do not treat lightly the opportunity to speak on moral issues in this place.

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Our experience suggests that there may be resistance as well to divulging information such as that called for in your legislation. The instinct to protect one's self-interest, individual or corporate, will be at war with the instinct to protect others. Personal faith, company ethics, eco-justice convictions and legal penalties will intermingle as a decision is made whether or not to disclose knowledge of hazardous products or processes.

I am in agreement with the purpose of the bill. If adopted, it would be a significant reinforcement for the historic Judeo-Christian values of accountability and honesty. Surely it could be extremely helpful in this new era of interdependence when it is even more obligatory for each person to act responsibly on behalf of the planet and posterity. Each of us is under judgment for anything we do to contribute to a damaged future for others.

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Here in H.R. 4973, governmental responsibility and corporate accountability intersect with the values of faith. It can provide one additional guidepost by which human behavior in the marketplace will be challenged to meet the demands of new times and ancient precepts.

Thank you for the opportunity to make these remarks.

Mr. CONYERS. I want to thank you all for excellent statements that raise anew the issues of moral considerations within the free market enterprise system.

I would like to first try to respond to the questions that you raised about the bill because we have left the appropriate Federal agency as a general term now because there may be different agencies for different subject matters, and rather than trying to get into a failure of omission by enumerating them and leaving out some, so far the best way we can approach this is to consider this general phrase: "Appropriate Federal agency."

We think that U.S. corporations would be quite limited in their conduct—we may have trouble with activities that were committed outside the United States. There, the law goes off into a great number of directions. So the most that I can say now without any further research is that we might be limited to conduct within the United States although I am not willing to close the discussion on that. But that starts us off at our most cautious point.

It would seem reasonable that U.S. corporate activity that violates our law here should be prosecutable wherever it may occur, but we are just not too certain at this moment.

Let me ask, probably of the executive director, just how large can you estimate the religious community's investment in corporate America to be?

Mr. SMITH. Mr. Conyers, there has not been recently a tight and accurate review of what the American religious wealth—if you add real estate and so on—adds up to. Several years ago, when people

testified before Congress, they talked about an estimated $20 billion.

But I can say within the orders and denominations that are part of the Interfaith Center of Corporate Responsibility, because you are talking about pension funds such as the United Press, which is worth about a half billion dollars, that the total amount would be well over $5 or $6 billion. So those are the agencies that are working directly with us, but there are many, many that have large investments and real estate holdings that are not directly part of the ICCR.

Mr. CONYERS. Could other witnesses help me on that question?

Reverend CROSBY. For instance, in the Catholic community, every diocese—and there are about 160 of them—is totally autonomous and does not disclose unless it chooses to disclose. I would say the average diocese would probably have a portfolio of between $5 and $10 million. There are about 700 or 800 Catholic religious orders of women and men and those range in number from 15–20, to 3,000 and 4,000. The women's needs are greater than the men's needs for a portfolio, because in the last 10 or 15 years the average age has increased among religious women, so they have greater needs for health care. And the portfolio helps that.

It would be very difficult; you have such difference in sizes among the religious orders. Also, the Catholic community has hospitals and educational institutions and foundations. All of them have their own separate portfolios, and there is no center to which any Catholic group has to give to any higher authority its financial disclosure.

So we are very independent when it gets to our separate diocese and religious orders, financially.

Mr. CONYERS. Then I take it that the $20 billion figure, considering inflation and so forth, is probably still a ballpark figure, but it is still an incredibly large figure and means that you do have a real impact, I take it.

This leads me into my next question, that you have to exert a real impact upon the companies in which you do invest. If you could tell me a little about those experiences, I would appreciate it.

Mr. SMITH. I think in the last decade many corporations have recognized that the church is going to continue to be an ongoing part of the landscape in terms of raising social accountability questions. Of course it doesn't hurt when you are filing a shareholder resolution with IBM on a question like investment in South Africa, if you have $10 million worth of church investment proposing that resolution, as we have this year.

In the last decade many companies have shown more willingness to sit down and talk about social responsibility issues—whether the issue is the environment, equal employment opportunity, or South Africa.

We are still surprised at the number of companies that resist basic disclosure of information on key social questions. We have seen numerous copies of reports on equal employment opportunity or environmental questions, or on South Africa; or health and safety questions that companies have done as a result of shareholder resolutions put by churches.

Mr. CONYERS. So you are making some progress?

Mr. SMITH. We feel that the impact of church pressure in this area is being felt, and we are seeing some changes in company policies and practices or in disclosure.

Mr. CONYERS. Are there any other kinds of examples you would like to raise in terms of what you mean when you say social interest questions that are brought before the corporation? Could you give me just an example or two?

Mr. SMITH. This year there are numerous examples we could talk about that relate closely to the legislation before us today; the one example I mentioned briefly was the Dow Chemical Co.; the shareholders' resolution put to them this year asked for them to set up a committee which shall include some outside directors and representatives of management to do a report on the public health consequences of certain herbicides to the board and shareholders within 6 months of the 1980 annual meeting.

Second, Dow Chemical is asked to place a moratorium on all production destined for export of the herbicides until publication of the committee report, assuming that we have agreed that there is a real public health problem here, and we feel that these herbicides should not be exported until management has done this review.

As I said earlier, in a letter that raises smiles rather than being seen as a serious response, the chairman of the board of Dow Chemical, Mr. Earl Barnes, on November 1, 1979, wrote a religious investor who made inquiry about this, and said that the people who were criticizing 2,4,5-T were extreme environmentalists and people who were afraid that this herbicide was being used too effectively in Oregon and northern California to destroy secret crops of marihuana.

I would suggest that the social impact questions related to these herbicides are much more serious than the chairman of Dow Chemical has at least indicated in this one letter. We will be having meetings with Dow to further explore this issue. We will, of course, be attending their shareholders' meeting to raise questions about it, and we will be looking to institutional investors who own Dow stock to cast their ballots in favor of these kinds of resolutions to try to increase the pressure on Dow. That is one kind of example that I think does relate to the legislation before us today.

I mentioned Occidental Petroleum and their ownership of Hooker Chemical. That is a famous case to all in this room, and again religious investors have a shareholder resolution they have put before them on that particular issue asking for policies and procedures to be developed regarding production, distribution and disposal of hazardous substances, providing for the cost of cleanup, compensation and monitoring to prevent future problems.

When you get down to specifics like this, where you are pressing a company to take its responsibilities seriously in this area, obviously a lot of times you meet a lot of resistance.

Reverend CROSBY. I might mention one case that refers to the bill where we got positive response but yet shows there are still some problems. In 1977 we ran across the information that has been included in the testimony previously from Silverman and Letogar that was in Mother Jones. We filed a shareholders resolution with Warner Lambert regarding how it labeled "Drugs Abroad."

The United States demands certain things to be on the labels indicating what drug is to be used for and, what the contraindications may be. This changed very differently when labels got into Latin American and African nations.

As an aside, that is why we think that possibly as there are campaign and political contributions abroad that can be brought to United States legislation here, this bill might be able to be applied to foreign activities as stated above.

So we had filed a resolution asking them to disclose what they had done and to bring its findings to the shareholders every year. We met with Warner Lambert and Park Davis in Detroit discussing this issue.

Around the same time they made a policy that they would have the same kind of labeling globally. However, that still is not being done by a large number of pharmaceuticals.

Mr. CONYERS. Throughout the industry?

Reverend CROSBY. Of companies throughout the industry.

There was an article in Board Room. I clipped this. "Bring your own aspirin along if you are travelling in Latin America and stay away from all locally sold analgesics. Many such medications contain dipyrone which can cause serious blood disease. "The trade names come from Upjohn, Winthrop, McKesson, and Shering."

This was in Board Room saying Americans should watch what they bring abroad.

Mr. CONYERS. What is Board Room?

Reverend CROSBY. Board Room is like Money, Fortune or Business week.

Ms. YOUNG. Since a related issue, Mr. Dellums' bill, is before Congress, I might explain a little more about the formula marketing and promotion issue. There were hearings last week before Mr. Bingham's committee. This issue has to do with the growing use of infant formula in the third world. As it is promoted in general, it is also promoted to and reaches poverty persons who cannot afford it—who live in situations where it cannot be used safely because of the water situation, because they don't have facilities for sterilization or refrigeration; where disease is rampant and where the child needs the immunity provided by mother's milk which is agreed by everyone to be best. Breast feeding assists with family spacing as well. For all these reasons we think this is a serious health issue.

It provides a checkered picture of whether we have had response from corporations or not. Through 5 years of activity with the three American companies, and somewhat less with Nestle—of Geneva—who has a U.S. affiliate, we have had some minimal changes in their practices. However, it was necessary for the World Health Organization and UNICEF to convene a international meeting last October to deal with this issue.

Very strong things were said about corporate adherence to those criteria and principles, and yet to this day, 6 months later, we are still having difficulty having the companies sit down with us and tell us point by point whether they really are going to abide by the specifics that were outlined in that meeting.

Mr. CONYERS. The Chair notes that Mr. Miller of California has joined the subcommittee. I would yield now to the gentleman from Illinois, Mr. Hyde, for any questions or comments.

Mr. HYDE. Thank you, Mr. Chairman. Is it Father or Brother?

Reverend CROSBY. Both. I am a priest of the church and a Brother in my community.

Mr. HYDE. Before I get into specific questions, I would be interested in discussing the general philosophy of this bill and elicting your views on union responsibility. We have been talking about corporate responsibility, which surely is an area that requires study and, doubtless, some activity. However, right in Chicago, the community where I was born and raised, although I do not represent it anymore, the firemen are about to go on strike. If fires occur and people are killed, and if they set up picket lines and things get nasty, what is your view on union responsibility? Should that conduct be criminalized?

Reverend CROSBY. I don't think it refers to this piece of legislation.

Mr. HYDE. Oh, no, it does not.

Reverend CROSBY. What we have found about corporate responsibility from this dimension that brings us here is the shareholder dimension. We have shares in the corporations and they are able to affect the management decisions.

When you deal with trade unions we have different ways within the churches to relate to them as constituent of the churches. Dialogues take place such as that which has convened church and labor issues through the Center of Concern in Washington. Because of our limitations to the shareholder dimensions we do discuss with the unions. That takes place in other avenues within the churches.

Mr. HYDE. Is there an effort being made by any organization among the churches you know to dissuade the firemen from going on strike because of the possible loss of life if fires occur?

Mr. SMITH. That may be occurring in Chicago. I think none of us are aware of those efforts nationally.

Mr. HYDE. You do see a responsibility to the community?

Mr. SMITH. Oh, certainly, Mr. Hyde.

Mr. HYDE. This is a unique situation. I would not talk about electricians, but I am very concerned about the firemen.

Mr. SMITH. Obviously most of us in this room would say any institution, whether a trade union, a university, a foundation, the church, are all institutions that have to be scrutinized to see when they are meeting the public's welfare and when in any way their actions are undermining the public welfare.

That is a theme that we assume as we come before you today even though we speak specifically about corporations because of the bill.

Mr. HYDE. Any of you may answer this next question. What is the justification for singling out corporate management for punishment? Shouldn't anyone who has knowledge of a dangerous defect be criminally liable—for instance, a union steward who sees something; a government inspector who finds something; an OSHA inspector, a researcher, or, any employee who has knowledge of a very dangerous condition?

Why are we limiting this strictly to corporate management?

Mr. SMITH. That is an interesting point. I think the major impact of the bill, as I read it, was to try to get to the people making the decisions or who had serious oversight over the decisions. You may

be right that someone who is a worker in a plant may in fact discover something that is clearly a hazard to the health of the people in the workplace.

I would think that they would normally report within the company to people in a higher level of management and ask for remedial action. Those persons would also have responsibility if there were no action taken to go public. But let's also be clear that the price for somebody on the shop floor of reporting that kind of thing to a government agency may be the price of losing his job.

The first step he or she would take would probably be within the company to seek a remedy.

Reverend CROSBY. The bill does not say corporate. It does say appropriate manager could be extended to appropriate line people of responsibility.

Mr. HYDE. I would think we could define management to include all people who are responsible.

Have any of you thought about the self-incrimination problems involved in this legislation? Although the bill is well-intentioned, there is a problem, as I see it, with requiring the disclosure of information that is going to result in prosecution.

I remember some years ago there was a law requiring anybody who was a member of the Communist Party to register with the Government. That law was struck down because it violated fifth amendment rights.

Reverend CROSBY. I think we have all talked about it. None of us are lawyers and it would probably be best left to lawyers to comment on what double bind or catch-22 this legislation may put a person in.

Our responsibility today in commenting on the bill is to encourage a process to be set up within the corporation by which somebody is able to report out examples of corporate conduct that may cause social or bodily injury.

If we can't find a way of doing that because of the kind of limit that you have listed today, I think we are going to run into real problems in the 1980's with the person who wants to do this kind of reporting feeling that his job would be in jeopardy if he were a whistle blower.

Mr. HYDE. So many times legislation is well-intentioned and addresses itself to a real need, but we all must work within the context of established constitutional rights and principles.

When you get into the criminal law field, where specificity is a must, there might be some serious problems in determining what constitutes an "appropriate manager."

We may criminalize an action and put someone in jail. The principle is that there must be a definite crime—one that you know about and on which the law is clear as to the parameters of what is criminal and what is not. This does not mean that I am against the bill. However, I do see a problem of self-incrimination. These are things we have to study.

How much evidence of danger is necessary? What percentage of consumers must be affected? These are things we can perhaps work out through the amendatory process. I just want you to understand that this is not a black-and-white issue. There are real problems with this type of difficult, but important, legislation.

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Did you want to add something, Father?

Reverend CROSBY. I was saying that the bill does not discuss the self-incrimination concern but it is exactly the opposite. If they knowingly withhold the information, then they are incriminated, but I think that there are other bills in the Government that will be able to deal with people who do blow the whistle.

From my background information most likely because they have been honest they will not be held liable.

Mr. HYDE. If the bill requires someone to disclose knowledge of the matter for which he may be prosecuted, I would suggest that it violates one's fifth amendment right. One may not be required to testify against oneself. That is what we are confronted with in this bill.

Ms. YOUNG. It seems to me we are asking the wrong questions. The methodology which can uphold the principle that we think is basic can be worked out, as you have indicated, by amendments or whatever.

But because of the grossness of the kinds of crimes that are now possible with new developments and in a world that we suddenly recognize can be permanently harmed by some of our activity, it is incumbent on all of us to ask what new principles must be articulated and then to develop the appropriate legislation and constitutional safeguards.

I think that several institutions in society are responsible for that process. I think the Government, appropriately, must be one of those.

Mr. HYDE. With all due respect to what you have said, I cannot avoid being troubled by a potential violation of the fifth amendment to our U.S. Constitution. New principles are not going to repeal the privilege against self-incrimination. Maybe we can subject this conduct to a tremendously heavy civil penalty and make it prohibitive by a fine, but it is not an easy problem.

Ms. YOUNG. I agree with that. I have two children engaged in law. One warned me this was going to be a problem raised. I do not offer any expertise in solving that. I would suspect someone like you could if you were for the principle. Government, it seems to me, has a responsibility under these new times. Also, I think corporate institutions have to examine what their processes are for placing responsibility and accountability. They may establish a code and make clear what is expected of that code. They may have an outside advisory committee that advises them objectively on what they ought to be doing. In any case, they must develop their new procedure.

Further, consumer groups and religious institutions are responsible for keeping people aware of what the values are, and that human values must come first.

Mr. HYDE. I am sure my time is up. You have been most generous, Mr. Chairman. I just want to say that I am sympathetic toward what this legislation seeks to do. I think it is overdue. These fictional entities, corporations, should not be immunized from the rules of normal, decent conduct. However, it must be done within a framework of constitutionality. I think we can achieve this.

Mr. CONYERS. Mr. Sensenbrenner.

Mr. SENSENBRENNER. As Members of Congress, all of us are very painfully aware of how slow the wheels of bureaucracy move. I would like to ask the panel what they would propose to do if corporate executives do make timely reports under this bill. Let us suppose that such a report is sent to a Government agency and years lapse before the Government agency does anything about it.

Would you be in favor of amending this bill to make that kind of delay specifically malfeasance in office, thereby subjecting the agency's personnel to penalties?

Mr. SMITH. You are talking about another sector of corporate responsibility; in other words, the Government agency's corporate responsibility. I think, obviously, if a grievance as serious as referred to in this bill gets reported to a Government agency and it is sat on for a year, neither the public's welfare nor the employees' welfare, whoever is being affected, is being protected.

The aim of the bill is to get swift remedial action. So I think whether the specific amendment you refer to or another way of making sure that doesn't get cooped up in the agency's files is an absolute necessity.

Mr. SENSENBRENNER. The Food and Drug Administration is the agency that comes to mind. It is notoriously slow in taking action when there are allegations that a drug on the market is dangerous. It takes a long, long time to get the drug decertified through the processes of the Food and Drug Administration.

Of course, everybody is entitled to a hearing, including corporations, but what do you think would be an appropriate time frame during which the agency should take action?

Mr. SMITH. I don't think we are willing to recommend a period of weeks or a period of months specifically, but to say that obviously the agency needs to move swiftly to confront the corporation to discuss the issue, to get more facts about it and to suggest remedial action.

If a specific amendment would be put forth we would be willing to comment on that. Obviously, it is something that can't go over months and months into a year.

Mr. SENSENBRENNER. Do you believe that reports that would be filed pursuant to this bill should be a matter of public record under the Freedom of Information Act?

Reverend CROSBY. I do, because it affects the public health.

Mr. SENSENBRENNER. Don't you think that such availability to the public could be used by Madison Avenue advertising geniuses who have been hired by the competitors of the company that complied with this law to achieve a competitive advantage over that company?

Reverend CROSBY. I will give you an example of how difficult it is to file under the Freedom of Information Act with a corporation in your District, General Electric, in Waukesha. We had asked about issues regarding the Equal Employment Opportunity Act for minorities and women to be used in their considerations at that plant, which is located far from minorities.

We filed a stockholder resolution. The company urged the shareholder to vote against a simple disclosure of what their EEO data was; not broken down but just in the nine categories.

We also filed under Freedom of Information to get the nine categories of that local facility. We are still in court with General Electric which is trying to keep us from getting that one sheet of paper which the simple data disclosed.

It has nothing to do with the competitive issue. General Electric is able to use lawyers and money in a way we could never do because of our limited resources. It is keeping us from getting basic information from the Freedom of Information Act.

I am using this as an example of a corporation within your own District keeping basic information from concerned citizens about how minorities and women are in the work force of that plant.

Mr. SENSENBRENNER. Let us say that the working place of the corporation is conclusively proven to be dangerous to women of child-bearing age. The corporation then has the choice of either spending the money to make the place of work safer for these women or not hiring women at all and not spending the money.

Doesn't this suggest another potential conflict created by this bill, in addition to the fifth amendment conflict which Congressman Hyde brought up?

Reverend CROSBY. In our shareholder resolution which we filed with American Cyanamid, we raised the issue that has been discussed in yesterday's New York Times articles on "The Genetics Test of Industry Raise Rights of Workers." If it is going to adversely affect the woman and her genes, it is also going to affect the man and his genes. Therefore, it should be equally applicable.

Again, it would have bearing on this piece of legislation.

Mr. SMITH. I would suggest if this particular issue is of interest to the committee, he might solicit testimony from the International Chemical Workers Union which has been doing extensive research on this particular question and is one of the cosponsors of the shareholder resolution, with several religious investors, with American Cyanamid.

I think the question is a real live one. Are companies who decide there are some genetic or reproductive hazard in the workplace simply going to try to minimize their possible dangers by taking women out of the workplace and say they have solved the problem rather than trying to adequately clean up the workplace so people aren't going to be affected?

What the International Chemical Workers Union is arguing is there is scientific evidence now that obviously women of child-bearing age, both they and the children in the womb, would be affected by certain chemicals. There is also an increasing body of scientific evidence that shows some of those chemicals adversely affect male genes.

That kind of information has to be taken very seriously if you are talking about protecting people in the workplace.

Mr. SENSENBRENNER. I have two final questions for Father Crosby relating to procedures. On page 3 of your statement, you mention that your group was not able to discover which corporate managers were responsible for some alleged misstatements by Bristol Myers. If this legislation had been in effect at the time, how would the situation have been improved?

Second, assuming that the corporate manager did not comply with the notification requirements, how would anybody be able to

better discover the source of the misstatements? It seems to me that you would have to find out who did it before somebody can be prosecuted under a law like this.

Reverend CROSBY. The purpose of the bill appeals to me because when we realize how difficult it is to get the smoking gun, you find out from inside. Outsiders like us—even who are supposed to get the information because we are shareholders—do not get the disclosure.

The appealing thing about this bill is that someone with the inside information would do the disclosing of the facts. That is why we support this bill. Until now it has been very difficult to find out who is making these decisions.

Mr. SENSENBRENNER. Don't you think that that problem can be more effectively resolved with an amendment to the Securities and Exchange Act relating to corporate disclosure to shareholders, rather than through the passage of a criminal law like this?

Mr. SMITH. That may be helpful to require that kind of reporting to shareholders. That might be an additional kind of suggestion one would make. But if you are talking about the appropriate Government agency to have oversight of health and safety questions in the workplace, it seems to me there should be dual reporting that both the appropriate agency and the shareholders through the 10-K's or the annual reports should have access to that information.

But I think the point we are all trying to underline, as Mr. Hyde described, the fictional character of the corporation, how do we reach inside that fictional character, go to the place where decisions are made and let the person who is making that decision know that society is supporting responsible actions they are going to take and that there are penalties for irresponsible actions.

At this point those persons are caught within a corporate fabric which is not giving them positive reinforcement when they are going to come forth and say we found the danger in the workplace or our society is being damaged by a certain product.

There are no penalties for them. So, again, we want to underline with some of the very helpful comments both of you have made, this kind of legislation is an absolute necessity for the 1980's if we are going to change the fabric of the decisionmaking process within the corporate top management.

Mr. SENSENBRENNER. I am sure that we all agree on the principles that the three of you have discussed. I would just like to reemphasize Mr. Hyde's point that drafting an effective, constitutional law, which will not be discarded for violating fifth amendment rights, is easier said than done. Certainly we are going to need the expertise of those who are more experienced in the area of criminal law than I am, for example, to come up with something that effectively gets to the root of the problem and provides some kind of punishment for those who violate the law.

Mr. SMITH. But it might be helpful for us to look at the legislation and the penalties provided for corporate managers who are involved in improper payments overseas, political contributions or bribes and to see what that has done within the corporate world to a degree.

Even before legislation of that sort was in place, IBM, for instance, and many other companies would have a policy that any manager overseas responsible for that action was going to lose his job as soon as headquarters found out.

Also, now there are civil penalties for a manager who is responsible in making such bribes and political contributions. Perhaps there are other pieces of legislation where some other common learning could occur.

Mr. SENSENBRENNER. Nevertheless, but disclosure is the important part of the problem because you can criminalize the act through this law without getting the facts disclosed. Nobody will be prosecuted.

I seem to recall that there has been only one prosecution under the law that made bribes of foreign government officials illegal and it was not a major American corporation that was prosecuted. It was someone who bribed the government of a small Pacific island nation to sell postage rights in the United States. He pleaded guilty to that and was confined.

Mr. SMITH. You may be talking about the difficulty of putting such legislation into effect but the fact of the matter is that kind of legislation does require disclosure.

If a company doesn't disclose to the SEC adequately about such payments, they can be sued for misleading the shareholders, misleading the SEC as a Government agency.

I am sure both of us are making points that are germane to refining the legislation before us but I am saying there may be other legislation on the books where managers are required to make disclosures to their management and to the public in the end through the SEC process which deals with the fifth amendment question.

It would be interesting to see what counsel comes up with.

Mr. CONYERS. Mr. Gudger, do you have questions of the panel?

Mr. GUDGER. Mr. Chairman, I thank you for the opportunity to question and I believe I will pass at this time.

Mr. CONYERS. Mr. Volkmer, have you questions?

Mr. VOLKMER. No questions, thank you.

Mr. CONYERS. Mr. Miller, have you any questions?

Mr. MILLER. Mr. Chairman, I appreciate the opportunity. I would just like to respond to the question of self-incrimination where there are criminalizing acts. It would seem to me what the legislation speaks to is to criminalize that activity in which you fail to acknowledge or to report, in this case, information which would bring about the result, and at that point what you would be reporting to the responsible agency or appropriate agency—in this case assume it is EPA—would then be engaging the EPA agency by which that product would be removed from the marketplace or confined to certain uses and certain conditions.

As far as I know there is no criminal action in that kind of procedure. That is a question of governmental regulation and whether or not this has slipped through that regulation. It may be EPA will say, we appreciate this but we still think the manner in which they are marketing it or producing it is proper.

It would seem to me the person we are concerned about with respect to self-incrimination is exactly the opposite. This is a

person who did not speak up or in the case of the criminal activity that we have heard testimony on before your committee who has a written memo on how not to speak up and said: We will keep this product in the marketplace.

So the Government would in effect fine this person through some other investigation because this isn't the person who said: We are producing a dangerous product. This is a person who kept his mouth shut or participated in keeping away from the knowledge of proper authorities the fact that the product was dangerous.

I appreciate your concerns, Mr. Hyde, and I think it is something the committee is engaging in with the Justice Department to make sure we don't overstep constitutional bounds.

But I think we are talking about the exact opposite here.

Mr. CONYERS. This matter will be carefully reviewed by the Department of Justice and our own subcommittee. It is an important one.

We have used up our full share of time. We are grateful for the ethical concerns that the three of you have put in focus here with regard to this bill. We are happy to know that we can blend altruism and pragmatism in a more equitable manner.

On behalf of the committee, we applaud all of you and the organizations that you represent for the important work you are doing.

Mr. SMITH. We appreciate the opportunity to be here. Thank you.

Mr. CONYERS. Thank you again.

We now have our second panel for the morning which consists of Ralph Nader, Esq., Mark Green, Esq., and Dr. Sidney Wolfe. We welcome you before our subcommittee.

PANEL: RALPH NADER, ESQ., PUBLIC CITIZEN, WASHINGTON, D.C.; MARK GREEN, ESQ., CONGRESS WATCH, WASHINGTON, D.C.; DR. SIDNEY M. WOLFE, DIRECTOR, HEALTH RESEARCH GROUP, WASHINGTON, D.C.

Mr. NADER. Thank you, Mr. Chairman.

Mr. CONYERS. We note that Mr. Ralph Nader is a distinguished witness before congressional committees and has been our most effective consumer advocate. He has built an effective national network of citizen action that has a major impact on areas ranging from anticorporate crime and tax reform to nuclear energy.

He has written extensively, lectured and has spoken from one end of the country to the other. We welcome him today. Accompanying him is Mark Green, who also has done extensive work with the Nader Corporate Accountability Research Group, and is the current Director of Nader's Congress Watch. Mr. Green has written a number of books, including the "Monopoly Makers," "Who Runs Congress," "The Other Government," and "Taming the Giant Corporation."

Dr. Sidney Wolfe is very distinguished for his work as director of the Nader Health Research Group since 1972. Prior to that time, he was an intern at Cleveland General Hospital, a clinical associate at the National Institute of Health, a resident at Cleveland General Hospital, and a senior staff fellow at the National Institute of Arthritis and Metabolic Diseases.

He, too, has written extensively and has appeared before innumerable congressional committees.

Gentlemen, we welcome you all. We will incorporate your statements in the record and allow you to feel free to proceed in your own way.

[The statements referred to follow:]

PREPARED STATEMENT OF RALPH NADER AND MARK GREEN, PUBLIC CITIZEN'S CONGRESS WATCH

Mr. Chairman, we have had a long-standing concern about the growth of business crime. The documented level and cost of "crime in the suites" today should concern all those who promote consumer values in the competitive marketplace and who seek an effective system of law enforcement.

H.R. 4973 is a simple and workable reform that can begin to reduce the willful and unnecessary hazards that confront people at home, work, or in the marketplace. But before discussing that particular remedy in Part III, we would like to put it in a proper empirical context in Part I and II.

I.

Business crimes is as old as business. There were prohibitions against monopoly in common law England. Lord Bryce's "The American Commonwealth" (1888) and Henry Demarest Lloyd's "Wealth Against Commonwealth" (1899) dissected business corruption, with Lloyd saying that the Standard Oil Corporation "has done everything with the Pennsylvania legislature except to refine it." Widespread stock fraud led to the 1933 and 1934 securities acts; the 1960s saw the great electrical machinery bid-rigging case and the marketing of thalidomide by Distillers and MER 29 by Richardson Merrill, though both firms had evidence of health risks. Yet the apparent prevalence today of "corporate crime"—a subcategory of "white collar crime" involving managerial direction, participation, or acquiesance in illegal business acts—has newly raised the issue of the adequacy of legal sanctions. Why has deterrence apparently failed to reduce such economic illegality? Should the federal criminal code effecting corporate crime be recodified—or reconceptualized? What new sanctions or structures can persuade companies to obey legal standards?

Prevalence

There is no way to specifically prove how much business crime today is greater than in previous periods. Nor is it possible, given current data collection systems, to conduct a scientific "corporate crime, prevalency study." We only know of firms publicly exposed, since other culpable companies do not volunteer their guilt. Certainly, at least, there is a peak exposure of 4 major forms of corporate crime—financial, antitrust, chemical and product safety crime.

About 500 American firms—including more than one-third of the Fortune 500—have admitted in recent years to illegal or improper payoffs abroad totalling over $1 billion. And their primary public defense, that "everyone does it," was hardly reassuring. In a major 1976 report, the Securities and Exchange Commission declared that it was "unable to conclude that instances of illegal payments are either isolated or aberrations limited to a few unscrupulous individuals . . . the problem is serious and widespread." When 34 acknowledged their illegal payoffs, its chairman of 17 years, William L. McKnight, said "I don't know that 3M did anything different than a great many other corporations did." An Opinion Research Corporation Poll in 1974 revealed that 92% of the business people surveyed thought that legislation prohibiting bribes abroad would be ineffective. Said one, "How can you advocate morality over success?"

Over 100 grand juries—a record number—were a year ago investigating price-fixing conspiracies, the Justice Department's Antitrust Division reports. Based on these investigations, former Division official Joe Sims concluded that "price fixing is a common business practice." Corroborating this view is the fact that there seems to be a linear relationship between increased resources spent on criminal investigations and criminal indictments. And when a Nader group asked Fortune's top 1,000 presidents if they agreed with the observation that "many companies price fix," 60 percent of the 110 respondents agreed.

A relatively new category of illegality—chemical crime—has begun to spread, as Kepone, PCB's, PBB's, and other exotic chemicals work their way into the human environment. The Environmental Protection Agency has estimated that there are 30,000 toxic dump sites around the country, with "significant amounts" in 800 of them in areas such as at the Love Canal community in upstate New York.

Finally, there have been recently a series of cover-ups of product hazards. We now know from internal firm documents obtained in legal proceedings that (a) Hooker Chemical knew for decades the toxic effects of its chemical dumpings, (b) the Ford Motor Company knew that the gas tanks of earlier model Pintos had a tendency to explode when rear-ended, (c) Firestone knew that its radial 500 tires had an unusually high failure rate, and (d) leading asbestos firms withheld the health hazards involved in their product from their workers. The New York Times, in a May 1, 1979, editorial bristling with indignation, concluded that "The only effective remedy is to change the incentives and penalties that now shape such decision . . . Otherwise irresponsible decisions will continue to poison not only the physical environment but public confidence as well."

Costs

There is, first, the direct consumer cost. A 1976 Joint Economic Committee report pegs it at $44 billion a year—a number that doesn't even include the costs of antitrust or environmental violations. Yet one price-fixing conspiracy in 1961 stole more money that year than all street burglaries combined. Professor William Shepard of Michigan, a highly regarded economist, estimates that antitrust violations transfers (i.e. robs) over $60 billion each year from the pockets of consumers to the pockets of law-violating producers. Most cancer is environmentally caused, says the American Cancer Society and the Council on Environmental Quality; the highest death rates from lung, liver, and bladder cancer correlate with areas around chemical plants. The health and property impairments of industrial pollution range in the tens of billions annually, according to the best government studies. It is now estimated for example, that it would cost $8 billion to clean up the Kepone contamination of the James River in Virginia.

There is also the indirect assault on public trust when the proverbial pillars of the community turn out to be its pillagers. Edwin Sutherland, in his seminal work on white collar crime 40 years ago, concluded that "white collar crimes violate trust, and therefore create distrust, which lowers social morale and produces social disorganization on a large scale." Thus, there are not only the foreign governments subverted by our corporate bribes and cooperation with extortion. There is also the subversion of our own society. A public accustomed to lawlessness, especially by its leaders, can lose the self-discipline and respect for law essential to a working democracy. Manhattan D.A. Robert Morgantheau, for one, argues that suite-crime can provide an easy rationalization and incitement for street-crime. In Brazil some years ago one candidate boldly ran on the slogan, "To my enemies, the law; to my friends, facilities." If "everyone does it," many may ask—why not me?

Enforcement efforts

Despite the prevalence and costs of corporate crime, the federal effort against it, according to the American Bar Association's criminal section, is "underfunded, undirected, and uncoordinated, and in need of the development of priorities." A report by this section indicated how the lack of a unified federal policy, the multiple congressional committees each with a piece of the problem and the failure to centralize corporate crime data have defeated the government's ability to confront this problem. The House Judiciary Committee's Subcommittee on Crime, in a preliminary survey, found that only 5 percent of the Justice Department's resources ($139 million out of $2.5 billion) were devoted to white collar crime. Under pressure from critics, Attorney General Edward Levi created an inter-agency white collar crime task force in the mid-1970s, yet it never issued any public report or recommendation. In a November 1975 report, Paul J. Curran, the outgoing U.S. Attorney for the southern district of New York, complained that "except for the Securities and Exchange Commission and the Internal Revenue Service, which operate in fairly narrow areas, the Federal agencies responsible for investigating these (white-collar crime) cases are simply not doing the job." Until the creation of the Watergate special prosecutor, the Justice Department had almost never moved against illegal business contributions to political figures. When last checked, there was not even a reporting category for business crime in the FBI's detailed annual compendium, "Crime in the United States"—although there are 27 other categories.

Even where the federal government moves against business abuse civilly or criminally, the results are often insignificant. The chances of being sentenced to a prison term is 20 percent for those indicted for bank embezzlement and 89 percent for those indicted for bank robbery. In Marshall Clinard's study of the 582 corporations, 88.1 percent of all sanctions imposed were administrative in nature (e.g. cease and desist), 9.2 percent were civil, 2.7 percent criminal. In only .9 percent of all enforcement actions was a corporate official criminally sanctioned—probation, fine, suspended sentence, or jail; in all, five officials (out of 1,553 actions) went to prison.

More than 80 percent of all antitrust civil cases and 90 percent of SEC complaints end with consent decrees, which are not admissible as prima facie evidence in later private actions. More than 70 percent of antitrust indictments and 80 percent of securities fraud cases end with nolo pleas—which also cannot be used in later private actions, which often lead to more lenient punishment and which allow defendants to describe their offenses as merely "technical." Though antitrust violations are now felonies punishable by up to three years in jail and $1 million in fines for corporations, terms of over three months or fines over a few thousand dollars are rare. Those companies who, following an SEC investigation, have admitted to illegal or "questionable" foreign payoffs have paid fines that equal the revenue of a few minutes of company production. Indeed, most of the responsible company directors and officials continued on in their positions. This level of tolerance upset Business Week. "The public will trust businessmen only if it knows they will be held responsible when they break the law."

There is a long history of judges and justices being solicitous to business felons. One, Judge Underwood, when sentencing real estate executives in 1933 for mail fraud, said, "You are men of affairs, of experiences, of refinement and culture, of excellent reputation and standing in the business and social world." More recently, Federal district court judge, Warren Ferguson, has written, "All people don't need to be sent to prison. For white collar criminals, the mere fact of prosecution, pleading guilty—the psychological trauma of that—is punishment enough." This comment lends credence to sociologist Gilbert Geis's conclusion that "the legal justice system represents a class prejudice so evident that it leads citizens to question the fairness and the integrity of our system of justice."

More specifically, C. Arnholdt Smith, whose misappropriation of $400 million led to the collapse of a $1 billion bank, received a five-year probation and a $30,000 fine—to be paid at the rate of $1,000 per year for 30 years. Attorney Joel Dolkart stole $2.5 million from two New York City law firms, and on appeal received a suspended sentence (the lower court judge who had imposed the sentence called the suspension "a travesty of justice"). Those convicted in the Home-Stake Oil swindle in Texas, involving tens of millions of dollars, were each sentenced to spend a night in jail.

Even for many executives who may be indicted and convicted, a new vogue has appeared to cushion the blow—community service instead of penal sanctions. One federal judge "sentenced" convicted price-fixers to give speeches before civic groups about the evils of price-fixing. Another sentenced dairy executives guilty of price-fixing to serve food in charity dining rooms and distribute free milk to charity. Which is nice, but probably not a successful deterrent when matched against the huge potential gains of antitrust crime. The moral: crime pays; courts are not collar-blind; "the people who call the shots (in corporations) don't bear the risks" (Professor Christoper Stone), or, as Eugene O'Neill put it in the "Emperor Jones," "For de little stealin' dey gits you in jail soon or late. For de big stealin' dey makes you emperor and puts you in de Hall o' Fame when you croaks."

II

There is perhaps no better example of the need for the kind of criminal penalties in H.R. 4973 than the behavior of the Hooker Chemical Corporation in Niagra Falls, New York, particularly in the neighborhood of Love Canal. Today, Love Canal is not so much a place as a symbol of the dangers of the chemical age—a paradigm of corporate irresponsibility and lawlessness. It is a persistent crime of cumulative silent violence. A close look at Hooker's actions at Love Canal may help illuminate the need for a strong H.R. 4973.

From 1942 to 1952, Hooker dumped more than 20,000 tons of carcinogenic, nerve poisoning and other toxic chemicals into the Love Canal, sometimes pouring hazardous wastes directly from drums into the Canal itself. Included among these wastes were 200 tons of trichlorophenol, which has been estimated to be contaminated with about 130 pounds of dioxin, the deadliest chemical ever synthesized. There may be as much dioxin in the Love Canal as was sprayed over Vietnam during all the years of Agent Orange use there.

When Hooker had finished using this dump—a dump permeable to subsurface water and, at the same time, lacking adequate protection from rain and melting snow—it sold the property to the Board of Education, which hoped to put a school there. The price to the school board was only $1, but for Hooker the arrangement was a bargin. Nowhere in the deed was mentioned the extremely toxic nature of the chemicals buried there. Instead Hooker inserted a clause that read "as part of the consideration for this conveyance . . . no claim, suit, action or demand of any nature whatsoever shall ever be made by the Board . . . from injury to a person or

persons, including death resulting therefrom, or loss of or damage to property caused by reason of the presence of said industrial waste. . . ."

With this legal stroke, Hooker hoped to rid itself of liability for the time bomb it had placed in this growing neighborhood. Since 1953, Hooker has acted to shield its own legal exposure, at the cost of allowing the families of Love Canal to be consistently exposed to the poisonous wastes so haphazardly buried there.

Hooker officials knew in 1958—exactly 20 years before 239 Love Canal families were forced from their homes in a medical emergency—that children were being burned by chemicals that had surfaced from the old dump. According to an internal memorandum written by a Hooker technical superintendent, two employees who visited the area reported that "in the northerly portion of the tract the ground had subsided and the ends of some drums which may have been thionyl residue drums were exposed and south of the school there is an area where benzene hexachloride spent cake was exposed. It was their feeling that if children had been burned it was probably by getting in contact with this material." The memo also noted "that the entire area is being used by children as a playground."

With all this information, what did they do? Almost nothing. Except for apparently discussing the problem with a representative of the school board, Hooker took no actions to repair the dump's cover or to prevent future migration of the chemicals. It did not warn residents or the developers building new homes that the chemicals were hazardous. It refrained, because Wilkenfeld of Hooker testified last spring, because "We did not feel that we could do this without incurring substantial liabilities for implying that the current owners of the property were doing an inadequate (job of) care on the property."

After these incidents, Love Canal remained for Hooker only a potential liability to be minimized. In a 1962 company memorandum revealed at House Oversight and Investigations Subcommittee hearings last spring, a Hooker products manager wrote that the company "is still being plagued with problems associated with the fill at the Love Canal *in spite of their best efforts to shed themselves of any responsibility.*" (Italics added). Six years later, Hooker was forced again to deal with the troublesome Canal when a New York state work crew building a highway unearthed some waste that "burned much like a 4th of July sparkler" in the words of a company memo.

The cost of Hooker's long attempt to evade responsibility has been staggering. In terms of dollars, it has been estimated that proper disposal of the waste in the 1950s would have cost only $4 million. With the recent appropriation of an additional $5 million to buy the homes of more residents forced to flee the neighborhood, New York State and Niagra Falls have committed more than $31 million to the Love Canal cleanup. The federal government has committed another $7–9 million. It will cost millions more to monitor the site and the health of the residents exposed to the chemicals.

The human costs are immeasurably greater. More than 240 families left the area after the state purchased their homes or paid for relocation. Many more, after long waits, are hoping to follow them soon.

No less than a dozen carcinogenic chemicals have been detected in the air, water and soil of the Love Canal neighborhood. Studies by both the state and Dr. Beverly Paigen, a research scientists at Roswell Park Memorial Institute have found increased incidence of birth defects, miscarriages, low-weight births in urinary disease, nervous system disorders, suicides, convulsive disorders such as epilepsy and respiratory disease. Her survey found suggestive evidence of increased skin disease, blood clotting problems, bone metabolism disorders and interference with the body's immune system. Studies by the Environmental Protection Agency have determined an increased cancer risk exists for residents of the area.

It is easy to overlook the personal pain in these broad numbers. Dr. Paigen summarized the experiences of four families who had lived in a Love Canal house over a 15 year period:

"In family No. 1, the wife had a nervous breakdown and a hysterectomy due to uterine bleeding.

"In family No. 2, the husband had a nervous breakdown. The wife had a hysterectomy due to uterine cancer. The daughter developed epilepsy and the son, asthma.

"In family No. 3, the wife had a nervous breakdown. Both children suffered from bronchitis.

"In family No. 4, who lived there less than 2 years, the wife developed severe headaches after moving in. She also had a hysterectomy due to uterine bleeding and a premalignant growth."

Despite these tragedies and many others like then, Hooker officials continue to deny any responsibility for the Love Canal and to publicly downplay the damage done to the residents living there. Armand Hammer, chairman of the board of

Hooker's parent corporation, Occidental Petroleum, recently said that the Love Canal problem "has been blown up out context." These officials are hardly penitent.

Tragically, Love Canal is far from the only Hooker dump threatening health and property. In Niagra Falls alone, there are three other large Hooker dumps, one sitting only a few hundred feet from the city's water treatment plant. Wastes were often poured directly into this porous dump and have been detected inside the treatment plant.

This chemical warfare has not been confined to New York. Hooker conducted detailed studies of "groundwater contamination" in Montague, Michigan at least 10 years before the state sued in 1978 to force Hooker to cleanup pesticide wastes contaminating local drinking water. In fact, a memo dating back as far as 1955 begins, "The disposal of plant residues at the Montague plant is a major problem. . ."

In Taft, Louisiana, a 1977 internal study showed that the company knew it was vulnerable "to rain runoff and groundwater contamination" of both PCBs and waste asbestos. When this document was revealed at oversight hearings last year, the Louisiana attorney general said that Hooker had not informed his office of these problems. Other 1978 memos acknowledge the migration of dangerous chemicals into groundwater.

A White Springs, Florida, Hooker phosphorus plant released fluoride and phosphate into the Swanee River and knowingly violated state environmental air pollution laws on fluoride as a cost-saving method. According to internal memos, Hooker's top management in Houston was aware of the moves: One 1978 memo says "These cost saving items were reviewed in Houston and (the) operation . . . was continued with the knowledge and approval of Houston management."

In perhaps the best-known example of willful corporate pollution, a Hooker plant at Lathrop, California contaminated groundwater and nearby drinking wells with pesticide wastes including DBCP (dibromochloropropane), which has been found to cause sterility in males and cancer. Hooker internal memos candidly discussed concerns raised by neighboring farmers about the safety of their water. But the corporation withheld information about the discharges from the California Water Quality Control Board. One memo to the corporate management in Houston stated flatly. "Should the water quality control regulatory agencies become aware of the fact that we percolate our pesticide wastes, they could justifiably shut down our entire Ag Chem plant operation."

Dennis Virtuoso, a United Steel Workers local official who works in a plant bordering the Hyde Park dumpsite—a plant where workers have suffered from the diseases mentioned above—put Hooker's actions in proper perspective when he testified at the hearings last spring.

"They are polluting our air," he said. "They are ruining our environment. They are killing our people. If that is not a crime, I do not know what is."

III

The Conyers-Miller bill will not guarantee that future Hooker Chemicals will not pollute future communities—no legislation can stop companies who believe they can cut costs if they violate laws which go under-prosecuted. But enactment of H.R. 4973 should make such business abuse less prevalent.

Advocates from the business community are beginning a campaign to defeat this measure, arguing that its provision could lead to "over-deterrence." Such opposition, while perhaps predictably, is unpersuasive for several reasons. First, if anything, as previously discussed, there is gross under-deterrence of business abuse now. Second, given the kind of injuries this law attempts to avoid, we agree with the comment of an official of the National Association of Manufacturers that to oppose the purpose of H.R. 4973 is almost "un-American." Especially for those who normally embrace strong measures for law and order, it would appear hypocritical to suddenly go soft on "corporate law and order." Third, improved law enforcement and deterrence is not more regulation; indeed, to the extent it is successful, in frustrating abusive conduct this bill would avoid the kind of extensive regulation often necessary when consumers are injured in the marketplace. Fourth, this bill should help promote public confidence in business, by reducing the likelihood of hazardous conduct. Finally, it is appropriate that business people most knowledgeable about the impact of their technology be required to report on its hazards—who better than them? They are first with the information to sound the alert. It is morally and operationally unacceptable for business leaders to be free to hype the virtues of their products to the general public but yet balk when asked to report on the hidden harms of their products to the consuming public.

While H.R. 4973 is a useful first step toward reducing business crimes in the health/safety area, it should be recognized for how modest a step it is. Assuming the

articulated premises of this bill, a more effective version would also contain provisions along the following lines:

The "knowingly fails to so inform" standard is so strict that it allows business executives to design an organization that insulates them from the actual knowledge of serious product dangers—i.e. they can self-develop "plausible deniability." This measure should also contain a "reckless" standard of diligence; "reckless" connotes a sufficient degree of moral turpitude and indifference to life as to be a fitting standard for criminal prosecution—especially when the costs of the crime can be so immense to proximate communities.

There should be a "restitution" provision, so that those who are injured a a result of the failure to report adequately product hazards to the "appropriate federal agency" and "affected workers" would be made whole by those responsible. As between the culprit and the victim, it is appropriate that criminal law presume that the former pays rather than profits.

Beyond tradional criminal penalties, the sanction of "disqualification" ought to be imposed on executives proven to have violated their power by engaging in seriously dangerous acts. Why allow them to continue in such positions of power over innocent people, especially since the Landrum-Griffin Act provides for disqualification of labor leaders guilty of misconduct in office. Thank you.

PREPARED TESTIMONY OF SIDNEY M. WOLFE, M.D., PUBLIC CITIZEN'S HEALTH RESEARCH GROUP

Mr. Chairman, thank you for your invitation to testify on this important legislation.

From the perspective of preventive medicine, this legislation seeks to reduce the the number of injuries and deaths by requiring businesses to disclose promptly to the appropriate federal regulatory agency and to affected workers newly discovered dangers associated with their products. By imposing fines and/or jail sentences on the responsible business persons who fail in such notification, Congress seems clearly intent on an important effort aimed at preventing needless death and injury. All of these ounces of prevention and any other ways of preventing illness are not only appropriate but quite necessary as the current bill for the pound of cure (the health budget) will be at least 220 billion dollars in 1980.

I will briefly review a recent case involving the antihypertensive drug Selacryn which illustrates how large numbers of people were seriously injured and, in many cases people were killed as a result of such delays. First, I will summarize a letter to FDA Commissioner Dr. Jere Goyan sent on January 24, 1980 asking him to urge the Justice Department to bring criminal charges against Smith, Kline & French (SKF), a major U.S. drug company, for apparent violations of the Drug Law. Next, I will review new information obtained since January 24 which makes it even clearer how much the company delayed in reporting life-threatening adverse drug reactions to the FDA, and how many people were needlessly exposed to the drug and injured by it as a consequence of the illegal delay. Finally, I will comment on ways this legislation could be strengthened.

JANUARY 24 LETTER TO FDA

Attachment 1 is the letter to FDA Commissioner Goyan including a chronology of the events as of January 24 and a copy of the January advertisement for the drug. I stated then that Smith, Kline & French violated the Drug Law by belatedly reporting 12 cases of Selacryn liver damage to FDA in early November buried in a Routine Quarterly Report, instead of reporting each one to FDA within 15 days of the time the company learned of it, as required by law. I said that it was not likely that all 12 cases had occurred within 15 days of the November Quarterly Report. Once FDA became aware of this information—in December—it was used as a basis for taking the drug off the market on January 15, 1980. At the January 15th meeting when this decision was made, SKF suddenly presented FDA with 40 new cases of liver damage, including 5 deaths.

NEW INFORMATION

Attachment 2 is an updated chronology which has recent information concerning when the company was actually notified by physicians of the cases of liver damage and data concerning sales of the drug during and after this time. The following points summarize this chart:

1. For 11 (of the 12) cases included in the routine SKF Quarterly Report to FDA for which information is available as to when SKF learned of them, all 11 were reported (in the November 2 Quarterly Report to FDA) far later than the 15 day

maximum limit for reporting such unexpected adverse reactions. The longest delay was 105 days (a case reported to SKF July 20th) and the shortest was 36 days. Thus each case constitutes an illegal delay in reporting.

2. By early September, SKF had 4 reports of liver damage and had received a 2nd report concerning one of those 4 patients who, after taking just one pill (a second course of therapy—a rechallenge case) got hepatitis for the second time. This rechallenge case proving a causal relationship—combined with information from France about other rechallenge cases which had occurred by that time—should, even in the face of earlier negligence in reporting, have caused SKF to report their findings promptly to FDA in early September.

3. From September through November, 230,000 prescriptions were filled, probably representing about 200,000 of the 300,000 patients SKF claims have used the drug. If SKF had reported to FDA even in early September with red flags on the reports instead of burying them in Volume 3 of a routine 7-volume submission dated November 2, at least 200,000 people would have been spared exposure from the drug as it would likely have been removed from the market then instead of several months later.

4. According to FDA sources, about one in 500 people exposed to the drug gets liver damage, about 60 percent getting jaundice. Accordingly to an authority on drug-induced liver damage,[1] about 1 out of every 10 patients who get drug-induced liver damage with jaundice dies.

Therefore, the 200,000 patients who were needlessly exposed to this drug because of delays in reporting to FDA and the consequent delay in banning the drug probably had approximately 400 cases of hepatitis (1 in 500) about 240 with jaundice (60 percent), and approximately 24 deaths.

5. At the same time SKF was withholding evidence of life-threatening adverse reactions from FDA, it was actively promoting the drug, offering free samples in a September-October 1979 mail campaign, and, in a January 1980 medical journal advertising blitz, was telling doctors to use it as a "first-step drug" for hypertension and trivailizing the adverse reactions by saying they were "similar" to those seen with thiazides (the most commonly-used drug for hypertension/diuresis).

In other words, by trivializing the risks (to FDA and doctors) but emphasizing the benefits through major advertising campaigns, SKF sold several million dollars more of Selacryn[2] after it knew but didn't tell of the serious dangers of the drug.

Even though the company claims it acted "responsibly" and that FDA had earlier taken the same position, FDA Associate Commissioner Wayne Pines has recently said, "It appears that SKF may have violated the regulation."[3]

SUGGESTIONS OF H.R. 4973

1. Mandatory jail sentences for violators

As presently worded, H.R. 4973 assesses penalties of fines not less than $50,000 *or* imprisonment for not less than two years for individuals convicted of violations. As long as a poor person goes to jail for stealing a loaf of bread but a corporate executive can escape jail and pay a fine for withholding information which leads to the deaths and injuries of may people, there is no law and order. A minimum mandatory jail sentence of at least 60 days should be inserted in the legislation with longer sentences depending on the nature of the violation.

2. Adequate protection for corporate whistle-blowers

Unless the growing number of corporate whistle-blowers is given protection from dismissal and other retaliatory measures, the legislation will not be as effective as it could be.

In summary, the case of Smith, Kline & French is one more example of why decisions to withhold information about serious dangers in order to maximize sales need to be countered by strong criminal sanctions against those responsible for such decisions. FDA and other federal regulatory agencies will be able to do a much better job protecting the public when the flow of such information is speeded up by the fear of jail instead of slowed down by the fear of making less money.

Thank you.

Mr. NADER. Thank you, Mr. Chairman.

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[1] Dr. H. Zimmerman, "Hepatotoxicity: Adverse Effects of Drugs and Other Chemicals on the Lives," Appleton Century Crofts, 1978.

[2] Bache, Weekly Portfolio Comments, Jan. 21, 1980, estimates total 1979 United States sales of Selarcryn at $5–8 million.

[3] Food, Drug & Cosmetic Reports, Jan. 28, 1980.

We wish to commend you for the hearings which you have been holding on corporate crime. In a period of our history when corporate crime is at an epidemic level, there seems to be few investigations of this phenomenon which I think demonstrably takes more lives and provokes more injuries and inflicts more dollar costs than the much more heralded street crime phenomenon in our society.

Also, the phenomenon of corporate crime tends to produce enormous disrespect for the law when these criminal activities are exposed and prosecuted by the enforcement authorities of our land. Many people look at the leaders of our society and expect them to be held accountable, particularly the business leaders who are so much more prevalent with their impact on people than any other sector in our country.

It is important that this committee's deliberations result in enactment of strengthening provisions of the Federal Criminal Code such as, of course, what is now before your committee in the form of H.R. 4973.

I would like to introduce Dr. Sidney Wolfe who will focus on one particular case study involving the drug industry and then we will continue with our testimony.

Mr. CONYERS. Very well, you may proceed.

Dr. WOLFE. From the perspective of preventive medicine, this legislation seeks to reduce the number of injuries and deaths by requiring businesses to disclose promptly to the appropriate Federal regulatory agency and to affected workers newly discovered dangers associated with their products.

By imposing fines and/or jail sentences on the responsible business persons who fail in such notification, Congress seems clearly intent on an important effort aimed at preventing needless death and injury.

All of these ounces of prevention and any other ways of preventing illnesses are not only appropriate, but quite necessary as the current bill for the pound of cure—the health budget—will be at least $220 billion in 1980.

I will briefly review a recent case involving the antihypertensive drug Selacryn which illustrates how large numbers of people were seriously injured and, in many cases, people were killed as a result of such delays.

First, I will summarize a letter to FDA Commissioner Dr. Jere Goyan dated January 24, 1980, asking him to urge the Justice Department to bring criminal charges against Smith, Kline & French (SKF), a major U.S. drug company, for apparent violations of the drug law.

Next, I will review new information obtained since January 24, which makes it even clearer how much the company delayed in reporting life-threatening adverse drug reactions to the FDA, and how many people were needlessly exposed to the drug and injured by it as a consequence of the illegal delay.

Finally, I will comment on ways this legislation could be strengthened.

Mr. CONYERS. We have the letter that you sent the Commissioner. Without objection, it will be incorporated in the record. [See appendix.]

Dr. WOLFE. I will just summarize it in a sentence or two. The letter includes a chronology of the events as of January 24, and a copy of the January advertisement for the drug.

I stated then that Smith, Kline & French violated the drug law by belatedly reporting 12 cases of Selacryn liver damage to FDA in early November buried in a routine quarterly report, instead of reporting each one to FDA within 15 days of the time the company learned of it, as required by law.

I said that it was not likely that all 12 cases had occurred within 15 days of the November quarterly report. Once FDA became aware of this information—despite the handicap that it was buried in a long routine report made in December—it was used as a basis for taking the drug off the market on January 15, 1980.

At the January 15 meeting when this decision was made, Smith, Kline & French suddenly presented FDA with 40 new cases of liver damage, including five deaths.

Attached to my statement is a graph. I would like to go over it a minute and summarize what I think is shown by this case. It is called attachment 2. On the bottom is a calendar starting in May of 1979 when the drug was first put on the market. Right above that are the month-by-month sales starting out with 3,000 and going up to 80,000 in October. Above that indicated by circles are individual case reports of liver damage and the time is when the company found out about these cases.

As you can see, the company found out about one case as early as July.

Above that is a brief review of two very large promotional campaigns, one a mail campaign to every doctor in the country, including me, offering free samples of the drug which went out in September and October and currently a massive medical advertising campaign saying, "First step drug for treating hypertension," and, "Prescribe with confidence."

This is an ad ran in January, long after the company was aware that there should be something less than confidence in this drug.

To summarize these findings concerning the drug and the way in which the company behaved: One. For 11 of the 12 cases included in the routine Smith, Kline & French quarterly report to FDA for which information is available as to when Smith, Kline & French learned of them, all 11 were reported in the November 2 quarterly report to FDA, far later than the 15-day maximum limit for reporting such unexpected adverse reactions.

The longest delay was 105 days, a case report to Smith, Kline & French on July 20, and the shortest was 36 days. Thus, each case constitutes an illegal delay in reporting.

Two. By early September, Smith, Kline & French had four reports of liver damage and had received a second report concerning one of those four patients who, after taking just one pill, a second course of therapy—a rechallenge case, got hepatitis for the second time.

This rechallenge case proving a causal relationship, combined with information from France about other rechallenge cases which had occurred by that time, and in the face of earlier negligence in reporting, should have caused Smith, Kline & French to report their findings promptly to FDA in early September.

Three. From early September through November, 230,000 prescriptions were filled, probably representing about 200,000 of the 300,000 patients Smith, Kline & French claims that have used the drug.

If Smith, Kline & French had reported to FDA even in early September with red flags on the reports instead of burying them in volume 3 of a routine seven-volume submission dated November 2, at least 200,000 people could have been spared exposure to the drug as likely it would have been removed from the market then instead of several months later.

Four. According to FDA sources, about one in 500 people exposed to the drug gets liver damage, about 60 percent get jaundice. According to an authority on drug-induced liver damage, about 1 out of every 10 patients who get drug-induced liver damage with jaundice dies.

Therefore, the 200,000 patients who were needlessly exposed to this drug because of delays in reporting to FDA and the consequent delay in banning the drug probably had approximately 400 cases of hepatitis, 1 in 500, about 240 with jaundice, 60 percent, and approximately 24 deaths, 1 in 10.

At the same time, Smith, Kline & French was withholding from FDA, evidence of life-threatening adverse reactions. The company was actively promoting the drug, offering free samples in a September-October 1979 mail campaign and, in a January 1980, medical journal advertising blitz, was telling doctors to use it as a first-step drug for hypertension and trivializing the adverse reactions by saying they were similar to those seen with thiazides, the most commonly used drug for hypertension/diuresis.

In other words, by trivializing the risks to FDA and doctors, but emphasizing the benefits through major advertising campaigns, Smith, Kline & French sold several million dollars more of Selacryn 2 after it knew, but did not tell of the serious dangers of the drug.

Even though the company claims it acted responsibly and that FDA had earlier taken the same position, FDA Associate Commissioner Wayne Pines has recently said, "It appears that Smith, Kline & French may have violated the regulation."

Our suggestions for H.R. 4973 are:

One, mandatory jail sentences for violators: As presently worded, H.R. 4973 assesses penalties of fines not less than $50,000 or imprisonment for not less than 2 years for individuals convicted of violations. As long as a poor person goes to jail for stealing a loaf of bread but a corporate executive can escape jail and pay a fine for withholding information which leads to the deaths and injuries of many people, there is no law and order. A minimum mandatory jail sentence of at least 60 days should be inserted in the legislation with longer sentences depending on the nature of the violation.

Two, adequate protection for corporate whistleblowers: Unless the growing number of corporate whistleblowers is given protection from dismissal and other retaliatory measures, the legislation will not be as effective as it could be.

In summary, the case of Smith, Kline & French is one more example of why decisions to withhold information about serious

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dangers in order to maximize also need to be countered by strong criminal sanctions against those responsible for such decisions.

FDA and other Federal regulatory agencies will be able to do a much better job protecting the public when the flow of such information is speeded up by the fear of jail, instead of slowed down by the fear of making less money.

Mr. CONYERS. Thank you very much, Doctor.

Mr. NADER. We have had a long-standing concern about the growth of business crime. The documented level and cost of crime in the suites today should concern all those who promote consumer values in the competitive marketplace and who seek an effective system of law enforcement.

The proposal before the committee, H.R. 4973, is a simple and workable reform that can begin to reduce the willful and unnecessary hazards that confront people at home, work, or in the marketplace.

But before discussing that particular remedy in part III, we would like to put it in a proper empirical context in parts I and II. Was it Whitehead who said, "Duty arises from the power to affect the course of events"? What this proposal is doing is focusing on managers within corporations who have indeed the power to affect the course of events and imposing the modest duty of alerting the authorities and the public of these hazards.

In our testimony we go through a number of categories of business crimes. Under the section entitled "Prevalence" we note that there is an extraordinarily poor recordkeeping system by the Justice Department for business crime, a point that the committee has made in the past and a point that has to be made again and again.

We have the 10 most wanted criminals on the FBI list who are all street criminals. We should perhaps institute a 10-most-wanted-corporate-criminals list for the FBI to focus some of its attention on. Indeed, it may emerge as recidivists, as repeated offenders, indicating a level of management offensiveness an calousness that is beyond the norm.

In our testimony we discuss one of these companies, the Hooker Chemical Co., which has been trying its best to turn America the Beautiful into America the wasteland.

Hooker, which is a wholly owned subsidiary of Occidental Petroleum, is headed by Armand Hammer, a consort of presidents and a collector of paintings and a vigorous believer in trade with the Soviet Union.

To focus on this kind of corporation tends to take the issue of corporate crime away from the theoretic and abstract and bring it right down to the victim such as those poor families in Niagara Falls who were exposed without their knowledge to noxious chemical hazards which were reposited in the Love Canal dumping site and their children were exposed to this for years without their being informed of what it was beneath their homes, what it was that was seeping in their cellars and what it was that was bubbling up in the school playground.

The representative of Hooker Chemical came down last year to the House of Representatives and in effect said that his company did not render a public alert because it did not want to incur liability.

Other categories of corporate crime involve, of course, the traditional price fixing. We cite the statement by a former Antitrust Division official, Joe Simms, who says that, "Price fixing is a common business practice." Of course price fixing is also a common crime and one that goes back to the Sherman antitrust law of 1890 which was passed by a Republican-dominated Congress.

A relatively new category of illegality—chemical crime—has begun to spread, as Kepone, PCB's, PBB's, and other exotic chemicals work their way into the human environment, and is now receiving greater attention by a special unit of the Justice Department as well as by the Environmental Protection Agency.

But the task of doing something about these chemicals and chemical waste dumps will be a monumentally expensive one, burdening the public's budget in the eighties and pointing once again that due attention to corporate crime at the proper time is not only justice, it is not only health and safety, but represents economically an ounce of prevention to ward off tons of cure in terms of dollars that will have to be spent.

There also has been a series of coverups of product hazards such as the Ford Motor Co. situation, the Firestone Co. radial 500 tire situation. Both of them were known at high levels of management for their unique hazard or failure rate in the case of Firestone as well as the burgeoning asbestos contamination tragedy, a form of hazardous exposure known to companies such as Johns Mansville back in the thirties but kept away from detection of Government authorities and the victims who were, of course, the workers.

For a Congress that is supposed to be concerned with costs, it should be concerned with corporate crime from that viewpoint as well. In 1965, the Joint Economic Report lists a figure that does not even include the cost of antitrust or environmental violations.

Bank robbers took off with about $20 million last year from banks, incurring the pursuit of legions of FBI agents and local enforcement officials.

If someone wants to distinguish that from the $44 billion figure which does not even include antitrust or environmental violations, one might add that corporate crime not only inflicts economic costs but very serious damage to health and safety, producing mortality and morbidity levels that increase with every expansion of the scrutiny of this tip of the iceberg situation.

It is now estimated, for example, it costs $8 billion to clean up the Kepone contamination of the James River in Virginia. It should have cost Allied Chemical a tiny fraction of that to dispose of kepone properly.

There was also the indirect assault on public truth when in Brazil a number of years ago one candidate for the governorship of the state of Pernambuco ran on the slogan: "To my enemies the law; to my friends, facilities."

Mr. CONYERS. Where was that and what year?

Mr. NADER. The state of Pernambuco in the northeast of Brazil where Recife, the state capital, festers.

The important thing about that is that was considered an acceptable slogan which reflects the widespread opinion among the public as to the low repute of the law.

That kind of attitude spreads in this country because the big boys get off scot free in their crimes, and we are in for really serious trouble, because one of the few things that hold up in an organized society is the rule of law, and what holds up the rule of law is the feeling among a sufficient number of citizens that it is fair and equitably applied. Once that feeling is replaced by cynicism, then even the form that surrounds the law crumbles and then you are on your way to this kind of situation.

In the area of enforcement efforts, despite the prevalence and costs of corporate crime, the Federal effort against it is underfunded. The ABA might be the first to improve this.

Its criminal law section is still overwhelmingly concentrated in the area of street crime. After all, if they went into focus on corporate crime they would be casting certain reflections on their clients and they have been rather inhibited from doing that.

A report came out a few years ago that made this conclusion that there needs to be more priorities and funds given to the study of the prevalence and costs of corporate crime and a greater law enforcement effort against it.

The House Judiciary Committee, this Subcommittee on Crime, in a preliminary survey as you know, found that only 5 percent of the Justice Department's resources, $139 million, out of $2.5 billion, were devoted to white collar crime.

Under pressure from critics, Attorney General Edward Levi created an interagency white collar crime task force in the mid-1970's, yet it never issued any public report or recommendation.

In a November 1975 report, Paul J. Curran, the outgoing U.S. attorney for the Southern District of New York, complained that "except for the Securities and Exchange Commission and the Internal Revenue Service, which operate in fairly narrow areas, the Federal agencies responsible for investigating these white collar crime cases are simply not doing the job."

Until the creation of the Watergate special prosecutor, the Justice Department had never moved against illegal contributions to political figures.

When last checked, there was not even a reporting category for business crime in the FBI's detailed annual compendium, "Crime in the United States," although there are 27 other categories.

Even where the Federal Government moves against business abuse civilly or criminally, the results are often insignificant. The chances of being sentenced to a prison term is 20 percent for those indicted for bank embezzlement and 89 percent for those indicted for bank robbery.

Our testimony gives other examples of what can only be called a double standard of law enforcement: one applied to street crime, one applied to corporate crime.

In Marshall Clinard's study of the 582 corporations, 88.1 percent of all sanctions imposed were administrative in nature, for example, cease and desist, 9.2 percent were civil, and 2.7 percent criminal. In only 0.9 percent of all enforcement actions was a corporate official criminally sanctioned—probation, fine, suspended sentence, or jail; in all, five officials—out of 1,553 actions—went to prison.

More specifically, C. Arnholdt Smith, whose misappropriation of $400 million led to the collapse of a $1 billion bank, received a 5-

year probation and a $30,000 fine to be paid at the rate of $1,000 per year for 30 years.

After pointing out we have material summarizing the Hooker Chemical Corp.'s predations, I would like to turn to the last part of my testimony, which deals with the proposed bill. The Conyers-Miller bill will not guarantee that future Hooker Chemicals will not pollute future communities.

No legislation can stop companies who believe they can cut costs if they violate laws which go unprosecuted, but enactment of H.R. 4973 should make such business abuse less prevalent. Advocates from the business community are beginning a major campaign to defeat this measure, arguing that its provision could lead to over-deterrence.

I wonder who creates these phrases, over-deterrence.

Such opposition while perhaps predictable is unpersuasive for several reasons: First, if anything, as previously discussed there is gross under-deterrence of business abuse now.

Second, as a matter of fact, one businessman once told me something quite astonishing. He said the penalties for securities fraud are so weak and so unlikely to be imposed that he knows people in New York who say that if they can get away with a $3 million fraud, squirrel it out of the country, and even if you get caught and go to jail for 1 year, it is worth it.

He was reflecting their own mindset. They literally perform those kinds of calculations. That is one reason why scholars in this field have said that sanctions against corporate crime tend to be more deterrent than sanctions say even of street crime.

Street crimes tend to be more emotional, impulsive, where corporate crime, business crime tends to be planned, calculated, and if it is not calculated it is perpetuated. After the onset of the crime, its perpetuation is certainly a factor of deliberate knowledge.

Given the kind of injuries this law attempts to avoid, we agree with the comments of officials of the National Association of Manufacturers that to oppose the purpose of H.R. 4973 is almost un-American. How many times have you heard a business executive come up and say, Mr. Chairman, we applaud the purpose of the legislation. The only thing we are against is the legislation.

Especially for those who normally embrace strong measures for law and order, it would appear hypocritical to suddenly go soft on corporate law and order. I am still waiting for the first Member of Congress to be defeated because of being charged by his opponent as being soft on corporate crime. That would really be a tremendous advance in public priority accorded to this situation.

Third, improved law enforcement and deterrence is not more regulation, as that word is used; indeed, to the extent it is successful in frustrating abuse of conduct, this bill would avoid the kind of extensive regulation often necessary when consumers are injured in the marketplace. In other words, it is preventive medicine.

Fourth, this bill should help promote public confidence in business and you know how interested we are in helping to promote public confidence in business, Mr. Chairman, by reducing the likelihood of hazardous conduct.

Finally, it is appropriate that business people most knowledgeable about the impact of their technology be required to report on

its hazards—who better than them? They are the first to know, and are in the position to be the first to blow the whistle, to alert the public. They are first with the information to sound the alert, in other words.

It is morally and operationally unacceptable for business leaders to be free to promote the virtues of their products to the general public yet balk when asked to report on the hidden harms of their products to the consuming public.

This is going to be an increasing problem. By the way, if you want a new context for this bill, with the gene splicing industry that is beginning to develop according to reports in the newspapers in the last week, it will become a very major industry involving thousands of laboratories all over the country in the next 25 years.

Just consider the incentive to hide the features of this kind of research, say to produce new medicines, and the disincentive to show the hazards, and it is extraordinarily important for new scientific and engineering developments to be foreseen by your committee because this type of bill is going to be even more critical with every advancing year. Because with every advancing year there are more and more latent hazards to millions of people which are only known to fewer and fewer specialists.

While H.R. 4973 is a useful first step toward reducing business crimes in the health and safety area, it should be recognized for how modest a step it is. Assuming the articulated premise of this bill, a more effective version would also contain provisions along the following lines and we make these following suggestions:

The knowingly-fails-to-so-inform standard is so strict it allows business executives to design an organization that insulates them from the actual knowledge of serious product dangers; that is, they can self-develop plausible deniability.

This measure should also contain a reckless standard of diligence. Reckless connotes a sufficient degree of lack of moral turpitude and indifference to life as to be a fitting standard for criminal prosecution, especially when the cost of the crime can be so immense to communities nearby.

There should be a restitution provision so that those who are injured as a result of the failure to adequately report product hazards to the appropriate Federal agency and affected workers would be made whole by those responsible. As between the culprit and the victim it is obviously appropriate that the criminal law presume that the former pays rather than profits.

Beyond traditional criminal penalties the sanction of disqualification should be imposed on executives known to have violated their power by engaging in seriously dangerous acts. Why allow them to continue in such positions of corporate power over innocent people, especially since the Congress has a historical analogy to work from, and that is the Landrum-Griffin Act, which provides for disqualification of labor leaders guilty of misconduct in office.

Thank you.

Mr. CONYERS. I want to express my appreciation for both statements and inquire if Attorney Green wanted to add anything?

Mr. GREEN. No, when Ralph testified he was speaking for both of us.

Mr. CONYERS. All right.

Let me ask you, Mr. Nader, is there something in science and technology that is creating an increasing danger to which we are attempting to address in the bill before us now?

You pointed to increasing science and technology and a great new number of variations that are coming out and that this bill is only the beginning of a legislative effort to deal with that.

Mr. NADER. Yes. If St. Claire had not written in "The Jungle," about dirty, unsanitary meat knowingly sold to the public, who would know about that? Everybody in the plant, including the people who take the meat to market.

It is kind of common parlance, when you are dealing with specialized scientific engineering activities, the handling, say, of nuclear waste, at a particular repository, the transportation of viral or bacterial material, this begins to be known to fewer and fewer people and they are specialists. Many of them would be Ph. D.'s in biology or chemistry, or genetics, and it is extremely important for responsibility in these corporations to be localized, to be focused.

When an appropriate manager knows he or she comes under this provision, what are they going to do? They are going to take a greater interest in the activities beneath them in the organizational hierarchy to make sure things are done properly, things are reported, and things are not covered up. So the deterrence is not only to the appropriate manager and vertically upward, if there is any upward executive superior, but also downward.

I think there is a great thrust in our society to develop organizational facades that shield people in authority from responsibility. That is one of the great functions of the corporate structure, that it diffuses and shields and includes personal responsibility for activity and behavior.

And as science and technology develops, this organizational facade will be joined with the camouflage of technical jargon and specialized scientific activity which can make it even more difficult to root out, barring the prevalence on the statute books of such a provision as your legislation.

Mr. CONYERS. In other words, scientific development is now becoming so remote and arcane that it will not be within common knowledge as earlier predations that you referred to were? I am quite prepared to agree with that.

Let me inquire of all of you—these questions are open to all who would choose to respond: With regard to incarceration and realistic finance for corporate violations, I find that a very interesting area, because in many other activities I am found trying to get realistic sentencing provisions as regards street crime and I want to make sure that I am not rushing to another area, to impose excessive sentencing in another area that seems to be, at least nominally, a contradiction in that regard.

Would not the realistic imposition of sentences that amounted to penalty damages which go to the motive that created most of the misconduct in the white collar area have as much deterrent effect as bringing in the possibility of sentence abuse over from the street crime area into the white collar crime area?

Mr. NADER. I do not think so. I think an economic penalty geared to the seriousness of the crime is merited. Again, it would have to

be applied not just to the corporation but to the culpable executives involved.

Again, there would have to be a prohibition on insurance against such penalty, so they do not just transfer the cost. But it really is not enough. What we want to try to do is two things: One, as long as we have jails in this country, if only the poor and the oppressed who are charged with crimes end up in the jails, you will have prison abuse, prison brutality and prison conditions that only produce more crime after they get out of prison.

As long as there are jails, the jails must be class blind, they must entertain and feed and take care of the rich, as well as the poor. We will then have a better idea of what penology is all about and a better idea of what prison conditions should be changed.

Second, I think that the stigma of criminal incarceration should be amplified by a coordinate behavioral sanction. For instance, if the Allied Chemical executives were sent to jail, which they were not, having them go to jail for a few years and then after getting them out of jail, having them spend a few years cleaning up the James River, along with the others who have to clean up that river.

That does two things: One, it tells the society that the law does not differentiate between the rich and poor or powerful and weak, because they do end up in jail after due process, et cetera, and second, it engages a rehabilitation. After spending a few years cleaning up the James River, there might be a lot of managers in the chemical industry who don't want to poison the rivers.

Behavioral sanctions are way underutilized. I think about the only time we utilized them, as we mentioned in our testimony, is in regard to price fixing, and after being convicted, requiring them to speak to a number of community groups like the Rotary Club, to tell them how bad price-fixing is.

People have looked at how that particular sentence worked. A California judge, indicated that it really was not all that onerous for the defendents.

Mr. CONYERS. It sort of made a mockery of the principle that was supposedly enunciated, it seems to me.

My final question, before I recognize Mr. Gudger, is whether you find, in your judgment, that the conditions in our society that support obeying the law are still in the process of crumbling, or has there been within recent time an effective enough reversal occurring?

Where do we appear on a linear time scale in terms of whether the Government's approach toward law and justice has a strengthening or a deteriorating effect as we move into the eighties?

Mr. NADER. Well, if I compared the present with the past, at least the Justice Department is putting more people on this problem, and concern over the problem creeps into the speeches of attorneys general and division chiefs once in a while.

But if you looked at it in terms of the burgeoning expense of corporate criminal activity, it probably is trundling along a little faster but falling behind a little more; trundling along faster than 15 years ago but falling behind even more.

The development of a corporate crime task force and a corporate crime law enforcement capability at the district attorney level, the

local and State, and at the Justice attorney level requires a major program. You have to have accountants, actuaries, and different kinds of investigators than when you are dealing with street crime, and all of these are difficult to employ.

Often actuaries, for example, are almost overwhelmingly employed by the insurance industry, which accounts, in part, for the fact that the insurance part of the Internal Revenue Code is not enforced; not only is it arcane, but it is not enforced.

I think we have to be very careful to distinguish between technical violations of complex laws and really serious, egregious, blanket, repeated, violations of health and safety laws that produce death and injury.

A lot of times the technical violations of these laws produce a casualness, both on the part of law enforcers and the violators. They say, well, the IRS Code is 1,500 pages; who could not trip over a provision or two there.

I hope the committee makes a very clear distinction between what are technical violations, and those that really harm people.

I also hope the committee asks the Justice Department in more detail than ever before as to why it refuses to take certain case referrals from the Food and Drug Administration or the National Highway and Traffic Safety Administration and prosecute them.

The National Highway and Traffic Safety Administration, for example, was hampered in its pursuit of the Firestone 500 radial tire situation because the Justice Department notified them they would not take the case as a criminal prosecution case, and regulatory agencies have not been really able to tell their story about how hard it is to get compliance with their regulations because of the attitude of the Justice Department.

The U.S. News & World Report had a two- or three-page article sometime last October reflecting some quotes by some of these regulators saying you should see how hard it is even when we have the goods on these companies to get them prosecuted or to get them to stop what they are doing.

I think the committee could make a major contribution if it could do what no other committee in the history of the U.S. Congress has been able to do, and that is turn the Justice Department around to recognize the need to service these regulatory agencies more effectively than has now been the case.

Mr. CONYERS. Thank you very much.

Mr. Gudger, the floor is yours.

Mr. GUDGER. Thank you, Mr. Chairman.

I believe I will address my first question to Mr. Wolfe, since we were addressed in turn by Mr. Wolfe and by Mr. Nader.

You spoke of this Selacryn manufactured by Smith, Kline & French, and you told us about the instances of liver damage. Was this over a period of time, or was it reported late in your calculation?

Let me put the question in a different context. Some years ago in my trial practice, I had occasion to bring a suit against the manufacturer of a drug known as Aralyn, an antimalaria, which caused a confined retinopathy or destruction of the retina of the eye.

The manufacturer did not, I am sure, realize when this initially went on the market that it was going to have this characteristic

unless very carefully monitored when used in the treatment of arthritis. The antimalaria had been discovered in World War II to have a substantial effect on retarding the pain and effects of arthritis, even rheumatoid arthritis, and this product came on the market for the purpose of such treatment, but caused the eye damage.

My client experienced substantial blindness with an area of vision retained about the size of a quarter at 18 inches and the rest of the retina being beclouded and destroyed.

Was the situation with Selacryn somewhat like that? Did the discovery of its side affects or its aftereffects come on gradually, and did the company move with reasonable expedition or was there actual concealment?

Dr. WOLFE. I am very familiar with the case that you have been involved with, the Aralyn case. In this case, at the time the drug was marketed, they did not believe that the drug caused liver damage and because of that, when the cases of liver damage started coming into the company—and as I indicated on the graph attachment to my statement, they started coming in as early as July, and then more in August, and a whole batch in September—because there had not been previously any causal relationship made between the drug and liver damage. This really did constitute an unexpected finding, and according to the present drug regulations, whenever a company finds an unexpected finding in the course of a drug that is already on the market it has to report this as an unexpected finding within 15 days.

Now not only did it not report the first one, but all 10 or 11 of the 12 that we have dates on were known to the company. They were filed and allowed to accumulate and not for yet another month after the last of the ones was received by the company did the FDA get notified, and even then it was not notified of this block of cases as an unexpected finding. These cases were inserted in the middle of a massive 7-volume routine report.

The FDA employees I have spoken to say there are two kinds of information that come in the course of drug marketing. One is the routine reports which are supposed to have only routine findings, and then the red flagged ones, which are unexpected, which are supposed to be reported within 15 days.

If they have their choice, they always go first in terms of examining the red flagged ones, and since they were not red flagged, they were put in a routine report and even yet another month went by after the receipts.

I think it is clear these were expected findings for which the company delayed a considerable period of time before alerting, and even when they alerted the FDA, it was done in as quiet and unassuming routine way as possible.

Mr. GUDGER. Thank you for that clarification.

I would like to ask one question of Mr. Nader. First, I want to commend him for his description of the Hooker experience and the Love Canal situation.

I come from North Carolina, and we just had a very bad situation with PCB dispersion along the highways down there, and, as a result, an effort to prosecute. It was a very difficult situation.

I think we all know that all over the United States many of these chemical agents which are highly poisonous, highly deleterious, both to herbs and to humans, are finding their way into discharge points from old mines and abandoned wells, and every kind of place that can be used for this purpose carried there perhaps by some trucker who has been given $15 a barrel to remove them from the company's premises.

Unlike the Love Canal situation where there is a clear discharge point, these things can turn up 100 miles away from their service.

Now clearly the person in the corporate structure responsible for seeing them hauled off the premises is bound to know they are likely to turn up in a place where they would be hazardous, and I see Mr. Miller's bill very much in the context of putting a responsibility on a corporate officer to know that there is a reckless endangerment down the line. This is what you were addressing so effectively earlier.

Reckless endangerment is being addressed in the criminal code rewrite in the Criminal Justice Subcommittee of the Judiciary Committee, but certainly it parallels and is closely tied to this disclosure bill of Mr. Miller, and I commend you, Mr. Nader, for, in effect, tying them together in your concluding remarks.

I want you to comment just a little further and relate the type of endangerment in the PBC situation and the Love Canal, as to the punishment that might fall on the corporate officer, not merely the corporation with the respect to the obligation to clean up. I am not just referring to behavioral sanctions which you have mentioned, but to the corporate officer who recklessly is exposing human life and safety.

Should that corporate officer be punished somewhat like the officers of the labor union under the Griffin-Landrum Act? Should he never be able to engage in that type of business again? Should there be sanctions that involve him personally as well as sanctions against the corporation? Where do you see the State function, vis-a-vis see the Federal function in this complex?

Mr. NADER. Of course, the severity of the sanction depends on each case, and the facts of the case, but in terms of the offerings, there seems to be no reason why traditional criminal penalties cannot be applied here.

If you deal with a criminal manslaughter case on the highway where a driver is drunk and kills somebody, the parallel is quite clear; if not more so, because there is a greater rationality and a greater deliberative time period involving in the corporate official.

I think as far as the State and Federal jurisdictional problems are concerned, I favor parallel jurisdiction. I think it is appalling that the Department of Transportation is now proposing that the Federal Government preempt the State and local officials from a role in deciding the transportation of radioactive waste through towns and villages and cities in the States, and this is what the Department of Transportation is doing. When the Federal Government preempts the police power of State and local officials with the support of industry, one is permitted to reflect that the so-called support for States' rights in the civil rights movement was purely an expediency; that corporations are for States' rights when the Federal Government is breathing down their neck, and they are for

Federal rights when the State governments or the local governments are breathing down their neck. I believe in concurrent jurisdiction.

I also believe that the effect of compliance under this provision will be enhanced if the Environmental Protection Agency develops suitable repositories for such chemical wastes, and requires them to be operational around the country. For instance, the compliance difficulty in a hypothetical case, one where a corporate official hires a truck company to cart away barrels of toxic, not knowing where they are going to be dumped, is much more difficult than the compliance problem involved where the same official hires a truck company and knows that there are designated and sophisticated waste disposal or waste reprocessing plants around the country which will give that truck driver a certificate of acceptance.

It is very important to have a parallel move of enhanced legal accountability, but also enhanced environmental regulation to provide a kind of technological framework for maximum compliance.

By the way, there is very little, attention that has ever been paid in our country to a compliance strategy except sometimes these task forces of the Justice Department. But if you send a letter to the regulatory agencies in this Government and say, would you please give me your compliance strategy as well as your evaluation annually of the degree of compliance under your regulations that prevails, you will not only provoke a vacuum, but you might actually shake them up so they do develop a compliance strategy.

For example, how does the ICC know that their regulations are being complied with? Well, if you talk to them they know there are drastic violations of ICC regulations—for example, regulations dealing with interstate motor bus safety—drastic violations, but they do not put it down in writing. They do not have statistical compliance sweeps to see where noncompliance is or what new prosecutorial resources they should ask Congress to supply them with.

That is why so many of these regulations which are good in theory do not produce the benefit in terms of saving lives and preventing injuries that one would think they should if they were reasonably complied with.

Mr. GREEN. Mr. Gudger, just an additional point on your question about personalizing liability. Prof. Christopher Stone wrote a book "Where the Law Ends." He believes the law ends at the corporation. He said, paraphrasing, managers who call the shots do not bear the risks.

As long as the criminal law socializes the costs of penalties, there will not be individual deterrents. In a sense, right now there is an insurance system whereby the manager knows he is insulated from the reach of the law.

We support in our testimony disqualification provisions analogous to Landrum-Griffin. This is no principle in that one can never get a job at the managerial level but for a set period of time, a cooling off period. A manager who has shown he or she has violated his judiciary responsibilities should not be put back in a responsibility he has already violated.

You do not reinstall an embezzler as a bank teller immediately after a court disposition.

The bill before us is a very modest bill. It is narrow, it is precise, it is brief and it is simple. Those are virtues. It says, knowing violation of a hazardous product. It could have said, one who recklessly fails to so inform, not only one who knowingly fails to so inform. We support a reckless standard—reckless means gross disregard, and it is the example of someone shooting through a window not knowing one may be harmed as a result but knowing there is a serious possibility.

The Business Round Table has been very successful in both chambers at reducing the culpable standard from "reckless" to "knowing" in most instances.

So we support the willful standard in your bill and in an ideal world where the Business Round Table does not have the leverage, they apparently have a reckless standard which would be most appropriate in areas of hazard which are nationwide and communitywide.

They are not just pockets. We are talking about the community's collective health.

Mr. NADER. Whenever you pass a law you have to ask how easy is it for someone to escape any possibility of violating it apart from escape prosecution if they do violate it.

Here the corporate executive can simply say to his subordinates, do not inform me, I do not want to know about it. The reckless standard in some ways gets around that ability to, in effect, personally exempt oneself from the law simply by saying to the company, do not let me know anything about this.

It is interesting that the very companies who oppose the reckless standard apply the reckless standard rigorously in the factory to their workers. That kind of double standard perhaps ought to be brought to the attention of the corporate executives or trade associations who testify.

Mr. GUDGER. May I follow with one brief followup on the point developed by Mr. Nader in his suggestion about compliance sweeps by the ICC. I think all of us who have practiced law know that virtually all of our tractor-trailer rigs in interstate have a speed monitoring recording device, and all of us know that between here and North Carolina that we are occasionally passed by these vehicles when we ourselves are very close to the margin.

I think what you are saying is there should be a routine monitoring to see that the corporation is complying with even a law of this simplicity and certainly with reference to the more serious problem of public transportation where there are clear regulations and there is clear enforcement machinery and where public life and safety is involved in transportation—even more rigorous standards should be carefully monitored to discuss deliberate breach.

When you see a company that is constantly letting the drivers of its tractor-trailer rigs drive at 85 miles an hour thorugh heavy traffic it is getting very serious.

Mr. NADER. That is right. Anything you can add to encourage these compliance sweeps I think would be a very useful innovation.

Somebody asked me, what does this bill do? If I wanted to give a really basic response I would say it requires the corporate executive to incorporate in his behavior the golden rule. Right now it is the mercantile value system that dominates. Whatever is cheaper,

do. Do not put it in the ravine. Give it to some fly-by-night trucking company that can escape any accountability, send it to some underdeveloped company like Sierra Leone and dump it there.

What this bill says is you are not just going to consider your company dollar. You are going to do unto others what others should do unto you. In short, it incorporates in the legal mandate, not mercantile value of health and safety, but everything that counts that you can't buy.

So any company executive that says you cannot legislate morality, you ought to call his bluff because if morality is a precondition of being accepted when the alternative is jail, you can legislate morality.

Mr. GUDGER. Thank you very much.

Thank you, Mr. Chairman.

Mr. CONYERS. Thank you for your questions.

I call on our colleague George Miller.

Mr. MILLER. On that last point on the question of legislating morality, it is obvious in my mind in helping to draft this legislation that I really am not content. I would rather have the 11 million asbestos cases removed from the books. I would rather have those children back who were burned up in the Pinto, and I would rather have those people who were injured in accidents with Firestone tires.

The question is, in your opinion do you think this standard will in fact create a deterrent to the kind of activity where we saw corporate executives exchanging on their own letterhead plans and proposals not to disclose, not to warn; to evade?

Will the jail you trade for morality in fact create a deterrent?

Mr. NADER. I think it will. It also creates a lot of multiple deterrents throughout the company if someone is on the hot seat and accountable under this law.

I think the reckless standard has really to be added. If you ask a prosecutor and you probably have a number of former prosecutors on the committee, the difficulty they will have with this "knowingly fails to" will make a strong case for the reckless standard.

Mr. MILLER. On that point let me ask you a question. Is it not conceivable that you could have both standards and just for the sake of discussion for the moment, is it conceivable you might fail to notify a Government agency but put it in commerce. You send the truck across the country with the lethal material so you have in fact placed it in motion, you have manufactured the Pinto. Now, failure to inform the Government may or may not have some action but clearly to place the product into commerce will have a different action.

There is a two-tier test because if you believe there is a deterrent in the jail provision, it also gives defense to the corporate person who wants to be responsible to his boss to say, I am not going to jail so I want to tell you something.

It seems to me you back up that person who seeks to be responsible.

Mr. NADER. That is true. That is why I would add both of them.

I say knowingly or recklessly. Because the point is very important that you made. It will encourage people to say, I am going to

inform because that is what triggers the standard of accountability under this provision.

I would really add both—knowingly or recklessly.

Mr. MILLER. Thank you.

Mr. CONYERS. This has been a very important set of hearings. We appreciate the panel. We are fully aware of your work in this entire field and we hope that you will continue to give the benefit of your suggestions to the subcommittee, not only with reference to the points of this law but with regard to our larger approach toward the Department of Justice which in some way sets the tone for the prosecutorial mood against corporations and executive-type practice.

We are all in your debt.

Mr. CONYERS. The subcommittee stands adjourned.

[Whereupon, at 12:15 p.m., the subcommittee was adjourned.]

APPENDIX

[ATTACHMENT 1]

PUBLIC CITIZEN HEALTH RESEARCH GROUP,
Washington, D.C., January 24, 1980.

Dr. JERE GOYAN,
Food and Drug Administration,
Rockville, Md.

DEAR COMMISSIONER GOYAN: This letter urges you to ask the Justice Department to bring the maximum criminal charges possible against Smith, Kline and French for an apparent violation of the Food, Drug and Cosmetic Act—failure to promptly report unexpected adverse reactions—which has resulted in a large number of unnecessary injuries to patients using the antihypertension drug Selacryn (ticrynafen) and has probably resulted in a number of needless deaths.

A detailed chronology of the events concerning Selacryn is included as Appendix I of this letter.

The drug laws and regulations (see Appendix II of details) require companies to report, within 15 days of receipt, any unexpected toxicity including toxicity not reported prior to marketing and toxicity occurring at a higher rate than previously found.

Since the labelling for the drug as of November, 1979 mentioned only a "few cases" of abnormal liver tests or jaundice and since it disclaimed any causal relationship from use of the drug, the occurrence of 12 cases of liver damage—as reported in the SKF routine quarterly report to FDA—would clearly constitute an "unexpected" finding.

Unless all 12 cases had occurred within 15 days of the time the quartely report received by FDA on November 9th was written—not likely—SKF failed to report the liver damage within the maximum 15 day period specified in the regulations. This delay, therefore, constitutes a criminal violation of the [illegible] laws, punishable by a maximum fine of $10,000, a maximum [illegible] years in jail [illegible] both if there is intent to defraud or mislead.

The sudden "appearance" of 40 more cases at the SKF-FDA meeting of January 15th also raises the question of lack of promptness in reporting of these additional cases to FDA.

According to everyone with whom I have spoken at FDA, adverse reaction reports from companies which are of the "unexpected" variety and which must be sent in within 15 days of occurrence are handled much more expeditiously than routine quarterly reports which are assumed by FDA personnel not to contain "unexpected" problems.

This delay in reporting by SKF not only lost one or two or more valuable months of time from when the reports should have been filed (well before November until November), but also lost an additional month or more after filing because they were handled as "routine" until they were closely examined in December.

From November until now, for example, well over 100,000 prescriptions for Selacryn were filled. In other words, many people were exposed to the drug well after SKF knew of the rapidly rising number of case reports of liver (and kidney) damage which ultimately led to banning the drug.

The massive January medical journal advertising campaign (see Appendix III) for Selacryn promoting it as a "first step" drug for hypertension only adds injury to injury.

This example of corporate white collar crime needs to be dealt with using the full sanctions of the Food, Drug and Cosmetic Act. As long as FDA needs to depend on drug companies to report adverse reaction data, criminal penalties against SKF will hopefully make it and other companies more "dependable" in the future.

Given the handicap of SKF's reporting as "routine" that which was serious enough to result in the banning of the drug, many FDA employees moved quickly once the seriousness of the data was recognized.

I must strongly disagree, however, with the statement of FDA Bureau of Drugs Director, Dr. Richard Crout, on January 15th that "a good reporting system, properly utilized by physicians, the manufacturers, and FDA has worked the way it was designed to . . . promptly and effectively to protect the public health."

Whereas some physicians and FDA appear to have properly utilized the "system," SKF seems to have thrown a dangerous monkey wrench into it by its negligence in promptly reporting life-threatening adverse reactions.

In addition to highlighting the serious deficiency in post-marketing surveillance of adverse drug reactions, due to a lack of prompt reporting by SFK, a serious question must also be raised about the adequacy of pre-market testing of this drug. For a drug which was intended for chronic use by millions of people had it succeeded in displacing much of the thiazide market, adverse reaction information on just 533 people apears to be inadequate. Such data from at least several thousand people would likely have uncovered the liver damage before rather than after marketing.

Sincerely,

SIDNEY M. WOLFE, M.D., *Director.*

Attachments.

[APPENDIX I]

CHRONOLOGY OF TICRYNAFEN (SELACRYN)

April 23, 1979—FDA Summary Basis of Approval, (S.B.A.) a 63-page document, reviews the safety and effectiveness of this diuretic/antihypertensive drug. No mention in this document is made of hepatitis or jaundice.[1] Although the drug is aimed at a very large market—the millions of people now taking thiazide diuretics[2] the S.B.A. states, on page 53, that there is adverse reaction data at the time of market approval on only 533 patients with 675 patient treatment courses. (Some patients got the drug more than once.)

April 1979—FDA approved labelling for the drug states, under ADVERSE REACTIONS, "[a]bnormal liver function tests and jaundice have been reported in a few patients treated with 'Selacryn'; however, *no causal relationship has been established* (italics added).

May 1979—Marketing of Selacryn begins.

August 21, 1979—FDA bulletin "Adverse Drug Reaction Highlights" on the topic of "Selacryn-Ticrynafen Acute Renal Failure" reviewed two cases reported to FDA of patients developing acute kidney failure within 4 hours of the initial dose. Two foreign (French) medical literature articles (1978 and 1979) also reported kidney damage from the drug.

September 1979—SKF sends letter to all physicians warning of kidney problems.

September-October 1979—Major mail advertising campaign to promote Selacryn—offering free samples. A major thrust of the ads is to displace use of thiazide drugs by getting doctors to switch to Selacryn. ADVERSE REACTION section of label continues to note "abnormal liver function tests & jaundice . . . no causal relationship."

November 9, 1979—FDA receives SKF routine quarterly report on Selacryn in which 12 cases of liver damage and 40 cases of renal failure in patients getting the drug are described. Since this was filed as a routine quarterly report, rather than being sent in within 15 days of occurrence as evidence of unexpected adverse reactions or an increased occurrence of toxic effects, (See Appendix 2 for reporting requirements) FDA handles it in a routine manner rather than giving it immediate attention.

January 1980—Major medical journal advertising campaign for Selacryn, pushing it as "a 'first-step' agent for Your Hypertensive Patient" (See Appendix 3, from January 1980 Annals of Internal Medicine).

January 15, 1980—SKF meets with FDA and 40 additional cases of liver damage from Selacryn including 5 deaths are presented to FDA by the company. A decision is made to suspend use of the drug in the United States.

January 16, 1980—FDA Press Release concerning the 52 cases of liver damage, including 30 cases of jaundice and 5 deaths. FDA Bureau of Drugs Director Dr. Richard Crout says, "The public should know that a good reporting system, properly utilized by physicians, the manufacturer, and FDA, has worked the way it was designed to . . . promptly and effectively to protect the public health."

January 16, 1980—SKF letter to all doctors stating that, "Clinical use of Selacryn has shown that the drug can *cause* significant hepatic injury" (italic added) and that "you should discontinue use of the Selacryn immediately. . . ." (NOTE.—No mention is made in FDA or SKF announcements about large number of new cases of renal failure.)

January 17, 1980—"FDA Adverse Drug Reaction Highlights" on the topic of "Selacryn-Ticrynafen Hepatic Injury" states that FDA Adverse Reaction Files con-

[1] One of 20 patients (p. 46 of S.B.A.) given ticrynafen did have an abnormal liver function test. Several cases of hepatitis were reported (not in the S.B.A.) amongst the 533 patients prior to marketing but for most of these cases, it was not clear whether the drug was responsible.

[2] 1978 retail sales for thiazide diuretics were 240 million dollars, representing 39 million prescriptions filled that year or over 4 million patients.

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tain 16 reports of hepatic injury associated with Selacryn. This report is based on the 12 cases sent in by SKF in their routine quarterly report and 4 additional cases reported to FDAs Adverse Reaction reporting system.

[APPENDIX II]

FEDERAL LAW AND REGULATION GOVERNING REPORTING OF ADVERSE REACTIONS OF MARKETED DRUGS

Statutory requirement for reporting adverse reactions

Section 505(j)(1) of the Federal Food, Drug and Cosmetic Act (FDC Act) says the company "shall establish and maintain such records, and make such reports to the Secretary, of data relating to clinical experience . . . with respect to such drug, as the Secretary may by general regulation, or by order with respect to such application . . . prescribe on the basis of a finding that such records and reports are necessary to enable the Secretary to determine . . . whether there is or may be ground for invoking Subsection (e) [withdrawal of approval]."

Regulations specifying details for reporting

The regulations, 21 C.F.R. Section 310.300(b)(2), state that "[a]s soon as possible, and in any event within 15 working days of its receipt by the applicant [drug company in this case] complete records or reports concerning any information of the following kinds: information concerning any unexpected side effect, injury, toxicity, or sensitivity reaction or any unexpected incidence or severity thereof associated with clinical uses, studies, investigations, or tests, whether or not determined to be attributable to the drug. . . . Unexpected as used in this subdivision refers to conditions or developments not previously submitted as part of the new drug application or not encountered during clinical trials of the drug or conditions or developments occurring at a rate higher than shown by information previously submitted as part of the new drug application, or than encountered during such clinical trials."

The regulations go on to say that other kinds of information need be submitted only at 3 month intervals during the first year after marketing. 21 C.F.R. 310.300(b)(4).

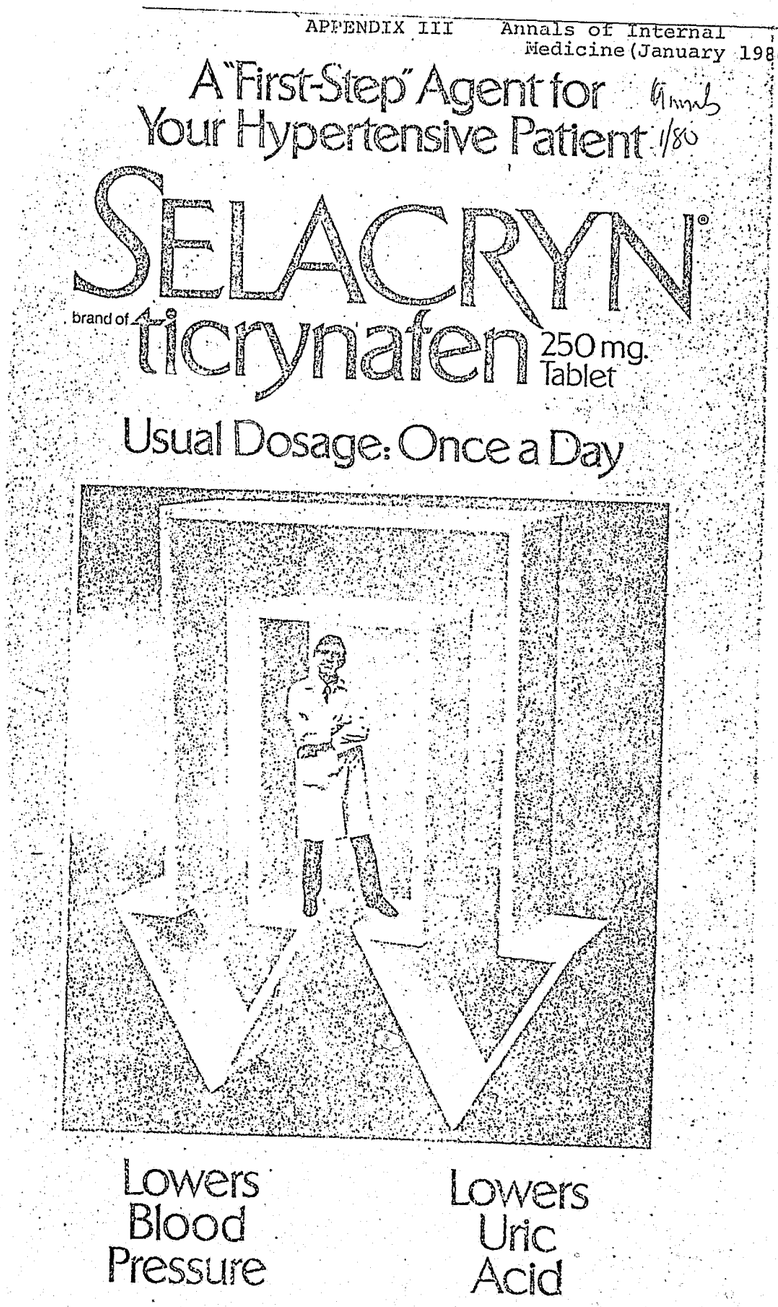
Prohibited acts

Section 301(e) of the FDC Act, under "prohibited acts," described "the failure to establish or maintain any record, or make any report, required under Section 505(j)."

Penalties for violations

Section 303(a) of the FDC Act says "[a]ny person who violates a provision of Section 301 [see above] shall be imprisoned for not more than one year or fined not more $1000, or both." Section 303(b) increases the penalty to not more than 3 years in jail or not more than $10,000 or both if the violation is committed "with the intent to defraud or mislead."

APPENDIX III Annals of Internal Medicine (January 1980)



Important Benefits for Your Hypertensive Patient

'Selacryn' provides: Three desirable clinical effects in a single agent—antihypertensive, diuretic, uricosuric; Proven once daily round-the-clock antihypertensive control, helping you provide a simplified regimen; Appropriate in primary hypertension regardless of severity, 'Selacryn' is compatible with nondiuretic antihypertensives; Similar to hydrochlorothiazide in effect on electrolytes, no special replacement measures are ordinarily required; and Effective reduction of uric acid levels.

Prescribe 'Selacryn' with Confidence

In most respects, the type, incidence and severity of adverse reactions seen with 'Selacryn' are similar to those seen with thiazides over the years. Standard laboratory tests you use to monitor the course of thiazide therapy are indicated when you prescribe 'Selacryn'.

Discontinue Previous Diuretics

In hypertensive patients, discontinue any previous diuretics for three days before instituting 'Selacryn'. Where feasible, in patients with congestive cardiac failure, discontinue the other diuretic for one to two days before beginning 'Selacryn'. Occasionally, in patients switched from other diuretics without a washout period, nausea, vomiting, flank pain, azotemia, oliguria and, rarely, anuria have been reported.

Maintain Adequate Fluid Intake and Urine Flow with Initial Doses

For patients switched to 'Selacryn' from other diuretics (see above), and for dehydrated patients, hydration is recommended for three days before and three days after starting 'Selacryn'. Since initial doses of 'Selacryn' produce diuresis as well as uricosuria, urinary uric acid concentration does not increase in well-hydrated patients who can increase urine flow.

Reduce Dosage of Concomitant Anticoagulants

'Selacryn' potentiates oral anticoagulants; use caution when using these drugs together. In such patients, reduce the oral anticoagulant to one-quarter or one-half the maintenance dose, monitor prothrombin time through titration until stabilized.

Potassium Supplements Are Usually Not Necessary

but may be advisable in some patients. Since some patients who received 'Selacryn' and Dyrenium® (brand of triamterene) have shown marked elevation of BUN and creatinine, such a combination is not recommended.

See next page for indications and brief summary of prescribing information.

SELACRYN®
brand of ticrynafen 250 mg. Tablet

Logical Successor to Thiazide
In First-Step Management

SK&F
a SmithKline company

SELACRYN®
brand of ticrynafen 250 mg. Tablet

Before prescribing, see complete prescribing information in SK&F literature. The following is a brief summary.

Indications: Hypertension, with or without elevated uric acid levels. Salt and water retention states associated with congestive cardiac failure.

Contraindications: Anuria, severe or progressive renal disease, hypersensitivity to the drug, known renal uric acid calculi.

Warnings: Potentiates the action of oral anticoagulants, caution should be exercised when these agents are used with 'Selacryn'; reduce anticoagulant dosage to ¼ or ½ of the maintenance dose, and carefully monitor prothrombin time until stabilized.

Concomitant use with triamterene is not recommended since a marked elevation of BUN and creatinine may occur.

Not appropriate in hepatic ascites. May precipitate azotemia in progressive or advanced renal disease; therefore, frequent electrolyte, creatinine and BUN determinations should be performed early in therapy and periodically thereafter. Discontinue the drug if renal impairment progresses.

Pregnancy, Nursing: 'Selacryn' crosses the placental barrier in animals. Routine use of diuretics during normal pregnancy is inappropriate and exposes mother and fetus to unnecessary hazard. Use in pregnancy requires weighing anticipated benefits against possible hazards. Generally, nursing should not be undertaken while a patient is on a drug.

Precautions: Substantial uricosuria occurs within hours after the first dose of 'Selacryn'; for this reason, hypertensive patients switching from other diuretics should discontinue diuretics for 3 days before starting 'Selacryn'; where feasible, diuretics should be discontinued for 1 to 2 days in patients with congestive cardiac failure. Fluid intake should be increased to approximately 1500 cc. per day for up to 3 days before and 3 days after initiation of 'Selacryn' therapy in patients switched to 'Selacryn' from other diuretics and in patients who may be dehydrated, particularly if the patients are hyperuricemic.

Acute attacks of gout may be precipitated; continue 'Selacryn' (brand of ticrynafen), colchicine may be added to control the acute attack. Observe patients for signs of electrolyte imbalance, i.e., hypokalemia, hyponatremia, hypochloremic alkalosis. Periodic determinations of electrolytes to detect possible imbalance should be performed. Concomitant use with cytotoxic agents requires caution and individualization of dosage and management. Effects on glucose metabolism are similar to those seen with thiazides. Insulin requirements may be affected, hyperglycemia and glycosuria may occur in patients with latent diabetes. Elevation of BUN and/or serum creatinine can occur during diuretic therapy.

Children: Safety and effectiveness in children have not been established.

Drug Interactions: Exercise caution when administering with other highly protein-bound drugs, especially anticoagulants; reduce anticoagulant dose to ¼ or ½ of the maintenance dose and carefully monitor prothrombin time until stabilized. (See Warnings.) Concomitant use with triamterene is not recommended since a marked elevation of BUN and creatinine may occur.

The drug causes a decrease in excretion of salicylates and organic acids, e.g., penicillin. Diuretics reduce renal clearance of lithium and increase the risk of lithium toxicity.

Adverse Reactions: Adverse reactions seen with 'Selacryn' (brand of ticrynafen) in controlled studies were approximately the same as those seen with hydrochlorothiazide. Except where noted, the following adverse effects seen with 'Selacryn' have been reported in a small number of patients, e.g., approximately 1 in 100: anorexia, nausea, vomiting, dyspepsia, cramping, diarrhea, constipation, headache (approximately 4 in 100), dizziness/lightheadedness (approximately 9 in 100), paresthesia, somnolence, insomnia, syncope, vertigo, orthostatic hypotension, palpitation, rash, urticaria, pruritus, rare cases of fever and interstitial nephritis. Tiredness/fatigue (approximately 4 in 100), hyperglycemia, glycosuria, muscle cramps, weakness, bitter taste and dryness in mouth, exacerbation of gout, renal colic or costovertebral pain. Abnormal liver function tests and jaundice have been reported in a few patients.

Occasionally, patients who received 'Selacryn' without a washout period (See Precautions) experienced nausea, vomiting, flank pain, azotemia, oliguria and, rarely, anuria; these effects were reversible.

The following adverse reactions have not been reported to date with 'Selacryn' but have occurred with thiazides or other diuretics: pancreatitis, sialadenitis, xanthopsia, purpura, photosensitivity, necrotizing angiitis, Stevens-Johnson syndrome, respiratory distress, anaphylactic reaction, leukopenia, agranulocytosis, thrombocytopenia, aplastic anemia, restlessness and transient blurred vision.

Supplied: Light blue, round, scored, monogrammed tablets of 250 mg. in bottles of 100, and in Single Unit Packages of 100 (intended for institutional use only).

Date of Issuance Oct. 1979

Smith Kline &French Laboratories
Philadelphia, Pa.

[ATTACHMENT 2]

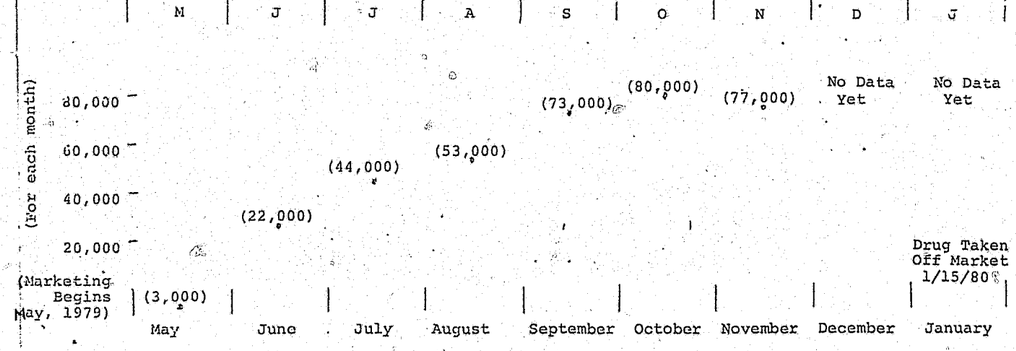
CHRONOLOGY ON SMITH KLINE & FRENCH'S SELACRYN

Labelling — During Entire 8 1/2 months on the market, through January 1980, labelling said, "Abnormal liver function tests and jaundice have been reported in a few patients. . . .However, no causal relationship has been established."

Promotion of Drug — Massive Mail Campaign to Doctors, Sept-Oct Offering Free Samples

Jan 1980 3-page ad in at least 10 medical journals "First Step" drug, "Prescribe with confidence"

When Cases of Liver Damage Were Reported to Company



[From the Wall Street Journal, Jan. 25, 1980]

FDA Is Asked To Cite SmithKline Division In a Criminal Case

NADAR GROUP ALLEGES DELAY IN DISCLOSING PROBLEMS OF A DRUG FOR HYPERTENSION

WASHINGTON.—A consumer activist group urged the Food and Drug Administration to seek criminal charges against a SmithKline Corp. division for failing to report promptly problems with its antihypertensive drug Selacryn.

Ralph Nader's Health Research Group alleged that SmithKline & French Laboratories delayed in telling the FDA about 52 cases of liver damage, including five deaths, among the 300,000 patients who have taken the drug. The liver problems led the Philadelphia-based concern to recall Selacryn last week.

In response, an FDA spokesman said the agency is drafting a letter to SmithKline & French "asking for a full explanation" of the delay. A decision about seeking criminal charges will be made "after we see how they respond," he added. A second FDA official said criminal charges are "a possibility, if some definite neglect can be shown."

The health research group charged that SmithKline & French informed the FDA about the first 12 cases of liver damage in a routine quarterly report last Nov. 9. It didn't describe the other 40 cases until last week, group director Sidney Wolfe said in a letter to FDA Commissioner Jere Goyan.

FDA regulations require drug companies to report unexpected adverse reactions within 15 working days of learning of them from physicians. "I would be extremely surprised if the company can show they promptly reported those cases" within 15 working days. Dr. Wolfe said. The delay "caused a lot of damage to people and probably deaths," he asserted.

In Philadelphia, SmithKline said it acted responsibly in reporting the possible side effects of Selacryn. The company said: "Last week, FDA acknowledged the 'responsibility' with which SmithKline carried out its obligations and we believe we have indeed acted responsibly in this case." The company said it would cooperate with FDA in current review of clinical data concerning Selacryn. The company maintains it isn't clear if the harmful side effects were caused by the drug.

FDA officials said they have also learned about 50 cases of kidney failure, including two deaths, among patients taking Selacryn. They said scattered reports of kidney problems last summer led SmithKline & French to alert physicians by mail.

One FDA spokesman said the agency was preparing a drug bulletin to all U.S. doctors, discussing the latest figures on kidney failure, "when the liver problems came to our attention." That drug bulletin is being revised, he added, to report on the recall of Selacryn instead.

Selacryn, approved by the FDA last May, is used to treat high blood pressure and edema, or water retention, which is often associated with gout. Analysts estimate the drug had sales of between $5 million and $8 million last year.

The FDA has said that, depending on the outcome of its evaluation of Selacyrn's adverse effects, the product might be returned to the market.

[From the Philadelphia Inquirer, Jan. 25, 1980]

U.S. Urged To Prosecute SmithKline Over Selacryn

(By Aaron Epstein, Inquirer Washington Bureau)

WASHINGTON.—A citizen health group yesterday urged the government to prosecute SmithKline Corp., a Philadelphia drug manufacturer, for "corporate white-collar crime."

The Public Citizen Health Research Group, affiliated with consumer activist Ralph Nader, accused SmithKline of failing to promptly tell the Food and Drug Administration (FDA) about 52 cases of liver and kidney damage in persons who had taken SmithKline's drug Selacryn, which is used to treat high blood pressure. Five of those patients died.

In Philadelphia, a company spokesman said SmithKline had "acted responsibly," and he quoted a statement to that effect made last week by an FDA official.

Nevertheless, the FDA, which pulled Selacryn off the market on Jan. 15, is preparing a letter to SmithKline to ask the company when it learned of each of the adverse reactions to the drug, agency spokesman Bill Grigg said.

Grigg said the FDA wanted to find out whether the drug firm had reported each of the "unexpected" reactions within 15 days of learning about them, as required by the federal Food, Drug and Cosmetic Act.

Sidney Wolfe, director of the citizen health group, contended in a letter to FDA Commissioner Jere Goyan that "many people were exposed to the drug well after SmithKline knew of the rapidly rising number of case reports of liver (and kidney) damage which ultimately led to banning the drug."

He asked the FDA to press the Justice Department to file "the maximum criminal charges possible" against SmithKline. The maximum penalty for delay in reporting unexpected drug reactions, with intent to defraud, is a $10,000 fine, three years in jail or both.

SmithKline said it informed the FDA of 14 cases of liver and kidney damage in a routine quarterly report Nov. 9. The government agency took no action at that time. The ban on Selacryn—also known by its chemical name of ticrynafen—occurred Jan. 15, when SmithKline presented information on 38 more cases of liver damage including the five deaths.

This delay in reporting by SmithKline not only lost one or two or more valuable months of time (before Nov. 9), but also lost an additional month or more after filing because they were handled as 'routine' (by the FDA) until they were closely examined in December," Wolfe wrote.

He noted that the company promoted Selacryn in ads in January medical journals. One such advertisement, in the Annals of Internal Medicine, extols Selacryn as "A First Step Agent for Your Hypertensive Patient," saying that the drug "lowers blood pressure."

The ad suggest that Selacryn be used as a substitute for the thiazide family of drugs used against high blood pressure for years. It mentions that "abnormal liver function tests and jaundice have been reported in a few patients" who took Selacryn.

About 300,000 people have reportedly taken Selacryn for high blood pressure or associated elevated levels of uric acid and water retention. Selacryn was approved by the FDA in May.

CORPORATE CRIMINAL LIABILITY

FRIDAY, MARCH 14, 1980

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON CRIME,
COMMITTEE ON THE JUDICIARY,
Washington, D.C.

The subcommittee met, pursuant to notice, at 9:50 a.m., in room 2226, Rayburn House Office Building, Hon. John Conyers, Jr. (chairman of the subcommittee) presiding.

Present: Representatives Conyers, Gudger, and Volkmer.

Also present: Steven G. Raikin, assistant counsel, and Deborah K. Owen, associate counsel.

Mr. CONYERS. The subcommittee will come to order.

The Subcommittee on Crime continues its hearings on H.R. 4973, a bill to amend title 18 of the United States Code to impose criminal penalties for knowing nondisclosure by business entities of concealed serious dangers in products and business practices.

Among other things, H.R. 4973 requires an employer to notify employees in writing within 30 days after the discovery of serious dangers in the workplace which would cause death or serious bodily injury.

We continue our deliberations today with representatives from some of the major labor unions in the United States—the AFL-CIO, the United Mine Workers, and the Teamsters—who will offer their analysis of H.R. 4973 and discuss any specific cases relevant to this legislation.

This bill has attracted a great deal of support within the labor movement, and other labor organizations will be testifying or submitting statements.

Historically, insuring the workplace to be free from hazardous conditions has been a major concern of many in the labor movement. In previous hearings we have heard evidence of the asbestos manufacturers who concealed scientific data which showed that exposure to asbestos greatly increased the workers' risk of cancer and other lung diseases. We have seen evidence that workers were not told of catastrophic health problems which company physicians had detected on X-rays.

The witness this morning may shed further light on why the labor movement strongly supports the Miller bill.

Our first witness is Dr. Lorin Kerr, director of the department of occupational health for the United Mine Workers of America.

Dr. Kerr graduated from the University of Michigan, where he received an advanced degree in public health. We welcome you, Doctor, recognizing your distinguished career in the field of medicine and public health,

CONTINUED

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Presently, Dr. Kerr is visiting professor of public health at the Howard University College of Medicine, chairman of the steering committee of the National Rural Health Council, and a member of the advisory council to the Secretary of HEW on coal mine health research.

He has received certifications and awards from any number of organizations. Without objection, we will incorporate your full statement into the record at this time, and invite you to proceed in your own way.

[The information follows:]

PREPARED STATEMENT BY LORIN E. KERR, M.D., M.S.P.H.

I am Dr. Kerr, Director, Department of Occupational Health, United Mine Workers of America. It is a pleasure to testify before this Subcommittee on H.R. 4973. This bill introduced by Congressman Miller and co-sponsored by 55 more of his Congressional colleagues is an unique endeavor to assure early implementation of essential preventive measures at the work site. The continued absence of such legislation will assure worsening of the frightening toll of occupational disease and disability which has already reached endemic proportions.

Today we reap the bitter fruit of the all-pervasive isolation of occupational health from the mainstream of medicine and public health. This isolation began about the time of the Civil War when the managerial class assumed control and operation of the means of production. With this responsibility came the need to assure the maximum productivity of both labor and machinery. It soon became obvious that efficient continuous production demanded reduction of absenteeism and the maintenance of the worker's well-being. Just as management accountants were concerned with depreciation of machinery so a whole new medical specialty—industrial medicine—came into being. For economic reasons management learned it had to control the health of the worker in the job-setting. And in turn, the medical profession learned to accept management's definition of health as the capacity to work.

Subsequent changes due primarily to economic pressures led to the new identification of industrial medicine as occupational health. Regardless of those changes both by definition and actual practice industrial occupational health programs are still generally restricted to those emergency measures necessary for the worker to complete, if possible, the work day.

This cessation of interest in worker's health once they walk out of the company gate has led to a serious fragmentation of the workers' health needs and programs designed to provide related services!

Management's early assumption of this prerogative went unchallenged because of the grim toll of workers injured and killed at the work site. In fact, the practice of industrial medicine for many years was "traumatic surgery." Since 1909 the predominant concern about accidents and injuries has been reflected in workers' compensation legislation. Closely associated has been the development of a broad safety education program directed primarily at workers. Over the years this restricted emphasis on safety has assumed such proportions that an almost exclusionary concern with injuries and accidents has developed. Despite the magnitude of this educational endeavor in safety all available evidence clearly indicates that the death and disability traceable to job-related illnesses far exceeds the toll inflicted by accidents.

Management has been largely responsible for this medical specialty primarily concerned with specific external hazards rather than with the development of an integrated approach to occupational health that embraces the complete health needs of the workers. It has also been responsible for the schism between industrial physicians and other practitioners and the extreme shortage of occupational health personnel. Dealing only with hazards on the job and isolated from the workers' health in the community, occupational health has also frustrated the industrial physician. His relationships with the workers have on occasion posed a dilemma at least in the minds of the workers. This has been accentuated by the elevation of physicians in the corporate structure to positions of technical advisers sharing management's viewpoints.

It is estimated that currently services for industry or employer groups are being provided by somewhat more than 15,000 physicians of whom about 3,500 are employed full-time. Of the latter group, over one-fourth never see a patient. Nearly all of these physicians are located in the 11,500 establishments with more than 500 workers. These comprise less than one percent of the nations's 5 million work sites

and employ only about one-fourth of the nation's 100 million civilian workers. Almost without exception there is no organized preventive health program for the rest of the workers. Rather than a maldistribution of qualified occupational health physicians there is in reality a marked shortage of all occupational health personnel.

A recent preliminary report from the Association of Teachers of Preventive Medicine appears to indicate many U.S. medical schools teach little or no occupational health. The report goes on to state ". . . there seems to be little recognition that, only a few physicians will become occupational health/medical specialists, while almost all physicians with or responsible for patients with medical problems that are caused or exacerbated by work-related factors must know how to recognize, appropriately treat, and help prevent such problems." There are only eight of the 19 schools of public health providing some training in occupational health.

Medical care programs negotiated by labor unions have also suffered because of management's continued assumption its isolating prerogative. While the programs refuse to pay for services covered by worker's compensation, they are universally saddled with the costs, sometimes inordinate, of job-related injury and illness for which limited benefits have been exhausted. Management has constantly lobbied against improvements of workers' compensation and company-oriented physicians have been reluctant to recognize or diagnose occupational diseases for fear of increasing corporate costs.

Public health understanding of occupational health has been sorely affected by the isolation of occupational health. It has also had a deadening impact on attempts to incorporate occupational health in public health programs. While many industrial physicians have indicated an understanding of public health, management is disinclined to relinquish its prerogatives to any outside agency. Public health programs have constantly suffered from a lack of authority to set or enforce compliance with standards.

Following passage of the Social Security Act in 1935 funds became available for the expansion of public health programs, including occupational health then identified as "industrial hygiene." By 1939 thirty occupational health programs had been established in state and local health departments including two municipalities. The work of these units, combined with the U.S.P.H.S. Division of Industrial Hygiene ushered in the era of "traditional industrial hygiene."

The production demands during World War II gave great impetus to the growth of occupational health. The nation was committed to protecting the health of the workers to assure essential acceleration and maintenance of production. The U.S.P.H.S. assigned a physician specializing in occupational health to nearly every state health department and the capabilities of the departments were appropriately expanded. Aside from these costs the annual U.S.P.H.S. occupational health budget was more than $4.5 million. Between 1947 and 1950 more than $1 million was made available in federal grants-in-aid to states for occupational health.

By 1955, however, the total annual appropriation for the U.S.P.H.S. Occupational Health Program had plummeted to $544,000. It was during this period that a macabre joke circulated in Washington. It was said that one director of the occupational health program had been brought to town to dig the grave for the program and the next director to intone the grave side prayers. Today, the budget is about $80 million with 932 authorized positions. Testimony presented in 1979 easily projected the need in FY 80 for $170 million. The minimum annual budget should be $150 million.

On occasion, management has also sought public health budget cuts because studies revealed hazards that posed an economic threat. For example, the world-renowned Wilhelm C. Hueper, M.D. relates that while he was a commissioned officer in the U.S.P.H.S. his epidemiologic studies on occupational cancer were "forcefully and abruptly brought to a halt in 1952 by an order of the Surgeon General." This followed a protest to the U.S.P.H.S. by the medical advisor to the chromate-producing industry on behalf of his clients. Dr. Hueper's studies had revealed an alarming amount of cancer among chromate workers. The order to Hueper was never revoked or rescinded.

Unfortunately, government also manifests management proclivities when occupational health research threatens them. Witness the Department of Energy cancellation of Mancuso's grant when his research revealed that the radiation exposure of workers at nuclear energy installations was ten and possibly twenty times too high. More recently Schlesinger made the appalling public pronouncement that the national interest was best served by protecting berrylium manufacturers at the expense of exposed workers. There was also a lack of concern by involved government officials about the large number of federal employees intentionally exposed to

increasingly larger atomic bombs on the Nevada desert. There is now another new occupational disease—G.I. leukemia.

Despite the long-extolled merits of occupational health protection, there is a vast army of workers with no such protection and millions more with limited or inadequate programs. The worker too often feels with considerable justification that an occupational health program is a management device to forestall payment of workers' compensation benefits. Even efforts to prevent occupational diseases become meaningless when the worker senses reluctance by employers to admit the existence of these diseases, because doing so would cost money for workers' compensation and the installation of preventive measures.

Today, the enormity of work-related dealth and disability is becoming apparent. It has been maintained for too long that 2 million workers are injured on the job each year and 14,000 are killed immediately or die later. A 1971 report indicates that a more accurate annual accounting will probably reveal 20–25 million job-related injuries and about 25,000 deaths. These are shocking figures.

More alarming is the NIOSH 1972 estimate that occupational diseases cause 100,000 deaths each year. (This is more than seven times greater than the estimated number of deaths caused by job-related injuries). Today, it is felt by some that the 1972 figure is a gross under-estimate. It is more likely that there are 300,000 workers killed each year by job-related illness. There is also reason to believe that when all the facts are eventually known that probably 80 percent of all cancer deaths will be due to job exposures.

Hueper said in 1947 that "Environmental (occupational) carcinogenesis is the newest and one of the most ominous of the end-products of our industrial environment". More recently a former director of the National Cancer Institute publicly stated on several occasions the view that at least 90 percent of all cancers originate in the environment. Although some federal health officials maintain that at least 20 percent—and perhaps 40 percent—of all cancers are caused by occupational carcinogens precious little research is being conducted in this area.

Mr. Chairman, I would venture that the passage of H.R. 4973 would quickly change this situation. Public policy set by this bill would overcome the resistance of private interests to occupational carcinogenesis research.

The passage of H.R. 4973 would also hasten the implementation of the preventive measures necessary to control the rapidly developing nationwide pandemic of occupational diseases.

The prevention of these diseases will eliminate more death and disability than has occurred with the virtual elimination of the communicable diseases.

The prevention of the job-related diseases also provides a major method of controlling the soaring costs of medical care.

There is just now a dawning realization that the pollution of the workplace is responsible for the degradation and exploitation of workers. In addition, many of the same pollutants also have a deleterious impact on the surrounding community causing non-worker death and disability. The ecologists and others are slowly becoming aware of what has long been known to workers—the eight hours on the job can be the most dangerous daily threat to their health.

Too frequently the black workers job is even worse. For example, the black coke oven workers have seven times more lung cancer than their white colleagues. The reason is simple—the black exposure to occupational carcinogens is greater. The reason is also old—the black worker too often has the dirtiest job with the worst exposures—in many industries. To make matters even worse black persons are twice as likely as others to be totally disabled. It is likely that the elevated cancer mortality rates recorded for black males is due to their jobs rather than their genes, diet and mode of living.

Alarming as the occupational figures are there is no accurate national accounting of any job-related illness except black lung. With the passage of the Federal Coal Mine Health and Safety Act of 1969, Congress for the first time mandated that the occupational disease occurring in a major industry must be eradicated. The Social Security Administration has approved payment of federal black lung benefits to somewhat more than 375,000 victims of the disease at a cumulative cost by 1980 of somewhat more than $8 billion. It is conservatively estimated that the death of more than 4,000 of these miners each year can safely be attributed to black lung. This means that more than eleven men every day wheeze away their lives as the penalty for mining coal to earn a living.

It should be noted that the coal mine owners have unsuccessfully used the black lung benefits section of the federal coal mine act on two different occasions to test the constitutionality of the law before the U.S. Supreme Court. Equally lamentable is the fact that about 15 percent of the working miners exhibit x-ray evidence of coal worker's pneumoconiosis. While only a relatively small proportion of these

miners may eventually become disabled varying from slight breathlessness on effort in the early stages of black lung to severe shortness of breath, premature death is preceded by total incapacity for work in the advanced stages. Coal mine dust is a killer but death comes slowly.

Alarming as all the black lung statistics are, it is important to realize that every one of the thousands listed in some report or study is a human being whose lungs have been diseased and disabled as the penalty for mining the nation's vitally needed coal for a living. It is small consolation for a miner with black lung to know that he is "only" one out of a group of five or ten who are so afflicted. Every figure represents a coal miner who is paying a dreadful price for his long years of service in the mines.

Black lung like all occupational diseases is man-made, preventable and can be eliminated in one generation.

Prevention of black lung requires reduction of coal mine dust to non-disease producing levels. The General Accounting Office (GAO) 1975 study of the coal mine dust control program verified the effectiveness of Congressionally mandated ventilation and use of water in reducing levels of coal mine dust. The technology has been well-known for several decades. The study also verified the need to improve present dust sampling technology and its use. The report indicated there is no known method of dust-sampling to replace the one currently in use.

The dust sampling program will only attain its mandated effectiveness when operator responsibility is eliminated by some method, such as, a continuous automatic system. Until such a system is in operation miners will continue to suspect the accuracy of the results. The UMWA has testified numerous times on this subject and on September 8, 1978, presented a proposal to (MSHA) delineating miners responsibilities in the dust control program. Their participation will assure an earlier achievement of adequate dust control then will otherwise prevail.

Since 1974 the UMWA has consistently recommended that the dust level in the mines be reduced to 1 mg. of respirable dust per cubic meter of air. The Union is fearful that the mathematical derivation of the 2 mg. standard is inaccurate. Reduction to 1 mg. throughout the mines would also eliminate the current economic penalty inflicted on those miners with an option to transfer to a less dusty area of the mine.

Congress became aware during the 1969 hearings that a dust suppression campaign must be constantly evaluated. Dust measurement by itself is inadequate. The only known method is periodic chest x-rays of the working miners. The development of new cases of coal workers' pneumoconiosis or progression of the disease provides convincing evidence of non-compliance with standards or the need to revise downward the existing standard of 2 mg.

As with dust measurement until operator participation is removed it will be impossible to relieve the miner's suspicions about the x-ray program. Since 1969 the Union has said many times that the U.S. Public Health Service should be totally and completely responsible for the x-ray program with 25 percent of the miners examined each year. This can only be accomplished by making the x-ray examination on-shift rather than before or after work. Then and only then will 90 percent or more of the miners be examined. The operators will continue the Congressional mandate to pay for the x-rays by reimbursing USPHS. Equally important is rigid enforcement of confidentiality of the films. The availability of duplicate films or copies of any films would violate confidentiality standards. The same would be true of any films interpreted by company physicians. Currently, all miner radiographs are maintained under tight security at the NIOSH facility in Morgantown, West Virginia.

The UMWA also recommends that all miners including surface and construction miners must be included in the working miner x-ray program. Unfortunately, a strict federal legal interpretation of the 1977 amendments is currently limiting the 3rd round of x-rays to the underground miners. Efforts to secure the necessary mandatory health standard directing the inclusion of surface miners has been nonproductive.

All miners including those with other conditions such as cancer and tuberculosis must be informed of the interpretation of the chest x-rays. To assure provision of necessary medical services the interpretation must also be transmitted to the physician designated by the miner.

The combination of more accurate dust measurements and high quality comparable films free of coal mining operator control will for the first time assure the adequacy of the information essential for eliminating the chronic pulmonary diseases plaguing the coal mining industry for decades. As stated earlier, these afflictions like all job-related diseases are man-made and can be eliminated in one generation.

There is also grave concern about the unknown health hazards of diesels underground. There seems to be a neurological distress produced by emissions and the possible synergistic action of the particulates and the coal mine dust that could hasten the possible development of lung cancer and black lung. A Bureau of Mines report states that particulates could make it difficult to meet the 2 mg. dust standard. The Bureau recommends that the emission of particulates should be minimized or diesels should be located in underground coal mines where miners would not be exposed. There is also the unknown carcinogenic potentiality of diesel emissions that needs extensive research. Moreover, the preliminary report of the recent NIOSH diesel conference fails to reveal evidence substantiating claims for increased productivity when using diesels.

Until these matters are clarified the coal miners refuse to permit themselves to be exposed to another unknown hazard. The miners reinforced this position with the unanimous passage of a resolution at the 1976 and 1979 UMWA Conventions calling for the removal of all diesels now in underground coal mines and the prohibition of any additional diesel equipment being introduced into the mines until such time as it is reliably established that they are not a health hazard to miners.

Nearly 100 percent more miners will have job-related impairment of their hearing upon reaching age 60 than the number similarly disabled because of age alone. On-the-job exposure to noise levels in excess of 80 dBA causes this unnecessary damage. A 1976 report on noise and impaired hearing jointly conducted by NIOSH and MSHA clearly indicates coal miners are afflicted with substantial hearing losses which are job-related.

A review of UMWA Health and Retirement Funds records revealed the purchase of five times more hearing aids for miners than their wives, whereas, the national ratio is equal, i.e., a male/female ratio of 1.0. Unfortunately, Congress did not have the benefit of adequate knowledge when they stipulated in the 1969 coal mine act that the noise level would be the Walsh-Healey standard which was later determined by the Department of Labor to be 90 dBA. The UMWA has vigorously opposed this standard which we submit on the basis of an EPA report should not exceed 75 dBA. MSHA officials are of the opinion that the technology necessary to reduce levels of noise in coal mining well below the 90 dBA level exists or can be developed.

The increasing use of chemicals in the mining industry has introduced the dangers of new exposures. Mechanization has also increased the stresses on coal miners that may become apparent with more miners showing evidence of such conditions as hypertension and ulcers.

A recent NIOSH report indicates that contrary to earlier studies lung cancer is killing coal miners at a moderately higher rate than occurs among the total U.S. male population. The report also indicates an excessive mortality rate for cancer of the stomach. Although in both instances coal mine dust is suspect this mortality report intensifies the Union's deep concern about the use of asbestos in some strip mines. We have protested this action many times and testified against its use at every opportunity. In addition the delegates to the 1976 and 1979 UMWA Conventions unanimously approved a resolution demanding the removal of asbestos from the coal mining industry.

Quite recently we have learned that transite (an asbestos wall board made by Johns-Manville) is being used in the construction of some coal preparation facilities. The carcinogenic potential of this and other asbestos products has been so widely publicized that its use in this or any other construction is incomprehensible. The only way this can be eliminated short of the bill under consideration is proof that there is violation of present health standards issued in federal regulations. In outdoor and windy conditions this is practically impossible so the hazard continues unabated.

I have delineated some of the job-related health problems confronting the coal miners because of what appears to be an almost exclusionary concern with injuries and accidents. The occupational disease figures clearly indicate that in coal mining as in all of industry the death and disability traceable to job-related illness far exceeds the toll inflicted by accidents.

Turning to H.R. 4973 I would urge deletion of the thirty days for warning employees and appropriate Federal agency of a potential hazard. Rather the requirement should be immediate warning of all concerned. Otherwise there will be additional unnecessary death and disability. You do not wait any period of time to turn in a fire alarm or place a call for an ambulance. A "serious danger associated with such product (or a component of that product) or business practice" could be life threatening. The use of asbestos wall board just related is one such example.

The definition of "serious bodily injury" should be carefully worded to assure inclusion of occupational diseases. This definition appears to give cognizance only to

injuries. The frightening toll of death and disability originating at the work place are the job-related illnesses and they must be included. Otherwise, you will only aggravate an already grievous situation.

The phrase "warn affected employees" lacks direction as to what the worker can or should do with the information provided. It is appropriate to warn the worker but the next question is "So what do I do about it." The worker must be provided with some recourse to what will appear to be an impasse.

Mr. Chairman, the passage of H.R. 4973 will strengthen the drive to eliminate the occupational diseases established by the precendent setting coal mine act and the OSH Act. Improvement of the latter legislation is opposed by private interests who constantly mount massive campaigns designed to weaken or repeal the Act. The most recent threat occurred with the introduction of S. 2153 on December 19, 1979, by Senator Schweiker. Enactment of this bill would emasculate the preventive aspects of OSHA and seriously threaten the viability of both OSHA and the Mining Safety and Health Administration (MSHA). Accommodation of public policy to private interests rather than the prevention of disease and disability among those exposed to health hazards at the work site will continue the mounting toll inflicted by occupational diseases.

Equally important is the increasing effort to claim health promotion is prevention. Nearly all of the numerous actions delineated in the health promotion programs require personal action some of which we have known since our youth. The validity of changing unhealthy habits such as cigarette smoking is now well documented. The same is true of many other recommended actions. However, in each instance the change in habits, in eating patterns, in safe driving is an individual decision. There have been exceptions to this such as occurred during World War II when public policy on nutrition became a government campaign that met with marked success. More recently, governmental reduction of highway speed to 55 mph materially lowered the number of deaths due to automobile accidents. In both instances the results were due to the implementation of public policy.

The current health promotion proposals may well be public policy but there is no way to implement them. Possible exceptions would be inordinately high taxes on cigarettes and alcoholic beverages and subsidies for tobacco farmers raising other crops. However, conflicting private interests will continue to strongly resist such policies.

Philosophically there is a serious flaw in the health promotion proposals. Obviously the blame for the fiscal inability to abide by the nutritional proscriptions will be laid at the doorstep of the individual. It will enable the policy makers to blame the individual for his/her poor health. It will be the individual's fault that he/she was unable to find a health professional who would constantly check the blood pressure. This will be particularly true of the 50 million living at or below the poverty level. It will also effect the worker exposed to asbestos—if he didn't smoke he would not be afflicted with asbestosis. Not only but more and more workers are going to be refused jobs if they smoke cigarettes and more and more workers will be refused worker's compensation benefits for job-related pulmonary disabilities because they smoke cigarettes.

The health promotion proposals also relieve the government and the corporate structure of their responsibility to protect the health of the workers.

Mr. Chairman, as you know one of the avowed precepts of our government has always been the protection of property. In fact it has long been recognized as a right extended to all citizens. This right of the people to have their property protected was essential for protecting the home and the place of business. Of more recent date this protection as a right has been extended to include health. This was necessary because the maintenance of good health and the ability to work is the only property workers have to assure economic sustenance. Thus government has the responsibility to take all possible steps to protect the workers' health—this is their property. Loss of this property through illness increases governmental expenditures at some point. Prudence certainly indicates that job-related illness must be avoided if the state is fulfilling its obligation.

TESTIMONY OF DR. LORIN E. KERR, DIRECTOR, DEPARTMENT OF OCCUPATIONAL HEALTH, UNITED MINE WORKERS OF AMERICA

Dr. KERR. Thank you very much, Mr. Chairman. I am very pleased to be able to participate in these hearings. In fact, I was delighted when you invited me to present testimony. Having been in the field of public health for many years, my major concern

throughout has always been the prevention of death and disability, which I think is supposed to be the foremost tenet of medicine as well as public health.

I have been quite disturbed over the years and am becoming very frightened by the marked increase of diseases coming out of the workplace today. In 1972, it was estimated that those would number somewhere in the neighborhood of 100,000—an estimate that came out of NIOSH. Some of us who have been in the field for some time think this figure is a gross underestimate. Probably today it is more likely to be about 300,000.

As far as cancer is concerned, I know that there are varying opinions anywhere from 1 percent to 40 percent coming out of the workplace, but I am willing to venture that when all of the facts are made known—how soon that will happen, I don't know—it will probably reveal that 80 percent of the cancer comes directly from the workplace.

It is with that kind of background that I come to you feeling that the country does not know. For instance, today we have no national accurate accounting of any of the occupational diseases with the one possible exception in the coal-mining industry, and I went into that in some detail as far as my statement is concerned.

In deciding to come here, I not only wanted this written statement accepted for the record, but in looking it over very recently I also remembered that there is a point in our history which I did expound upon in as much detail as it warrants, and that is the Gauley Bridge massacre, which occurred in West Virginia from 1930 to 1932. During that time, there was a tunnel being dug to provide hydroelectric power in West Virginia, for a couple of large manufacturing companies. This tunnel was going to be dug through a known embedment of silica, which was anywhere from 97 to 99 percent silica. Some of the folks out West would call it a hill, but around here we call it a mountain. When they discouered that the tunnel had such silica, the bore for driving the tunnel was increased to well over 40 feet. It also was known and proved here in the United States, with a study by the Public Health Service in 1914, in the lead and zinc mines in Missouri and Arkansas, where they were concerned about silicosis, that if the mining was done with wet drills and if there was plenty of ventilation, that silicosis could be prevented.

This was strongly advocated by the Bureau of Mines in a number of their publications as a means of preventing this disease, which, incidentally, until about the time of the Gauley Bridge massacre, had only been discussed in scientific journals. It had not hit the popular press with any great impact, not but plenty of the doctors, the chest physicians and the public health people knew about this disease and knew how it could be prevented.

Instead of using ventilation and wet drilling, the company that did this drilling used dry drilling. A congressional hearing conducted in January 1936 showed that the ventilation was nil. This was contrary to what the company knew. It came out in the hearing that they knew all of these things, and yet they did none of them because they were so anxious to get that tunnel dug. They had nearly 5,000 workers employed there; well over 60 percent of those were blacks who had walked for miles in order to get the jobs. The

wives and the mothers of these men sometimes after 9 months did not know what had happened to them.

It came out later that about 73 of them had died on the job, and that they had died in all likelihood of silicosis or siliceous tuberculosis.

Tuberculosis at that time was the third stage of silicosis. For example, in a workers' compensation program in some of the States for stage 1, you received $1,000; for stage 2, $2,000; and for siliceous tuberculosis, which was stage 3, you got $3,000, and that was it.

In any event, when these men died with less than 2 years of exposure, they were doubleshifting, running 10 hours on each shift.

This is an outstanding example of what you are talking about with this piece of legislation. Here was a company that knew full well what they were doing; as it came out in the testimony, they knew of the measures that should have been taken, and which they refused to recognize in any way at all. You can say—and I hate to be this dramatic about it, but there are times when you get a little incensed about things—that their names should have appeared on the death certificate as a cause of death rather than siliceous tuberculosis, because they actually killed these men.

I think the company must have known something was going to happen, because they bought a meadow near the job, and many, practically all, of these men were buried in unmarked graves in this meadow. There were about 1,400 or 1,800 more, if I remember the figures, that also had developed silicosis.

The situation received little coverage in the press, except locally. There were some national developments that occurred, and then finally Vito Marcantonio got a hold of this information, and he held congressional hearings. I think they were held in December of 1935 and in early 1936. In any event, he was equally incensed, and it was out of those hearings that there came a joint resolution from the House and the Senate, asking the Secretary of Labor to hold a national conference on silicosis. That was the first national conference on silicosis. I might say, it is the only one there has ever been.

The chest physicians who were the knowledgeable experts of that day, by and large provided or subsidized to a certain extent by the companies, made up the group of physicians who worked out these reports. In 1937, the report was submitted to the Secretary, and the definition of silicosis was so restricted that although a number of States adopted it later on, it was very difficult to get anything in the way of compensation. In fact, Leroy U. Gardner, the medical director of the Saranac Lake Laboratories who testified at the time the cases came up locally, said it was impossible for an acute massive pulmonary silicosis to develop in only 2 years. In 1938, he testified on a terminal case out in Colorado, and at that time said he thought that it was possible that it might have occurred. By that time, most of these miners were dead.

Today, we know from reports that NIOSH is now working with a silica that is being used in Illinois, known as silicous flour, in which silicosis develops with less than 2 years of exposure.

This is a piece of evidence that must be kept in mind when Congress considers this legislation. I would hope that it would be firmly imprinted on their minds, so that we would never have a

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situation like this to occur again. Believe me, with my years of experience in this field, I am not sure that it will never occur again. I think your bill will go a long way toward making it unlikely, but there are still things occurring today that makes one wonder why people are allowed to do the things that they do.

For instance, in one of the coal-mining States, I recently came across a company constructing a plant that is known as a prep plant, where the coal comes in from the mines and is prepared for the market. There are certain things that have to be done. It is rather large, usually about a six-story structure. For the partitions, they use a substance which they say is waterproof, fireproof, and will not bend or buckle. The product they use is transite, and if you remember Barry Castleman's testimony, he pointed out that in 1954 the asbestos companies knew that transite was a cause of cancer, and yet here today it is a product. This product is put out by Johns-Manville, as the label clearly indicates, and they further indicate that it is no cause for worry if it is used with the proper precautions.

With all of the information that has been publicized the last 10 years on asbestos I cannot conceive of a company that would have the chutzpah to go ahead and use a product which knowingly is a cause of cancer, let alone the disease known as silicosis.

We even have today in the coal mines, the coal mine operators that are insistent on putting diesels underground, and yet we know that the particulates in the diesel emissions are carcinogenic, and they know the same things we know. They have attended the same meetings; they have received the same reports, and yet their physicians stand up at the legislative meetings that we all attend, fighting one side and then the other to prevent this sort of thing from happening. They read different things into the final reports than I read into them.

NIOSH says, and so does MSHA, that if you put these things underground, later studies are going to show that they are probably a hazard, and you are going to have to take them out, but the drive for profits is so great that consideration for the lives of the workers goes by the board.

I would be willing to answer any of the questions you might have.

Mr. CONYERS. Thank you very much. You have very effectively and dramatically posed the case in these two areas.

Do you think that there is any progress being made in the ranks of the labor organizations and among the workers in gaining more information about the nature of the susceptibility of certain kinds of occupations? Is this growing, as opposed to a generation ago, where we would assume that far fewer people were aware of the nature of the medical risks involved in many of these occupational hazards?

Dr. KERR. I think that is so. I think this can be solely attributed to the enactment of the two occupational health acts, the Coal Mine Act in 1969 and OSHA in 1970. I think this gave the unions the capability to begin to move into an area that they knew about and had been moving as much as they could but this gave them the backup for going ahead and beginning to inform the workers, and

OSHA. For instance, today the acts are doing a good job on making funds available to labor unions to begin to move in this direction.

You see, I am also convinced that OSHA will never have the capability to have all of the money they would need to have inspectors at the 5 million worksites that we have in this country. It is utterly impossible, and even if they did have the money, and the manpower, I think it would be a waste of both to use it in that manner.

I think that we must drive constantly for alerting the membership; they must know what they are being exposed to and how they can protect themselves. No longer must we have the attitude among the workers that this illness that they saw occur among their fathers and grandfathers is part of working in that particular industry.

For instance, in the coal mining industry, the miners knew they were going to come out huffing and wheezing and barely being able to breathe; because that was part of the penalty of having to work in the coal mine.

The same attitude prevailed in many of the other industries, but today we have a change in attitude. Believe me, it is still not sufficient to take care of any backing off from your legislation.

I think that the need for your legislation is still there, and it will supplement, reinforce; it will make it possible, because management will pay the cost of workers' compensation, because it is cheaper than putting in the preventative measures so there won't be anything else, but with your legislation it makes it tougher, and also I would add one other thing: I think that corporate doctors should be in that group of individuals who would be subject to the penalties that you spell out in this legislation.

Mr. CONYERS. Well, they would, if they were involved in a coverup of the information that turned out to have a hazardous result. They would be liable in that class of managerial personnel, as well as the supervisory personnel.

I noticed that you would recommend reducing the 30-day reporting period. Would you want it down to 15 days, or would you want it immediate?

Dr. KERR. Mr. Chairman, you are talking to a public health person, you know, born, bred, and everything else. I eat and live and drink this public health business. I want it to be immediate. Why should you wait? Because if you wait 30 days, you are going to unnecessarily expose workers to something that at least management knows is a danger to them, and they are going to take the attitude, man, if we can get away with this for 30 days, we are going to get away with it for 60 or 120. No way, an immediate announcement should be required. Because if you do not, labor is going to come back here and say, hey, why didn't you make it right away? Why should we have to work for 30 days when it is known that there is a danger out there?

You know you don't wait 30 minutes before calling the fire department.

Mr. CONYERS. Your point is very well taken.

Are we moving upstream in terms of legislative progress in this area? I noticed there is some legislation that would emasculate OSHA and some of the mining safety regulations, and so we seem

to be in a period which, as you describe, there are more people, especially workers in unions, becoming sensitive to this whole question of occupational hazards, but there seems to be always a falling away on the part of the Government and some of its agencies.

Dr. KERR. I think that is so because of the pressures that have been put particularly on OSHA, although don't overlook the fact that the coal operators tried to test the constitutionality of the Coal Mine Act on two different occasions, and they lost both cases in the Supreme Court.

Since the passage of OSHA, there has been a continuous attack against it. They either want to water it down and so attenuate it that it doesn't mean anything, or they want to repeal it, and the attack is still going on.

For instance, I am sure you probably know about what is happening over in the Senate. There has been the Schweiker bill that was introduced on a very interesting day, December 19, just before everybody went home. There were a few people around, however, who were alert, and we began to hear about that.

But, talking about the worker, Mr. Chairman, don't overlook the fact we have a civilian work force today of 100 million and less than 20 percent of those are organized, so that while you talk to us in labor, and we are absolutely adamant on this kind of thing, there is a whole host of workers out there who don't have that kind of protection. Sure, we sort of set a standard. It is only because of the fact that organized labor fought long and hard for health insurance that most workers, or at least a high percentage of them, are covered by some form of health insurance today. This was true of workers' compensation, and a whole host of other things. But in this area, I am telling you, it is really an uphill battle. There is no question about it.

You get up in the morning sometimes and wonder, are we going to make it today; it is almost a day-by-day situation.

Mr. CONYERS. Well, you have been in the battle for quite a while and have made some very important contributions, and we appreciate your testimony here today. We hope that it will spur the action of the committees and the Congress to move in this area.

I would like to turn now to my colleague from North Carolina, Mr. Gudger, for any questions he may have.

Mr. GUDGER. Dr. Kerr, what effort is being made by management on its own initiative to examine employees routinely to try and keep current health data available? There was a good deal of initiative in this area about 25 years ago, and I don't see it quite as evident now as it seemed to have been back then.

I remember quite a number of corporations in America that were routinely requiring their employees to undergo periodic examinations, realizing that it was economically advantageous to the company to avoid absence because of illness and, of course, to discover anything in the management area that could be done to relieve hazards within the plant.

Dr. KERR. I honestly don't think there is terribly much of that going on today. I think there are preplacement—they call them preplacement, really preemployment examinations and, as far as the industrial programs, the so-called occupational health programs that are going on in various industries, the primary premise

on which they are based is helping the worker to get through, if possible, that day of work.

Mr. GUDGER. One other question: You have addressed silicosis in a 1932 context. You have addressed black lung in a more current context, and you mentioned in your paper beryllium poisoning. That I have some familiarity with, having tried some lawsuits involving exposure to beryllium, and I recall that there was a great deal of concern about discovered fibrosis in the beryllium employee's lung before it was realized how highly toxic this particular substance was. In other words, it emerged as a discovered hazard which was apparently not fully assessed or appreciated because of a lack of development or lack of state of the art.

Would you speak to that subject of state of the art, because there are circumstances in which an employer and an employee lack knowledge of the hazard that the employee is exposed to until some experience develops. I think this was the case in beryllium poisoning, because I have made some special study into it in connection with a lawsuit.

Dr. KERR. Beryllium is one of the occupational diseases that has had a lot of attention, however, I must point out that my knowledge of beryllium is not all that extensive.

However, from what I do know about it, it first became recognized, as you undoubtedly know, back about 1943, at the brush beryllium plants in Lorain, Ohio, and it was not recognized at that time that it was that big a hazard. However, there was done by Dr. Harriett Hardy, which showed that the beryllium in the fluorescent bulbs was extremely hazardous. She also did extensive work on the beryllium industry really from the point of view of using this not only with the metals to make a very hard metal alloy that is now being used on the missiles, but also as one of the propellants for mechanisms that we have out here in outer space and indicated that this was a very strong carcinogen. She was responsible for developing what became the first and only beryllium register up at MIT and at Harvard, when she was at the Massachusetts General Hospital.

Mr. GUDGER. My point is that it seems to me that we see emerging the patterns of occupational hazards that are not assessed and appreciated either by management or by labor at the time that the exposure is causing damage, and that only after the art has evolved to where there is an understanding of the hazard can the industry, or can AFL–CIO, the union, move to protect the employee from that risk, and I think the beryllium case is sort of a case in point.

So you clearly cannot impose the burden on management to do what it doesn't know and understand.

Dr. KERR. I do not think anybody is asking them to do that. I think what we are asking them to do, Congressman, is to protect the worker when they know about it, and I venture that they know about it every time, because of the fact that these occupational diseases that we are talking about, in every instance, Congressman, are manmade diseases.

Mr. GUDGER. I am aware of this. But now we get back to my question. Should management routinely examine all employees to

discover if there is an unknown hazard there in the plant which perhaps periodic examination might reveal?

Dr. KERR. I would say I would go one step further. They should not be permitted to use the material that causes any problem.

Mr. GUDGER. Agreed, but if they don't know the hazard.

Dr. KERR. I am not happy about having management do these examinations. For instance, in the Coal Mining Act, I think we are in a unique position because Congress said that the X-rays that were part of the surveillance program of the coal miners are to be taken by the U.S. Public Health Service, and they specified the intervals at which they are to be taken. These X-rays are used not only to protect the health of the miners, but to help us assess the adequacy of the dust suppression campaign going on constantly. This has to be done by a neutral agency, and the only neutral agency I can come up with is the U.S. Public Health Service, and I think that if they were to be doing these X-rays all of the time, that we would be in a far better position, and I think the same thing prevails in other industries.

I am not content, I am not easy, about having this information in the hands of management, because I have seen that information used too frequently to the detriment of the worker.

Mr. GUDGER. I think you missed my point. My point is this: Whereas we have discovered black lung connection, and therefore are in a position where the Government can require the administration of routine X-rays to determine its development, I am saying should industry, where we do not yet know that there is a hazard, be required to regularly and routinely examine its employees so as to discover the pattern of hazard before too much damage has been suffered. In a situation like the beryllium poisoning where it was not known that beryllium was so highly toxic until we began to have people at the workplace evolve these symptoms of extreme fibrositis, should management, have already been routinely, every 6 months, examining those employees before the discovery was made that beryllium had this high toxicity?

You see what I am talking about?

Dr. KERR. I see what you are talking about. When you don't know what you are looking for, that is one thing, but in all of the instances with which I am familiar, in the world of work, and in public health, in most instances we knew what we were looking for; we knew what was there, and so did management. These were not new situations.

Mr. GUDGER. Silicosis became a disease recognized under the Workmen's Compensation Act of the State of North Carolina about 1944 or 1945. The act had been in place since 1939. Silicosis became recognized, I think, throughout the United States largely as a result of this congressional study which you have referred to.

We knew something about it, but we didn't know the instances of its occurrence and the particular types of minerals which created high toxicity. We found that in western North Carolina. Mica was a highly toxic silicon.

Would you care to speak to that? What do you contend was the situation in 1936?

Dr. KERR. Well, I would contend that, first of all, we have known about silicosis; it is probably one of the oldest occupational diseases there is.

Mr. GUDGER. How many States had a law?

Dr. KERR. It was first described in the Greek literature.

Mr. GUDGER. How many States had workmen's compensation?

Dr. KERR. In 1936, oh, I can't tell you how many there were, Congressman. At the most I would say that there might have been 9 or 10, and there were only about 6 or 7 more that did anything about it as a result of those hearings, but believe me, there was also a Crown investigation that was done in 1902 of the gold miners in South Africa.

The interest of the Crown in that situation was the fact that the white supervisors were getting sick and dying, and so they did an investigation in which they found out that it was the black workers that were dying like flies.

The white workers were dying also, but they had a new disease and they called it siliceous tuberculosis.

That was the first time. Then they found it in the tin and zinc miners in England, and it was found in the United States in 1915. There is a famous report, the "Tri-State Report," in which it was fully described among those tin, lead and zinc miners out in the tri-State area of Arkansas, Missouri, and Oklahoma.

So it was a well-known disease scientifically. It had not had the lay coverage that it got as a result of those hearings, but it was in the journals. It was well talked about.

There were reports on it from the Public Health Service and from other journals, so that it was a known disease; but there were no other occupational diseases that were being given much in the way of compensation coverage until we began to get exposure on this silicosis bit at Gauley Bridge. Then there began to be a little bit of a change there.

Mr. GUDGER. Thank you, Mr. Chairman.

Mr. CONYERS. We want to express again our appreciation to you, Dr. Kerr.

As you know, the OSHA laws create no criminal penalties unless death occurs, and in the legislation before us we would create a Federal jurisdiction, as soon as there is any fraud or coverup in the reporting, so that we take this huge step forward in trying to reach any of these medical reports or findings or information of hazard that is known either to result in injury to the worker or to the potential consumer, and it is in that respect that we anticipate that the Miller bill will complement the OSHA regulations in that we would be able to move much sooner than we would under their prevailing pattern.

Dr. KERR. I think that is terribly important that you would be able to move much faster on this, and also the fact that the penalties are more severe. It is what I would call a stronger irritant on a pocketbook nerve. So as a consequence, it may stimulate action.

Mr. CONYERS. We hope that you will follow our activity. There are a number of recommendations for change in this bill to afford protection for those that blow the whistle.

There is a consideration of restitution for victims which may or may not be provided in the current drafting of the legislation, and there is going to be a further requirement that the corporations notify the public directly through public statement about the dangers so that they are aware and, of course, a requirement for immediate rather than the 30-day period.

All of those things will be considered very carefully, and we consider ourselves greatly profited by your testimony and your prepared statement which you brought to us today.

Dr. KERR. I would recommend, if you have not already done it, the inclusion of the material from the book titled, "I Vote My Conscience," which is a memorial volume that was written some time following the death of Vito Marcantonio, and there are about four pages in there that would be exceedingly interesting.

[The article follows:]

"I VOTE MY CONSCIENCE"

[On January 13, 1936, Congressman Marcantonio introduced the following joint resolution, H. J. Res. 449. The resolution was accepted.]

Resolution: To authorize the Secretary of Labor to appoint a board of inquiry to ascertain the facts relating to health conditions of workers employed in the construction and maintenance of public utilities.

Whereas four hundred and seventy-six tunnel workers employed by the Rinehart and Dennis Company, contractors for the New Kanawha Power Company, subsidiary of the Union Carbide and Carbon Company, have from time to time died from silicosis contracted while employed in digging out a tunnel at Gauley Bridge, West Virginia; and

Whereas one thousand five hundred workers are now suffering from silicosis contrated while employed in the construction of said tunnel at Gauley Bridge, West Virginia; and

Whereas one hundred and sixty-nine of said workers were buried in a field at Summerville, West Virginia, with cornstalks as their only gravestones and with no other means of identification; and

Whereas silicosis is a lung disease caused by breathing in silicate dust, this dust causing the growth of fibrous tissue in the lung gradually choking the air cells in the lung and bringing about certain death; and

Whereas this condition has existed for years and all efforts to expose it have been thwarted; and

Whereas there are other similar conditions existing in the United States in said industry: Therefore be it

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That (1) the Secretary of Labor shall immediately appoint a board of inquiry to make a prompt and thorough investigation of all facts relating to health conditions of workers employed in the construction and maintenance of public utilities.

[In accordance with the foregoing resolution hearings were held by a congressional committee of which Congressman Marcantonio was a member. He summarized the findings of this committee in the following article which appeared in The New Republic of March 5, 1936.]

"DUSTY DEATH"

There is nothing new about silicosis. The Ptolemies knew of it. Pliny the Elder referred to it as "the stonecutter's disease," and Aristotle warned Greek workmen against it. Medical records of the past two thousand years are dotted with descriptions of its cause and effect. International conferences have been called to discuss means of combatting it. The United States Bureau of Mines has issued hundreds of bulletins describing it as the most prevalent and most dangerous industrial disease known to man.

With the exception of inadequate legislation in eleven states making silicosis a compensable disease, not a single State or Federal statute has been passed to protect American workers against it.

This amazing paradox was the principal factual nugget in the vein of tragedy uncovered this winter by our congressional investigation into construction of the "tunnel of death" at Gauley Bridge, deep in the mountains of West Virginia.

When the House Labor sub-committee appointed to do the task began its investiagation two months ago, it was inclined to look askance at references to Gauley Bridge and neighboring towns as villages of the living dead. The committee knows better now. It has heard doctors, social workers and investigators describe the ghost towns whose male population has been decimated by the creeping death called silicosis. It has heard from the lips of the dying and the widows of the dead the horrors of a dust-filled hole through a West Virginia mountain where, after a matter of months, men choked up and died. It has heard a mother, whose eyes were those of a stricken animal, tell of the slow strangulation within the course of 13 months of her three young and vigorous sons, and of the youngest who asked that he be "cut open after he was dead so the doctors could find out what had killed him."

And, greatest tragedy of all, it has found irrefutable proof that the disaster at Gauley Bridge need not have happened at all.

When, in 1932, a Union Carbide subsidiary, the New Kanawha Power Company, decided to construct a water power tunnel at Gauley Bridge, preliminary surveys and test borings revealed large deposits of almost pure silica in the path of the project. Now, silica is an extremely valuable rock. It is essential in glass manufacture and certain metallurgic processes. To another Union Carbide subsidiary, maufacturing, metallurigic equipment in a nearby West Virginia town, the discovery came as a godsend, and the Charlottesville, Virginia contractors—Rinehart and Dennis—were consequently instructed to increase the size of their shafts when passing through the rich silica deposits.

From that point on the venality of the contractors was almost beyond conception. Disregarding even the most elementary health and safety precautions and the warnings of the West Virginia Bureau of Mines (which incidentally has no authority in the matter since this was not a mine but a tunnel), they pushed the job with presumably but one thought in mind—speed means money.

Ten-hour work shifts, "dry" drilling with ten of the sixteen drills which were in operation at once, operation of gasoline motors in the headings, and inadequate and at times nonexistent ventilation in these modern Black Holes of Calcutta; working conditions which witnesses could only describe as "hellish."

"Silica dust covered us from head to foot, got in our hair, our eyes, our throats, befouled our drinking water" witness after witness testified.

"You couldn't see ten feet ahead of you even with the headlight of the donkey-engine"—"Strong, husky men gasped, choked and collasped on the ground and were carried outside to revive"—"Men died like flies"—"the labor turnover in Negro workers was tremendous"—"You couldn't tell a white man from a colored man fifteen feet away"—"The paymaster told the assistant superintendent: 'I knew they was going to kill those niggers within five years, but I didn't know they was going go kill them so quick' "—

Wet drilling, so called because a stream of water plays constantly over the points of the drills, would have cut the dust hazard to a minimum, but wet drilling is slower and therefore more expensive. Masks? Masks cost money! It was cheaper, the company found, to diagnose the wracking cough which within a few weeks attacked the workers as "pneumonia" of the more mysterious "tunnelits," to dole out pills—"little black devils"—for everything from a cracked skull to an infected toe.

Of course, men died. Just how many the committee has not been able to determine, but the estimates run all the way from two [hundred] to five hundred. The company, adopting the role of undertaker with both neatness and dispatch, quickly solved that problem. There is a field of waving corn in the nearby village of Summerville. Beneath the corn lie the bodies of an untold number of men who died in the "tunnel of death" at Gauley Bridge. The local undertaker, hired by the company to perform mass burials at $50 a head, doesn't know how many he buried in that field. His records have been "lost."

Silica eats through tempered steel. What it does to the human lungs is almost beyond belief. One of the most dramatic committee exhibits are the lungs of a worker who died of acute silicosis. Parts of it the size of your fist are petrified clear through—veritable chunks of silica rock.

But that's what silicosis means—a gradually increasing agony as little by little the fine particles of silica fill up the air cell of the lungs and cause what is literally death by strangulation.

Hundreds of law suits have resulted from the tragedy that is Gauley Bridge, since until recently the disease was not compensable in West Virginia.

"It's a racket!" the company howls, but I perfer the definition of Senator Holt of West Virginia: "The most horrible industrial disaster in the history of the world and a permanent black mark on the record of American industry."

[The findings Mr. Marcantonio described above forced the revision of Department of Labor regulations governing working conditions in the industry. They produced stricter enforcement of existing regulations, and also led to more favorable decisions in silicosis compensation cases at Gauley Bridge and elsewhere.]

Mr. CONYERS. Thank you. We will include that item in the record.

Dr. KERR. Thank you.

Mr. CONYERS. Again, our thanks for coming.

I would like to call our next witness, David A. Sweeney, who is the director of Legislative and Political Education of the International Brotherhood of Teamsters.

Mr. Sweeney has had a long and distinguished career in the Teamsters Union for many years, and was a rank and file member starting as a truckdriver. He has been an activist and comes before the committee with a great deal of practical experience on the subject matter being discussed today.

We will incorporate your statement in its entirety into the record, without objection, and welcome you before the subcommittee.

[The prepared statement of David A. Sweeney follows:]

PREPARED STATEMENT OF DAVID SWEENEY, DIRECTOR OF LEGISLATION AND POLITICAL EDUCATION, INTERNATIONAL BROTHERHOOD OF TEAMSTERS

My name is David A. Sweeney. I am the Director of Legislation and Political Education, International Brotherhood of Teamsters. I am appearing on behalf of R.V. Durham, our Director of Safety and Health. Mr. Durham is unable to attend because he must appear as a witness at a trial in North Carolina today.

The International Brotherhood of Teamsters strongly supports H.R. 4973. This legislation is necessary to protect the workers as well as the public from known, concealed hazards that would not be recognizable in the normal course of business.

Safety in the workplace is one of the most important goals our union seeks on behalf of our members. Those of us who work in such pleasant surroundings as these modern, air conditioned offices sometimes lose perspective as to the working conditions of most Americans. The warehouse, the factory, the assembly line, and the truck present many known and unknown dangers to the safety and health of the worker.

There are many hazards in the workplace that are protected under OSHA. These are usually the more recognizable hazards.

The situation where there is a deliberate, knowing, concealment of a health hazard will rarely be detected by OSHA. There should be stronger deterrents to these sort of activities, such as the criminal penalties imposed by this legislation.

The Teamsters Union represents over two million workers in a vast variety of industries. We range from trucking, warehousing, manufacturing, food processing, the chemical industry, airline, construction, laundry, and the list goes on.

The safety of the worker can only be preserved by watchful employees who will report unsafe conditions, a strong Occupational Safety and Health Act, and laws to deter employers and manufacturers from concealing products and conditions that are injurious to health and safety.

We are aware of the horror stories now coming to light concerning health hazards such as asbestos, kepone, and D B C P.

The Teamsters Union has had experience in just such a case. It dealt with lead exposure on the job. To summarize the facts:

The employees at the St. Joe Mineral Corporation in Herculaneum, Missouri are members of Local Union 688. This is a lead smelting and processing plant. It has been ascertained that high levels of lead in the blood cause serious ailments. The lead build up in the blood was due to exposure to airborne lead in the workplace.

Prolonged exposure to high levels of lead causes kidney damage and increases risk of mental deficiency, premature aging, high blood pressure, and diminished fertility. Low level exposure impairs the formation of red blood cells. It is also damaging to the fetuses of pregnant women.

OSHA has recently set more stringent standards for lead exposure.

The company withheld from the employees the information concerning the results of examinations made by company doctors. Several requests were made for this information.

When the employees continued their complaints and went to the private doctor, the company would challenge the results of such diagnosis and thereby delay any workmen's compensation claim for several months. Since the employee knew that the delay would occur and could not afford to wait several months without any income, they did not take their claims to a private physician.

The company doctors used a cheltion drug to reduce the lead levels in the employees' blood. Under the chelation process, a drug is injected into the system. It essentially washes the lead out of the system.

The use of chelation drugs has many adverse side effects and should not be used, except in cases of extreme overexposure.

The use of these injections was commonplace to reduce the lead levels to so-called safe levels or to prevent elevation of lead levels.

In this case, St. Joe Mineral Corporation did not tell the employees the facts that:

(1) They were being exposed to excessive levels of lead;

(2) The exposure was harmful to their health and had long-term effects;

(3) The exact nature of the treatment the workers were subjected to was concealed as well as the adverse side effects of the treatment.

There are many such cases and I am sure many more that will be discovered in the future.

This legislation is very important as a deterrent to the continued concealment of health and safety hazards.

We congratulate the Committee for recognizing and taking such effective steps to resolve the problem.

Thank you for the opportunity to present the views of the International Brotherhood of Teamsters on this legislation.

TESTIMONY OF DAVID SWEENEY, DIRECTOR, LEGISLATIVE AND POLITICAL EDUCATION DEPARTMENT, TEAMSTERS UNION, ACCOMPANIED BY STEVE McDOUGALL, INDUSTRIAL HYGIENIST, SAFETY AND HEALTH DEPARTMENT, INTERNATIONAL BROTHERHOOD OF TEAMSTERS

Mr. SWEENEY. Thank you, Mr. Chairman.

My name is David Sweeney. I am the director of the Legislative and Political Education Department for the International Brotherhood of Teamsters, and I am appearing on behalf of our director of health and safety, Mr. R. V. Durham.

I have with me Steve McDougall, an industrial hygienist with our health and safety department. Mr. McDougall is a pretty good technician, so if you have any technical questions he will be able to respond.

The International Brotherhood of Teamsters strongly supports H.R. 4973. This legislation is necessary to protect the worker as well as the public from known, concealed hazards that would not be recognizable in the normal course of business.

Safety in the workplace is one of the most important goals our union seeks on behalf of our members. Those of us who work in such pleasant surroundings as these modern, air-conditioned offices sometimes lose perspective as to the working conditions of most Americans.

The warehouse, the factory, the assembly line, and the truck present many known and unknown dangers to the safety and health of the worker.

There are many hazards in the workplace that are sought to be eliminated under OSHA. These are usually the more recognizable hazards.

The situation where there is a deliberate, knowing, concealment of a health hazard will rarely be detected by OSHA. There should

be stronger deterrents to this sort of activity, such as the criminal penalties imposed by this legislation.

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The company doctors used a chelation drug to reduce the lead levels in the employees' blood. Under the chelation treatment, a drug is injected into the bloodstream. It essentially washes the lead out of the system.

The use of chelation drugs has many adverse side effects and should not be used except in cases of extreme overexposure.

The use of these injections was commonplace to reduce the lead levels to so-called safe levels or to prevent elevation of lead levels.

In this case, St. Joe Mineral Corp. did not tell the employees that:

They were being exposed to excessive levels of lead;

The exposure was harmful to their health and had long-term effects, and

The exact nature of the treatment the workers were subjected to as well as the adverse side effects of the treatment.

There are many such cases, and I am sure that many more will be discovered in the future.

This legislation is very important as a deterrent to the continued concealment of health and safety hazards.

We congratulate the committee for recognizing and taking such effective steps to resolve the problem.

Thank you for the opportunity to present the views of the International Brotherhood of Teamsters on this legislation.

In closing, Mr. Chairman, we would like to commend the subcommittee and the staff for holding these hearings and calling this most important problem to everybody's attention because in our opinion something has to be done, and it would seem that these hearings are a first step in the right direction. We are happy to appear and aid the cause as best we can.

If you have any questions, Mr. McDougall and I will attempt to answer them, Mr. Chairman.

Mr. CONYERS. Do you have any experience of your own during your work career in which the kinds of problems that we are discussing here are personally known to you?

Mr. SWEENEY. I would say not in my Teamsters experience, Mr. Chairman, but I was a member of the Woodworkers Union in the State of Washington as a very young man.

I worked in both sawmills and plywood plants and we had a continuous problem really more with saws and blades being exposed to workers.

I might ask Mr. McDougall if he would like to elaborate on any of the recent inspections or cases in which he has been involved.

Mr. MCDOUGALL. Just about the St. Joe Mineral Corp., the lead industry. The only way we finally did start to find information was after thorough OSHA-type inspections. When we found that workers were being exposed to something like 20 times the current legal limit for lead, the company would not release that kind of data to the workers. We discovered the high exposure level through OSHA and NIOSH, the National Institute of Occupational Safety and Health. This is the type of thing that we find continuously in the plants, that the workers want to know what they are exposed to.

When the workers see the company running around taking air samples, they say, "What are we working with, and how much are we exposed to?"

Nine times out of ten, or I should say probably 99 percent of the time, the workers cannot get that information. After our experiences, as at the St. Joe Mineral Corp., the workers finally have to come to the conclusion, why wouldn't you give us these results? We must be overexposed. That is the type of situation we run into time after time.

Mr. CONYERS. Of course, if the Teamsters Union runs into this kind of resistance, those who work in nonunionized circumstances are really probably having difficulty in having OSHA or NIOSH enforced at all. Is that too extreme a statement?

Mr. MCDOUGALL. I would say not. The unorganized worker 9 times out of 10 does not know his rights under the OSHA Act and they are usually so cowered by the situation that they wouldn't think of calling in an OSHA inspector for fear they would lose their jobs. We find that even among organized workers, we must fully explain their rights under the OSHA Act. Then we finally get

some action and the discoveries start to come to the information front.

Mr. CONYERS. Thank you very much.

I would like to recognize Harold Volkmer, our colleague from Missouri.

Mr. VOLKMER. I have no questions.

Mr. CONYERS. We thank you for appearing.

We hope you will follow the results of this activity, and please feel free to submit any additional recommendations or comments that you may have as this legislation moves toward some ultimate disposition.

Thank you very much for joining us today.

Mr. McDOUGALL. Thank you, Mr. Chairman.

Mr. CONYERS. Our final witness for the morning is the distinguished director of the department of occupational safety and health of AFL-CIO, Mr. George Taylor, a University of Virginia graduate.

He is presently the chairman of the Staff Subcommittee of AFL-CIO on Occupational Safety and Health.

He is also the executive secretary of AFL-CIO Standing Committee on Occupational Safety and Health, and secretary of the Staff Committee on Atomic Energy and Natural Resources.

Is he here, before I go on with this intensive introduction?

[No response.]

Mr. VOLKMER. Mr. Sweeney, since Mr. Taylor is not here, the only reason I did not ask some questions a while ago is because I do not have a lot of time and I thought I would like to permit Mr. Taylor to testify, since, he is not here, I still have a few minutes.

It pertains basically to the legislation itself and the integral parts of it. We have had various witnesses testify on this legislation and I would just like to know your general feelings.

First, we have the definition of an appropriate manager in here and the management authority. There has been some thought about enlarging that definition to require other people to also divulge, at least to Federal agencies, for example, let's say you have a testing laboratory. It is independent of the company but is acting for the company. They decided that something should have been done, in other words, notify.

Should they be required also to notify? What do you think about that? If you don't want to answer, that is OK.

Mr. SWEENEY. I am not an attorney, but we will do the best we can to respond to the question.

My first concern is that when it comes to these areas where workers are subject to any kind of danger at all, it should be divulged.

You get into a lawyer-client relationship or a doctor-patient relationship. I am assuming standard business ethics in a lot of cases like this, that if corporations had an independent health organization they would take a look at the toxicity or the bad air.

That poses really a very difficult question from a legal standpoint. My initial reaction is yes, they should be made to divulge this information.

Mr. VOLKMER. Should they be subject to criminal penalties if they don't?

You understand as an indepedent basically, a consulting firm or health or safety or any other type, doing it for a corporation, should they too be required to do any of this? That is not within the purview of the bill at the present time?

Mr. SWEENEY. My initial response, I suppose to be legally or technically correct, is that you probably couldn't make them liable. That is a personal opinion.

Mr. VOLKMER. As a policy question, should they; what do you think?

Mr. McDOUGALL. I am an industrial hygienist and occupational health specialist. I don't know the legalities of the issue either, but I would say the case we often have in companies right now, large corporations and even smaller outfits, is that the professionals, my counterparts, can come up with an overexposure to employees or medical condition that they have found in workers if there is a medical department.

Often their responsibility ends when they report to management and often, if their ethics don't get the best of them, when management does not inform workers of the problem, they do not go ahead and release it themselves because it comes down to a choice of economics; their job or their ethics.

The problem I would see is if there is not some kind of accountability for these consulting firms, and a lot of companies are turning to consulting firms now, we could see every company in the United States that might have their own capabilities right now, folding up those capabilities and contracting it out to an independent contractor so they would not have to release this type of information.

These companies would say they never got it. They never saw it. There would not be any accountability. There would be a gap in the accountability there.

Mr. VOLKMER. The other thing, as to the bill itself, it requires, as I read it anyway, willfulness on the part of the person charged with knowingly false, at least knowingly false to inform the agency and warn affected employees.

I think in the past there has been some discussion here about whether or not that should include at least gross negligence.

Let's take an example that I see something, and I am a president of a corporation or an executive manager of a corporation and something passes across my desk, or there is a comment made during a board meeting of a certain type of hazard, and I don't take action on it.

I don't tell anybody to do anything, not willfully, but it is just that I don't think about it anymore. I have 10 things right at that 5-minute interval coming about, or all of a sudden my wife calls and one of the kids has been in a car accident and I run out and I forgot all about it.

I don't do anything later on about that either, and it sits on my desk or somebody has already done their duty and told me about it. They go back to their office and don't tell me anymore. That is not, if I don't do anything, that is not willful. You understand what I am saying? That is not knowingly false in my opinion.

Mr. SWEENEY. Congressman, I would simply respond, whether we want to call your behavior willful violation or gross negligence or

not having knowledge of the law, in our opinion that you, as the employer, are responsible for the health and safety of your employees. As the previous witness stated, in our opinion there are very few health hazards that are really and truly unknown to us today. The liability in our opinion would still be upon the employer.

Whether he is grossly negligent or whether he is willfully overlooking the unsafe working conditions would not make that much of a difference, in our opinion.

Mr. McDOUGALL. I think we have to consider a situation that involves the actual lives of people, a situation that would constitute criminal negligence. I think we could draw a parallel to a man driving down the street in a car. If he runs over somebody intentionally that is a willful, criminal act.

If he is drunk when he is doing it, it may not be willful, but it is still criminally negligent in that there has to be some kind of accountability down the line. Those things can't be overlooked as casually as they have in the past.

Mr. VOLKMER. That is what I am afraid of within the language. They may be able to get out from under a criminal prosecution on the question of "was it knowingly failure?"

I have been a prosecutor on the other end. A lot of this is state of mine and how do you prove state of mind if you don't have any outside facts to prove it?

If he came out and told one of his subordinates, you stick that back in a file and we are going to forget about it and the subordinate so testifies to it, you have a case of knowingly failure.

No action was taken, and the question is, do you have a knowingly failure?

Mr. McDOUGALL. If his company doctor told a manager that this is a hazard, this is causing such and such in workers, and the top management passes it over, misses it, gets that call from the wife, who is responsible then? The top management is ultimately responsible but that physician would seem to have the responsibility of saying something or urging some type of action if he did not see any action being taken.

Mr. VOLKMER. You would place a duty upon others also with the knowledge to do something more than just top level management.

Mr. McDOUGALL. I would, definitely.

Mr. VOLKMER. Thank you, Mr. Chairman.

Mr. CONYERS. I would like to recognize staff counsel, Mr. Raikin.

Mr. RAIKIN. Mr. Sweeney, you point out on page 1, of your statement that OSHA usually will not detect the situation where there is a deliberate knowing concealment of a health hazard, and that there should be stronger deterrence to this sort of behavior.

Do you think the Miller bill adequately performs this function and fills in this gap?

Mr. SWEENEY. I would say, being a nonlawyer and on the basis of our initial perusal of the legislation, I would answer affirmatively but, as I was going to respond to Congressman Volkmer, if there is some way that we can beef up the language in the bill to make it more effective, I am sure that all representatives of workers would gladly accept the language that would in fact beef up the legislation.

I would say "Yes" to your question on our initial reading of the proposed legislation.

Mr. RAIKIN. You described starting at page 2 of your written statement your experience with the St. Joe Mineral Corp., in Missouri.

Mr. VOLKMER. It is not in my district, by the way.

Mr. RAIKIN. The corporation allegedly withheld from workers information concerning the results of examinations made by company doctors. We also had testimony at our first hearing on the Miller bill last November that doctors did this allegedly also in the asbestos cases.

I am referring to the testimony of Mr. Castleman.

Do you think this is a widespread practice; that is, the withholding of X-rays from workers by company doctors?

Mr. SWEENEY. I would yield to Mr. McDougall.

Mr. McDOUGALL. We found in our experience that it is extremely widespread, and that is one of the things that we are pushing for in OSHA regulations, the employee's own access to his own medical records. We have had extremely limited success.

I have only seen it once or twice where an employee asked to see his own record and he is granted permission by the company physician. It is company policy not to let employees see their own records.

We get to a broader issue, such as in a lead or chemical plant, as to what constitutes medical records; for example, blood lead levels are a good indication of lead poisoning.

The union asks to see the blood lead level records. The individual employee asks to see his of her own and are completely denied this type of information. We have hardly any cases where we have had success in getting access to records of any type in a company.

Mr. RAIKIN. You also pointed out on page 3 of your statement that the St. Joe Mineral Corp. allegedly did not tell their employees that they were being exposed to excessive levels of lead, that the exposure was harmful to their health and had long-term effects, and the exact nature of the treatment the workers were subjected to was being concealed as well as the adverse side effects to that treatment.

Do you think if we had had the Miller bill in place at that time with that alleged behavior that that would have prevented or at least deterred such things from happening?

Mr. McDOUGALL. I believe so, definitely, in that we had a situation where workers were exposed up to 20 times the legal limits. Their blood lead levels were four to five times what is considered now legally safe.

They were subjected to very dangerous chelation treatment which causes kidney and liver damage, and they were told nothing. The company would not respond to what their blood lead levels were and would not respond to direct questions about, "Do I have lead poisoning and what are you giving me in this shot?"

The company would say, "Oh, you are OK; you are a little elevated in the blood levels. Take this shot; you will be OK and we will send you back to work."

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It was absolutely criminal negligence in that type situation, and I think that if we had something like this legislation in place, the company would think twice about doing this type of thing.

Mr. RAIKIN. Would you favor, either of you, an amendment to the Miller bill that would provide for misdemeanor criminal sanctions in the instance where someone making a report, as required by the Miller bill, was discriminated against by being fired or demoted or something like that?

Would you favor such a provision, and is it necessary in your experience?

Mr. SWEENEY. Yes; we would, counsel, but again you had a very illustrious witness up here previously. I have served on a couple of workers' compensation studies in various States prior to coming to Washington, D.C. This is really a very, very difficult problem that if the worker in fact calls his State OSHA department he should not be penalized for reporting unsafe working conditions period. If we have to insert the so-called whistle-blower protection into this legislation we should be doing it because it is terribly important that the worker not be punished for taking what is really a rightful stand. We would answer yes.

If it is not presently in the legislation, in our opinion, it should be inserted.

Mr. MCDOUGALL. Yes, and if I might add to that, this type of protection is also extremely important for the professional—my counterpart in industry. Maybe 7 out of 10 industrial hygienists work for industry and I have many friends that do work for industry, thankfully not any of our companies, but I have had many of them come to me and say, Steve, we know the workers are overexposed. We have taken the air samples. The workers are tremendously overexposed. We should be telling those workers that it comes down to a choice again, if we try to blow the whistle, if we try to force management to let the workers know they are at risk, it's our job.

You have to have that type of protection, some type of protected code of ethics which my profession has adopted now, but it is only as good as the protection that is afforded in the workplace.

Mr. RAIKIN. Would you favor an amendment to the Miller bill providing for corporate probation; let me spell that out.

There has been a proposal in other contexts calling for the authorization of a Federal court to appoint a probation officer to visit the convicted company to insure compliance.

Another form of corporate probation that has been proposed in another context would authorize a Federal judge in a conviction, say, under the Miller bill, to forbid the convicted corporate manager from working in a similar capacity for a stated period of time.

Take those one at a time.

Would you favor an amendment authorizing the Federal court to appoint a probation officer to visit the convicted company to insure compliance with whatever court orders flow from a criminal conviction under the Miller bill?

Do you think that would be necessary in some cases to insure compliance?

Mr. MCDOUGALL. Again, I am not sure how this works and I am not a lawyer. But, I would think that the same type of probationary function could be carried out by agencies already in place, such as OSHA and NIOSH who have the capacity and capability to go in and check to see if there is continued abuse of disclosure of harmful conditions. So I don't know if a probation officer in the legal sense would be the person to go in unless he could discern what he was doing in the workplace.

Mr. RAIKIN. How about the second part of the question? Would you favor, in addition to the fine and prison sentence penalty possibilities currently provided under the Miller bill, an amendment that would authorize the Federal district court judge to forbid a convicted manager from working in a similar capacity, either at the particular company he was with at the time or a comparable company for a stated period of time.

Mr. MCDOUGALL. I wouldn't see a blanket restriction of that sort, but I would say that it would be very advantageous to have that capability if we have what might be known as a corporate murderer, and I don't think those terms are used too lightly. If there was that type of a situation, I think a person should be banned from ever being in a position of that sort again. So I think there should be that capability, but I wouldn't see a blanket restriction set out. If the person does this, we have to do this or restrict them for 5 years, that sort of thing.

Mr. RAIKIN. How about an amendment to the bill authorizing the judge to require that the corporation or the corporate manager make restitution to the victims of the coverup to actually pay for damages out of their own pockets directly to the workers who were victimized say by a coverup of hazardous conditions in the workplace?

Would that be a provision that you would favor?

Mr. SWEENEY. I think we could have some sympathy for that proposed provision. It would be very, very difficult to enforce. We would much prefer that the corporation's insurance carrier, the State or the Federal Government make a restitution. It would seem that again you would put the worker into a position where he would have to take his employer or the plant manager into court to collect.

Also, going back to your original question, I do not think that putting people in jail really solves a problem. I think what we have to have is adequate enforcement of present OSHA legislation, OSHA federally, and the various States. OSHA's simply have to be adequately funded.

They also have to have access to the plant sites so these violations do not in fact occur. Again, we would leave to the committee's wisdom the best way to write some enforcement language into the legislation.

If you have to be as drastic as you were in this last proposal that you questioned us about, so be it. But again, our position simply is that we have pretty good laws on the books now.

We have to, one, make sure that the annual harassment that OSHA undergoes to cut the number of employees and the number of companies that are covered by OSHA stops, and the annual fight that OSHA has to undergo to keep an adequate budget. Those in our opinion would come closer to solving the real problems.

Again, we would yield to the wisdom of the committee.

Mr. RAIKIN. You do agree that the Miller bill provides a necessary additional deterrent by providing the possibility of jail sentences and fines for coverups of legal defects?

Mr. SWEENEY. Yes, sir; we do.

Mr. RAIKIN. Thank you.

Mr. CONYERS. Staff counsel Owen.

Ms. OWEN. Thank you, Mr. Chairman.

We have had some discussion this morning of accountability, and I would like to get a little better idea of how far you think such accountability should extend.

Specifically, I have two hypothetical situations in mind.

First of all, would you also think that a union representative who knew of some sort of danger and did not report it to the employees should be held criminally liable?

Mr. SWEENEY. My response to your hypothetical question would probably be a hypothetical response. I can't imagine a union representative that is worth his salt that would not report health and safety violations.

I just would not be in a position to respond. If you let me think it over, I could very possibly respond in writing.

Ms. OWEN. Alright.

Mr. SWEENEY. I was going to say you caught me off guard with the question for the simple reason, as I stated, I can't imagine a good union representative worth 2 cents that would not report it.

Ms. OWEN. If he were not a good union representative, should he be held criminally liable?

Mr. SWEENEY. I am not in a position to respond at this time. I will think it over and try to give you a response at a later date.

Ms. OWEN. My second question involves with representatives of Government agencies, for instance, OSHA inspectors. If there were a situation where an OSHA inspector failed to report something that he saw, should he be held criminally liable?

Mr. SWEENEY. My initial answer would be affirmative. I just simply cannot imagine why OSHA or State OSHA would be paying——

Ms. OWEN. What if he were bribed?

Mr. SWEENEY. If he were bribed there are statutes that presently cover taking a bribe.

Ms. OWEN. What about imposing criminal penalties for his failure to notify, in addition to taking the bribe?

Mr. SWEENEY. In my opinion again he is derelict, and he simply should be subject to the laws of the land.

It would seem to me that even under current law he would be liable and could receive jail sentence or fined for nonperformance of his duties. Again, I don't know if we need more law on the books in that particular area where a representative of government, whether it be State, Federal, or local is guilty of nonperformance of duty. It would seem to me that there is plenty of law currently on the books that would handle that situation, but I would yield again to the subcommittee's wisdom. If you felt it was necessary to solve the problem, so be it.

Ms. OWEN. Do you have any comment, Mr. McDougall?

Mr. MCDOUGALL. No; I have nothing to add.

Mr. CONYERS. We want to thank you very much. We wanted to get apparently a lot of legal opinions from nonlawyers on the record this morning, so we have had our sampling.

Mr. SWEENEY. Thank you again.

Mr. CONYERS. We appreciate both of your reactions to the number of technical questions, and we think that your concern and continued surveillance of this legislation as it moves through the processes will be very helpful.

Again our thanks for your appearing before the subcommittee.

Mr. SWEENEY. Thank you, Mr. Chairman.

Mr. CONYERS. Our next witness is the director of the Department of Occupational Safety and Health of AFL-CIO, Mr. George H.R. Taylor, a graduate of the University of Virginia.

He is presently chairman of the staff subcommittee on occupational safety and health and is executive secretary of the standing committee on occupational safety and health, and the committee on atomic energy and natural resources.

He is chairman of the bureau of labor standards technical advisory committee on occupational safety and health, and a national advisory committee member.

He is also a member of the Federal Advisory Council on Occupational Safety and Health and, as you can see, he is very well keyed into the major committees nationally on this very important subject.

He is joined by our old friend, the legislative representative of the AFL-CIO, Mr. Kenneth A. Meiklejohn.

We have your prepared statement, Mr. Taylor, which will be incorporated in its entirety, and we welcome you before the Subcommittee on Crime.

[Mr. Taylor's statement follows:]

PREPARED STATEMENT BY GEORGE H. R. TAYLOR, DIRECTOR, DEPARTMENT OF OCCUPATIONAL SAFETY AND HEALTH, AMERICAN FEDERATION OF LABOR AND CONGRESS OF INDUSTRIAL ORGANIZATIONS

On behalf of the American Federation of Labor and Congress of Industrial Organizations, I wish to convey the strong support of organized labor for the principles embodied in H.R. 4973. This legislation would establish criminal penalties for certain corporate officials who knowingly conceal product or manufacturing process hazards information from their employees or from the public.

We strongly believe that the principles of accountability and honesty should be as applicable to business enterprises and the management authorities of such enterprise, whose acts of omission or cover-up may cause death or illnesses to innocent, unknowing people, as they are now applicable to individuals who engage in or tolerate various felonious acts defined in our criminal laws.

Too many corporate acts of omission and concealment have come to light in the past several years. The basic question has at least been raised concerning corporate morality. This, in turn, raises an even more basic question as to how long dollars continue to be more important than the lives and health of people in our society.

At present, decisions within a corporation have resulted in millions of American working men and women being needlessly exposed to a wide-range of toxic materials—from asbestos to vinyl chlorides. Environments have been polluted by the dumping of hazardous chemicals in waste sites all over the nation.

Efforts by the Occupational Safety and Health Administration to enforce the law, even when large civil assessments are imposed, do not go beyond imposing fines on an impersonal entity—the corporation itself—and not on individual decision-makers for their accountable actions, which resulted in violations of the Act.

We believe that H.R. 4973 can provide two major benefits:

1. Encourage business enterprises and corporate managers to do the right thing by imposing upon them the disincentive of possible criminal action.

2. Stimulate corporate managers to take personal responsibility for achieving and maintaining safe workplaces, and surrounding environment, without the need of having it always imposed by government regulatory intervention.

It is depressing to realize that the issue addressed by H.R. 4973 is as old as the industrial revolution—the headlong drive of employers for profits without adequate regard for the effect on society from the undesirable side effects of industrial and technological development.

In 1854, Charles Dickens wrote in his novel, "Hard Times," about this mentality among industrialists in the English Midlands—a mentality which persists to this very day:

"Whenever a Coketowner felt he was ill-used—that is to say whenever he wasn't left entirely alone, and it was proposed to hold him accountable for his acts—he was sure to come out with the awful menace that he would 'sooner pitch his property into the Atlantic.' This had terrified the Home Secretary within an inch of his life on several occasions.

"However, the Coketowners were so patriotic, after all, they had never pitched their property into the Atlantic, yet, but on the contrary, had been kind enough to take mighty good care of it, so there it was in the haze yonder, and it increased and multiplied."

Another attitude, but similar, in its happy irresponsibility was conveyed in a letter dated September 12, 1977, to Dr. Eula Bingham, of OSHA, by a Robert A. Phillips, Executive Director of the National Peach Council. This letter was written to protest joint action by EPA, OSHA and the Food and Drug Administration restricting exposure of workers to the chemical pesticide, dibromochloropropane (DBCP) after is has been shown that it can cause human sterility.

The modest suggestion that there was a bright side to the problem was set forth by Mr. Phillips' letter, in this fashion:

"If possible sterility is the main objection, couldn't workers who were old enough that they no longer wanted to have children accept such positions voluntarily: Or could workers be advised of the situation, and some might volunteer for such work (sic) posts as an alternative to planned surgery for a vasectomy or tubal ligation, or as a means of getting around religious bans on birth control when they want no more children.

"We do believe in safety in the workplace but there can be good as well as bad sides to a situation."

While we believe that H.R. 4973 can have the beneficial effect, wish to present a few suggestions for its improvement which we hope merit consideration by this subcommittee.

1. Applying the penalty solely to an "appropriate manager" as defined in the bill, or to the corporation as an entity, without naming names of co-defendants, would allow managers, directors or supervisors to escape personal responsibility, wherever criminal intent can be shown. This range of possible defendants could include, with lesser penalties, outside consultants, engineering and testing laboratories which perform jobs for corporate management in assessing and defining safety and health data. Individual responsibility should also be assigned to supervisors who cut corners in design and prosecution of construction projects, as well as in the process in fixed site workplaces.

2. Some scale of penalties should be developed from knowing acts of concealment, and those which involve distortion of information or gross negligence.

3. Requirement that there should be a warning by the company management to the public, as well as to affected workers, on discovery of a serious danger involved. This is necessary, not only to protect individuals in the ambient environment outside the workplaces but to prevent dumping hazardous materials on other countries without adequate disclosure of the risks involved.

4. Protection of "whistle blowers"—those who warn regardless of a corporate policy of non-disclosure—from the threat of management discrimination in response to such actions.

5. Providing access for victims of concealment who may file civil suits against the corporation to the full range of evidence collected by federal investigators in white collar crime prosections.

The time has long since gone by when business enterprises and corporate managers can legitimately claim freedom from responsibility for serious dangers associated with their workplace practices or with the lethal defects in products, or components of such products, which they place upon the market. Our economy is characterized, to much too great an extent, by preventable workplace hazards and by products and business practices threatening death or serious bodily injury, for this to be permitted any longer. H.R. 4973 would, if enacted into law, represent a significant step in the direction of holding business enterprises and corporate managers responsible for

dangerous products they put on the market, unhealthy and hazardous business practices in which they engage, and the effects of their activities upon the evironment, and we strongly urge its approval by the Congress.

TESTIMONY OF GEORGE TAYLOR, DIRECTOR, DEPARTMENT OF OCCUPATIONAL SAFETY AND HEALTH, AFL-CIO, ACCOMPANIED BY KENNETH A. MEIKLEJOHN, LEGISLATIVE REPRESENTATIVE, AFL-CIO

Mr. TAYLOR. To save you all time, I would be happy to yield to any questions that you might have.

Mr. CONYERS. Let me ask you if there are portions of the bill that could be strengthened?

Have you had a chance to review any possible modifications we might want to look into?

Mr. TAYLOR. Mr. Chairman, our statement on page 3 indicates five possible changes in the bill which in our opinion might strengthen it.

They consist of applying penalties for the criminal acts to codefendants in addition to an appropriate manager which is only vaguely defined in the definition section of the act.

Some decisions are not always made by just one person. Sometimes there is a combination of decisions which result in an undesirable result, withholding of information or some other violation of the provisions of this act.

We also propose enlarging that to cover situations where corporation employees, outside consultants, R. & D. operations, do come up with information which would, if released from the corporation to workers, inform them of something which, if they were not informed could result in something bad happening to them from exposure to a toxic material, for example: on page 3 of our statement, we request that the committee consider enlarging the definition in that fashion.

Also with the old principle, on page 4, of letting the penalty fit the crime, there are acts which might be committed by corporate personnel which were not the key acts for which they were solely responsible but an element of it. The penalties for such individuals, if convicted, should be less than for the ones who had the prime responsibility.

I don't believe everyone should suffer equally if they were not actually into the act as deeply as the higher-up, the scale management people.

Mr. CONYERS. Wouldn't the court in a prosecution sort out the relative liabilities?

Mr. TAYLOR. Well, that is conceivable. Now, I am not an expert on criminal law and perhaps Kenny Meiklejohn would be better equipped to respond to that part of the question than I would because I am an amateur in that.

Mr. MEIKLEJOHN. I am not the greatest expert either, Mr. Chairman, but I would think that, yes, it is possible the court would be able to sort that out, but I think Mr. Taylor's suggestion is still a necessary one.

Mr. CONYERS. OK.

Mr. TAYLOR. Our third recommendation at the top of page 4, if there is a situation which would deal with an occupational risk to people in the plant which might spill from the plant to the sur-

rounding environment, and people, like the Love Canal situation. It should be incumbent upon the corporation which had such information affecting people outside the plant to provide public notice to those people so they would have appropriate warning.

The fourth proposal we have is the whistleblower protection. There are people who do in a sense violate the rules of the corporation and do go public when they can't get the corporation itself to do what they think is necessary; so there should be protection for whistleblowers. I might suggest that you look at the OSHA Act in section 11(C)(1) which does protect workers from discrimination on management for legally participating in the OSHA Act.

You might want to provide some sort of protective language.

The last proposal is in the event that, say, you are a family living outside of the plant or even family living inside the plant, and one of your members or more have been injured by the concealment policy which results in a kind of situation that this act is trying to cover.

The only way that you really can reason something of what they lose is by means of filing civil suits and, if so, we believe that you and your lawyer should get all evidence available in any kind of white-collar suit that rises from that situation.

Those are the five recommendations that we did make to strengthen the act for your consideration.

Mr. CONYERS. Well, those are all important points, some of which have been raised, some have not, and we are very grateful for your additional comments thereto.

Does counsel have any questions?

Mr. RAIKIN. Just one, Mr. Chairman.

Have the AFL-CIO and affiliates, member unions in your various departments experienced many situations where employers evidently or allegedly concealed hazardous conditions from their workers?

We have heard from the two unions preceding you this morning, the Teamsters and the United Mine Workers, that that has been the case in their experience.

Mr. TAYLOR. This is true. In order to get something like this on the record, and I think you should have something more definite, I am speaking off the top of my head. If the chairman would think this would be helpful, I was in a meeting yesterday with some representatives from the Oil Chemical & Atomic Workers Union over the situation at one of the plants under contract with that union.

OCAW is attempting to get access to information concerning toxic materials and, if you would like, I can get a few of those instances and submit them as a later subject.

Mr. CONYERS. It would be very helpful.

Mr. TAYLOR. I don't like to spout off such things without validation.

Mr. CONYERS. I am hopeful that perhaps there can be a survey within the AFL-CIO which can bring together any of those instances and put them into one document and submit them to the subcommittee.

Mr. TAYLOR. Dr. Epstein, Barry Castleman, and others have a series of instances where withholdings have taken place—willful

concealments—and I think the record is fairly comprehensive as far as those larger instances which have hit the press and which have been discussed in this committee.

There may be a number of smaller ones that don't encompass whole corporations, but involve a local union and a local management. We have a number of those. We would be glad to try to dig them out. Providing we can get them validated so they will stand on the basis of facts, we will send them in to the committee.

Mr. CONYERS. Any further questions of counsel?

We want to thank you very much, both of you, for joining us with very strong supportive testimony from the AFL-CIO.

We will be looking forward to any documentation that you would have.

The subcommittee will stand adjourned at this time.

[Whereupon, at 11:25 a.m. the Subcommittee on Crime of the Committee on the Judiciary adjourned.]

CORPORATE CRIMINAL LIABILITY

MONDAY, MARCH 24, 1980

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON CRIME,
COMMITTEE ON THE JUDICIARY,
San Francisco, Calif.

The subcommittee met, pursuant to call, at 10 a.m. in the ceremonial courtroom, in the Federal Building, Hon. John Conyers, Jr. (chairman of the subcommittee) presiding.

Present: Representatives Conyers, Miller, and Sensenbrenner.

Also present: Hayden Gregory, counsel; Steven Raikin, assistant counsel; Deborah K. Owen, associate counsel; and Linda Hall, staff assistant.

Mr. CONYERS. Good morning.

The Subcommittee on Crime of the House Judiciary Committee will come to order.

This morning the subcommittee continues its fifth hearing on H.R. 4973, a bill that would impose a criminal liability upon corporations or the corporate managers within corporations for knowingly concealing lethal and serious dangers and products in business practices.

The bill places affirmative duty on the part of companies and their managers to notify their employees and appropriate Federal agencies within 30 days after the discovery of a lethal defect which could cause death or serious injury.

Now we're here in northern California, in the area, hopefully the district of the author of this legislation, our colleague, the Honorable George Miller, who has taken the lead in this fight in the Congress to promote the health and safety of the American consumer and worker, as well.

These hearings will consider the effect asbestos has had upon schoolchildren in California and will also inquire into the four decades of coverup that resulted in the exposure of millions of people to cancer-causing and lung disease-causing asbestos material.

George Miller is, in large part, responsible for much of the pioneering work in this field and we are very pleased to be here in his area.

We will also be hearing from public officials, representatives of the public interest, environmental groups, labor union officials, attorneys, and doctors who have also been in the forefront of efforts in California to deter those forms of white-collar crime and corporate crime which threaten the public health and safety.

California typically serves as a model for the Nation. Trends and developments here frequently move across the country. We are

very interested in hearing about the activities going on at the State level.

Before recognizing our first witness, I would yield to the Honorable George Miller for any comments he may choose to make.

Mr. MILLER. Mr. Chairman, I just simply want to thank you for bringing the subcommittee to San Francisco and to thank Mr. Sensenbrenner for accompanying you so that you could receive testimony from consumers and injured workers, and to get a picture of the types of activity that this bill envisions making criminal offenses.

On behalf of the many people in the bay area I want to express that appreciation to the committee for taking time to come to the San Francisco Bay area.

Thank you.

Mr. CONYERS. I would like to recognize my colleague from Wisconsin, F. James Sensenbrenner, who has given generously of his time to join us at these hearings today.

Mr. SENSENBRENNER. I have no statement to make at this time, Mr. Chairman. I would like to hear the first witness.

Mr. CONYERS. All right.

Our first witness is Attorney Peter Weiner, special assistant to the Governor of California for toxic substances control. He is also chief counsel to the California Department of Industrial Relations which oversees the California State OSHA program.

Mr. Weiner organized the State's seminal hearings regarding the sterilization of workers by DBCP in 1977, and appeared as a friend of the court on behalf of asbestos workers in California's Supreme Court this year.

As special assistant to the Governor, he coordinates the Interagency Toxic Substances Coordinating Council and is responsible for implementing the Governor's legislative initiatives to place more effective controls on the use of toxic substances.

Welcome to the subcommittee and thanks for preparing a statement. We appreciate your long concern in the area and without objection will incorporate your entire statement into the record, and you may proceed in your own way.

TESTIMONY OF PETER H. WEINER, SPECIAL ASSISTANT TO THE GOVERNOR FOR TOXIC SUBSTANCES CONTROL AND CHIEF COUNSEL TO THE CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS

Mr. WEINER. Thank you, Chairman Conyers, Congressman Miller, and Congressman Sensenbrenner; I very much appreciate the opportunity to appear before you today to offer our complete support of H.R. 4973.

It is sad that we are compelled to introduce and support legislation which tells corporate executives, "Cover up the dangers of your products and go to jail."

It is sad because the vast majority of industry is responsible and concerned about the effects of their products on their workers, the food we eat, and the air we breathe.

But in recent years we have unfortunately become aware of other corporate activities, as well. You will hear today testimony regarding some of these examples.

You will hear of three decades of corporate fraud and deceit by the asbestos industry, a coverup substantially responsible for the estimated 1 million people who will die from occupational exposure to asbestos, as many Americans as have died in all the wars of our history.

You will also hear testimony about the Occidental Chemical Co., a wholly owned subsidiary of Hooker Chemical, which brought us Love Canal. Internal memoranda from the company already received by this subcommittee, as I understand it, demonstrate a conscious and purposeful attempt by Oxychem to hide from Government and its neighbors the fact that its toxic wastes were polluting surrounding wells and sterilizing its workers.

Corporate executives of Oxychem, including a corporate medical director, knew of many of the probable dangers of DBCP and did nothing about it.

These are only two examples of what Governor Brown in his state of the State message recently called "corporate scofflaws who irresponsibly handle toxic materials and thereby endanger the public."

If those who rob our homes should go to jail, then surely those who rob us of our lives and our health should be punished at least as severely. It is time to wrest control from those who knowingly and secretly assault us with toxic chemicals.

No one that I know of has asked for a zero-risk society. We don't have one. What we do want is a choice. We want a choice that helps us control what goes into our own bodies in terms of the air we breathe, the water we drink, and the food we eat. If the public can choose tetween diet sodas and sugar colas, perhaps it wants that choice.

But we aren't given that choice when our water is polluted, we aren't given that choice when we go to the produce stands, we aren't given that choice when 96 percent of us in urban areas have asbestos fibers in our lungs.

H.R. 4973 would help insure that workers do know what hazards they face on the job. Workers have an absolute right and need to know the identity and hazards of the substances they work with in order to be able to bargain collectively to reduce those hazards, petition Government for assistance, and to assure some measure of personal choice during periods of regulatory uncertainty.

That doesn't mean that workers assume the risks or that any of us do when we are involuntarily exposed to these substances. That is why we need strong regulation to control exposure and use of these dangerous substances.

Otherwise competitive disincentives make it impossible for one industry or one firm within an industry to take responsible action without help.

Let me also be clear about one other thing. That does not also mean that a union or individual worker should be held responsible for knowing and then reporting further the hazards of a substance. It's true that in Cuba and some other centralized economies that workers and unions are penalized directly for workplace violations

But in our free enterprise economy, our laws properly recognize that it is the employer who controls the workplace, the employer who controls the production of a product and the employer who

profits. And it is therefore the employer who must be responsible for changing the workplace rather than trying to change the worker.

In California we are taking some steps, too, to try to deal with these problems. We've introduced legislation in cooperation with industry and labor that will require manufacturers to furnish employers and ultimately all workers with job hazard information. Senator Nejedly in Congressman Miller's district is, happily, the author of that bill.

We are also introducing legislation which sharply increases the civil and criminal penalties for failing to report ground water pollution and other disposal of toxic wastes. And we are taking programmatic action to step up enforcement against all such polluters.

We know that we have a lot of bipartisan support for that, just as you do for this bill, and we are pleased that responsible members of industry recognize the need to get rid of the bad actors.

We are heartened at your broad bipartisan support as with ours, at least in part, because some of your colleagues in the Senate persist in sponsoring a bill that promotes corporate coverups.

S. 2153, by Senator Schweiker, promotes corporate fraud in several ways. By exempting firms from OSHA inspections if the firm files an affidavit that they have had no industrial injuries or if the firm simply does not report such injuries, that bill emphasizes and encourages nonreporting, a trend that we already see in practice.

By giving employers advance notice of inspections and the ability to avoid them completely by stating that they are handling the problem, the bill insures that imminent hazards will persist until grave injury results. And contrary to this bill, the Schweiker bill virtually eliminates all penalties for Noncompliance, even where serious hazards have been concealed from the workers.

Schweiker would hold workers hostages to corporate whims. This bill would free workers and the public from injury-causing ignorance. We support this bill and we hope that you will make the testimony that you have received available to the Senate.

We think that H.R. 4973 is a good bill. I have some specific comments about how we think it could be strengthened.

First, we need total corporate responsibility. That means that this bill should require all persons discovering product dangers to report them to their superiors as well as to affected employees and to the Federal and State agencies.

Conversely, the bill should provide that any high-level corporate official who isolates him or herself from such reporting is at least as liable as those who know. We cannot have corporate isolation from a need to know.

Second, we need whistle-blower protection. Most statutes today do provide protection against retaliation. We must have one here.

Third, trade secrets must not be allowed to frustrate full disclosure. In a recent southern California incident, day care children were exposed to a toxic cloud from a nearby company. The children and teachers suffered liver damage. For weeks the company refused to supply treating physicians with the identity of the substances involved claiming trade secret protection. That's not a trade secret. Other companies have continued to refuse to disclose

the identity of their substances to workers, again frustrating the intent of this bill.

Next, we would urge that reporting requirements be changed. First, State agencies are often the primary enforcement tool for both State and Federal legislation. That's true of OSHA, it's true of RCRA, it's true of FIFRA, it's true of TSCA and so on.

Second, we'd like sharing among Federal agencies. We've recently seen industry attempts to limit any particular information to the one Federal agency that receives it, not allowing sharing. For example, with DBCP, the only way we got information from EPA about DBCP was through company consent. Otherwise, even Federal OSHA couldn't get it.

Third, companies must be required to report these problems to the affected public as well as to workers. In a day when we are paring Government to the bone, we cannot depend on a cumbersome and indirect reporting route. Moreover, under products liability laws, the companies already have this duty. If they have it when we can prove injury, why don't they have it without proving injury? We've got to have warnings first.

Fourth, we need some specific criteria for what reasonable persons should report. We are told by one company that it would not report on an NCI study on a material because it didn't agree with it. That is not good enough.

We are told that companies won't report evidence of mutagenicity because they don't know what it means. If Government knows and industry knows, then workers and consumers have a right to know, too.

We do live in an uncertain world but we have a right to know about that uncertainty so that we can take action to protect ourselves.

We should also impose criminal liability without proof of a knowing violation. Sometimes we have lesser violations that we can nevertheless characterize as willful or reckless.

An example is one where Cal/OSHA obtained a criminal conviction of an asbestos user in southern California. The employer left open bags of asbestos for employees to pass by on their way to the cafeteria. That was a willful violation.

Proof of actual knowledge by the employer is very difficult. But the court had no difficulty in understanding the need to impose a criminal penalty in that case.

Oxychem is a perfect example of why a knowing standard is too stringent. Here is a subsidiary of one of the largest corporations in the country. It claimed when we investigated that it did not know about the Hine-Torkelson report. It did not know about the NCI study showing DBCP to be a carcinogen. It did not know about a recent Russian study in 1975 showing DBCP to cause sterility. And therefore there was no knowing violation.

Its corporate medical director had previously worked for Shell Chemical Co. at a time when Shell was marketing this product. He knew. The corporation knew or should have known, given its size and its responsibility as a formulator of the product. And yet the bill, as it is currently written, would not get at that heinous and reprehensible conduct.

We've got to compensate victims as part of the sentence or probation that the court orders. We also think that mandatory sentences of some length of time, perhaps 60 days in jail, would be appropriate for this type of conduct. Why? Because the stigma of the criminal penalty which we impose both as a deterrent and as retribution for unacceptable conduct is lost if all that's involved is a fine that is paid out of corporate coffers. We've got to start putting people in jail for injuring us this way as well as for a simple burglary.

We'd also like some more flexible remedies because it's not always one individual. The entire corporation can be involved in one way or another. In appropriate cases the court should be able to order corporate probation and oversee future compliance very narrowly drawn with this bill.

Second, corporate indemnification of the guilty should be prohibited and both individuals and corporations should not be allowed to deduct these expenses in their taxes.

We've also got to begin piercing the veil of corporations that walk away from a problem. Where a company is not sufficiently capitalized to take care of the problem it causes with the toxic substance, I say that corportion is usually undercapitalized and we should pierce the corporate veil to get at the individuals' assets behind it.

Finally, although we recognize this to be a serious step, we would recommend amending the Bankruptcy Act so that these kinds of debts cannot be discharged in bankruptcy. All too often we find that that is the favored route of both individuals and corporations to avoid their obligations.

We hope that you won't preempt California law and that you will include something specific that says so. We are now facing litigation where no preemption was intended but where industry claims that the presence of the Federal Government in the field is, itself, enough to preempt State activity.

I appreciate the opportunity to appear before you today. We agree that we can't let tight little islands of corporate arrogance impose upon us a theory of risk-benefit analysis that demands that we take the risks so that others can benefit.

H.R. 4973 helps assure that responsible industry will not be undercut by unfair competition that reduces cost by reducing compliance with our labor and environmental laws.

We therefore support it, urge its passage, and thank you for the opportunity to appear.

Mr. CONYERS. Well, I appreciate the recommendations that you have suggested which would make the bill considerably stronger.

Can you give me any idea as to whether you've had any reaction from the corporation and business community here in California about your State legislation?

Mr. WEINER. Yes, I can, and very fortunately so.

We have not had a formal reaction by industry to all of our legislation. But for some of the significant bills we have had substantial industry support.

We have introduced a bill, A.B. 2140 by Assemblyman Tores, which provides us with authority for emergency suspension of a

toxic waste hauler's license where an imminent danger to the public is involved.

We had support on that bill, expressed both by the California Chemical Industry Council and by the California Trucking Association. They want to help, too.

We have another bill, S.B. 1465 by Senator John Garamendi, which responds to the Oxychem situation and our situtation with Aero Jet in California by imposing strong criminal and civil penalties and fines where corporations don't report that they are polluting ground water or discharging toxic waste to ground water.

We have had acceptance of that bill from industry, as well.

We believe that we will secure acceptance or support from a broad spectrum of industry on almost all these bills and we look forward to their cooperation and help in making them realistic additions to our laws.

Mr. CONYERS. Thank you, Mr. Weiner.

I take it, then, that there are incredibly serious and dangerous problems in terms of toxic wastes, herbicides that have built up over the years in California that are just now being investigated. In other words, is it a correct impression that you are finally getting down to business with a problem that is, perhaps, decades old in this State?

Mr. WEINER. Probably not. I think that California industrialized later than most Eastern States. We don't have Love Canals in California, so far as we know. We don't have the same problems of industrial wastes having built up here as built up in, say, New York, Pennsylvania, and Kentucky, as we understand them.

What we have had is the strongest programs in the country, recognized for national leadership in air pollution, water pollution, hazardous waste control, and the control of transportation of hazardous substances, as well as our California OSHA program.

We've been ahead in all those areas. Even pesticides. But what we're seeing is that a strong regulatory program isn't enough. We can't have environmental police everywhere. And, thus, corporations who want to secretly violate the law have been able to get away with it.

What we're saying now is we don't want to impose a brand new regulatory burden on all of industry. We'd like to see how our current programs work first. We think that they are working pretty well.

But we do know that we have corporate scofflaws out there and those are the guys that we've got to deal with. That's why we've taken the path of stepping up enforcement, increasing penalties, trying to weed out bad guys from those who are complying with the law.

I don't think it's a matter of not having taken care of problems generally before. But what we are finding is that there was a significant segment there that was able to cover up noncompliance with laws that are otherwise probably adequate.

Mr. CONYERS. Do you recommend that we create an exemption where States have adequate laws if we were to pass a Federal bill like the Miller-Conyers bill or would you want the Federal requirement to preempt the State laws on the subject?

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Mr. WEINER. I would only want there to be a statement that this law would not preempt other State laws on the same subject.

I think we need a Federal cause of action. We need a nationwide standard for nationwide and multinational corporations to observe.

There need be no preemption except insofar as the State law is in conflict with the Federal one. I don't think we want an exemption for other State laws. What we want is an ability to have parallel or more stringent State laws where we feel it's necessary.

Mr. CONYERS. Have you made any progress in controlling the black marketing of DBCP that apparently is going on?

Mr. WEINER. I believe we have. It's very hard to know whether you've ever made strides in controlling that kind of activity. Because it can surface again in ways that you haven't discovered. But I think that we've taken action. The Attorney General has been involved.

Mr. CONYERS. Is organized crime involved?

Mr. WEINER. I don't know.

Mr. CONYERS. You're aware that there are allegations to that effect?

Mr. WEINER. Yes. I have not been as involved with that particular enforcement activity as with others.

Mr. CONYERS. In other words, the law enforcement arm of the State is investigating that matter?

Mr. WEINER. Yes, and pursuing it vigorously.

Mr. CONYERS. Mr. Sensenbrenner.

Mr. SENSENBRENNER. I have only one question, Mr. Weiner. Have you given any consideration to the fifth amendment problems posed by this bill, and, if so, do you have any recommendations on how they can be solved?

The fifth amendment problems to which I refer are the following: If a corporate manager complies with the provisions of this bill and discloses an illegal activity that could subject his corporation to criminal penalties, that, perhaps, would be a violation of the fifth amendment. If the corporate manager, on the other hand, decides not to comply with provisions of this bill that require disclosure, then he would be subjected to criminal penalties.

This presents somewhat of a conundrum and I am wondering how we might get around that.

Mr. WEINER. I think that the problem evaporates when one analyzes that would really happen under such a situation.

Certainly we've already had an individual criminal prosecution. The accepted practice of having people, as they say on TV, "turn State's evidence," and it's hard for me to believe that a company that faces up to its responsibilities and does report previous wrongdoing will be dealt with nearly so harshly as one that does not.

Moreover, we have many laws in our society that require someone to report something when it happens, even though this involves wrongdoing on that person's part.

With the governmental and societal interests that we have in ferreting out the secret poisoning of our citizens, I do not believe that the fifth amendment problems are insurmountable.

Mr. SENSENBRENNER. Nevertheless, you have not given any specific suggestions on how to get around the fifth amendment problems that I described in my hypothetical.

It seems to me that any corporation that is willfully poisoning the environment or subjecting its employees and others to the substantial health hazards will have the money to hire the best lawyers available to take the matter up to the U.S. Supreme Court on any technicality they can find.

I am in sympathy with the aims of this legislation, but it seems to me that unless we carefully consider the fifth amendment problems that are involved, we might be passing a law that would be rapidly struck down by the courts. That would just increase people's cynicism with respect to the effectiveness of our Government.

Mr. WEINER. Mr. Sensenbrenner, I can imagine that if a corporate employee reported such activity and was then personally prosecuted that there would be fifth amendment problems.

But what this bill does is impose liability on an individual for not reporting the activities of the corporation. I do not believe that there is a fifth amendment problem in asking that individual to report the criminal activities of another. There might be at a certain level I would suppose but at the general levels that we're talking about in large corporate structures, I don't think there would be a fifth amendment problem.

Mr. SENSENBRENNER. I have no further questions.

Mr. WEINER. I would like to think about that further, if I may, and, perhaps, offer some further suggestions. It's an interesting problem.

Mr. CONYERS. Mr. Miller.

Mr. MILLER. Thank you, Mr. Chairman. I also want to thank you, Peter, for his testimony. I think it's very comprehensive. It certainly points out activities that have taken place in this State that clearly this legislation is designed to eradicate, and that, clearly, people with great responsibility within corporations made determinations to cover up. And that's exactly what we're talking about. We're not talking about the day-to-day business of the corporations. We're hopefully, talking about a very few select cases with very few corporate entities involved.

Unfortunately, the ramifications are very broad. The people involved in asbestos or the potential contamination of natural resources affect millions although it may be only three or four who made the decision to cover up those harmful affects.

So we're talking about a very few, yet very grave cases and I think it's also important to point out that we are in no way looking for the zero-risk society because that's not what this legislation addresses.

It addresses those cases where you already know that the risk is an unconsionable one. You are not even approaching the zero-risk. It's not that at all. You're at the other end of the scale. I suspect that in the case that has been alleged where a farmer makes a conscious determination to use an illegal pesticide and to buy it on the black market, that that farmer is engaging in criminal activity that is far beyond any concept of a zero-risk society and ought to pay very severely for the contamination of either the water supplies or the food chain.

That's what we're talking about. I think you for your appearance and also your suggestions on possible amendments and changes in the legislation.

Mr. WEINER. My pleasure.

Mr. CONYERS. If there are no further questions, I thank you, Mr. Weiner, for your participation and wish you well in your area of responsibility here at the State level.

Mr. WEINER. Thank you very much, sir.

[Written statement of Peter H. Weiner follows:]

STATEMENT OF PETER H. WEINER, ESQ.
SPECIAL ASSISTANT TO THE GOVERNOR
FOR TOXIC SUBSTANCES CONTROL

AND

CHIEF COUNSEL TO THE CALIFORNIA
DEPARTMENT OF INDUSTRIAL RELATIONS

ON H.R. 4973
BEFORE THE
SUBCOMMITTEE ON CRIME OF THE
COMMITTEE ON THE JUDICIARY
HOUSE OF REPRESENTATIVES
CONGRESS OF THE UNITED STATES

MARCH 24, 1980
San Francisco

Chairman Conyers, Congressman Miller, and Members of the Subcommittee on Crime: I am Peter H. Weiner, Special Assistant to Governor Brown for Toxic Substances Control and Chief Counsel to the California Department of Industrial Relations, which administers the California OSHA program. I appear here today to give our full support to H.R. 4973.

It is sad that we are compelled to introduce and support legislation which tells corporate executives, "Cover up the dangers of your product or business practice, go to jail." It is sad because the vast majority of industry is responsible and concerned about the effects of their products on their workers, the food we eat, the water we drink, and the air we breathe.

But in recent years we have found that some companies have expanded their profits by shrinking the lives of their workers and imposing a toxic legacy upon their neighbors. You will hear testimony today regarding three decades of corporate fraud and deceit by the asbestos industry, a cover-up substantially responsible for the estimated one million exposed workers who will die from it--as many Americans as have died in all the wars in our history.[1/] You will also hear testimony about Occidental Chemical Company, the wholly owned subsidiary of the folks who brought us Love Canal. Internal memoranda from the company, already mentioned before this Subcommittee, demonstrate a conscious and purposeful attempt by Oxychem to hide from government and its neighbors the fact that its toxic wastes were polluting surrounding wells. In addition, corporate executives who knew the possible dangers of DBCP to workers

1/ For a description of the cover-up, see in part Borel v. Fibreboard Paper Prods. Corp., 493 F.2d 1076 (5th Cir. 1973).

ignored the evidence before them, never told workers or the union of research results showing the chemical to cause testicular atrophy, sterility, and cancer in laboratory animals, and refused to act responsibly until the workers themselves discovered the tragic fact of their own sterility through casual lunchroom conversation.

These are only two examples of what Governor Brown recently called "corporate scofflaws who irresponsibly handle toxic materials and thereby endanger the public." If those who rob our homes should go to jail, surely those who rob us of our health and our very lives should be punished at least as severely.

It is time to wrest control of our lives from those who knowingly and secretly assault us with toxic chemicals. Americans don't want some mythical "zero-risk" society. That is a straw person. What we do want is a choice. If the public can choose between diet and sugar colas, it wants to keep that choice. But our citizens also want to control their ability to drink clean water and eat produce without pesticide residues. And millions of workers want to be able to earn a living without courting cancer, sterility, and birth defects in their children.

H.R. 4973 would help ensure that workers know the hazards they face on the job. Workers have an absolute right and need to know the identity and risks of the substances they work with in order to bargain collectively to reduce exposures, to petition government for assistance, and to assure some measure of personal choice regarding risks during periods of regulatory uncertainty.

Let me be clear. A worker's right to know does not mean he or she assumes all risks that are divulged or that the individual

worker or the union then is criminally liable for not taking further action. It is true that in Cuba and other centralized economies, workers and unions are penalized directly for workplace violations. But in our free enterprise economy our laws properly recognize that it is the employer who controls the workplace environment and has the most knowledge of the product. And in practice I have never heard of a labor union that did not press for more information about workplace hazards or did not use any information it got to achieve safer and healthier jobs for its members.

We in California agree that workers and consumers have a right to know, and that corporate cover-ups should be subject to strong criminal penalties. We are cooperating with responsible industry and labor in sponsoring a series of legislative and programmatic initiatives that will:

- Require manufacturers to furnish employers, and ultimately all workers, with job hazard information;
- Impose sharp civil and criminal penalties on firms which cover-up discharges of toxic wastes into ground water;
- Step up state enforcement activities against polluters and unsafe transporters of hazardous materials.

In proposing these measures we join you in recognizing that stern measures are needed to deter and punish those who recklessly violate our responsible regulatory protections.

We are heartened at the broad bipartisan support that H.R. 4973 has received, in part because some of your colleagues in the Senate persist in sponsoring a bill that promotes corporate criminal cover-ups. S.2153, by Senator Schweiker, promotes corporate fraud in several ways. By exempting firms from OSHA inspections that file an affidavit of no industrial injuries, the bill encourages non-reporting of such injuries. By giving employers

advance notice of inspections and the ability to avoid them completely by stating that something will be done, the bill ensures that imminent hazards may persist until grave injury results. And, contrary to H.R. 4973, that bill virtually eliminates all penalties for noncompliance, even where a serious hazard has been concealed from the worker. Schweiker would hold workers hostage to corporate whim; H.R. 4973 would free workers and the public from injury-causing ignorance. We hope that you will provide the Senate with relevant portions of the testimony you have received on this bill.

SPECIFIC COMMENTS

H.R. 4973 is a good bill. We think it could be even better. We have the following suggestions for your consideration.

1. Total corporate responsibility. The bill should require all persons discovering product dangers to report that danger to their superiors, up to and including the Board of Directors. Conversely, the bill should provide criminal sanctions for high corporate officials who do not ensure that such upward communication can occur. All managers with knowledge of the danger should be liable, including company or contract physicians.2/

2. Whistleblower protection. Retaliation against corporate whistleblowers must be subject to an even larger penalty than that imposed for nondisclosure.

3. Trade secrets. Trade secret concerns must not be allowed to frustrate full disclosure. In a recent Southern California incident, day care center children were exposed to a toxic cloud

2/ Physicians already have an ethical duty to inform workers of occupational hazards, and to inform government agencies where necessary, pursuant to the Code of Ethical Conduct of the American Occupational Medicine Association.

from a nearby company. The children and teachers suffered liver damage. For weeks the company refused to supply physicians with the identity of the chemicals involved, claiming trade secret protection. Other companies refuse to disclose information to their employees for the same alleged reasons. But as a DBCP worker told us, "the competitors ain't our worry. Our lives is what we're worried about."

4. Reporting requirements. First, the bill should provide for reporting to appropriate state agencies, for state agencies are often the primary enforcement tool for both state and federal legislation. Second, the bill should specifically provide for information sharing among federal and state agencies receiving such information. Otherwise, many federal statutes preclude such sharing, resulting in a proliferation of government duplication. Third, and most important, companies must be required to report to affected members of the public as well as to workers and government. If a company causes a problem, let it tell its neighbors and purchasers of its product. To rely on a cumbersome and indirect report through government agencies, at a time when we must pare government bureaucracies as much as we can, is neither effective nor efficient. Fourth, the bill should ensure that relevant research is transmitted at the earliest possible time. You will hear more today about the asbestos industry's coverup of relevant research. In the case of vinyl chloride, the late Justice Tom Clark concluded that industry's "course of continued procrastination" in failing to disclose research results to its workers or take corrective action was "morbid," leading to the deaths of thirteen workers before government finally stepped in.3/

3/Society of Plastics Indus.,Inc. v. OSHA, 509 F.2d 1301, 1305 (2nd Cir. 1975), cert. den. (1975).

This bill should therefore expressly provide for transmission of positive results in a battery of short term tests for mutagenicity and of any positive results in animal feeding studies. The fact that a company may disagree with the formal protocols or results of a National Cancer Institute study, for example, does not justify keeping that information secret from its workers.

5. "Knowledge" as the Standard of Proof. Criminal liability should not be imposed without fault, but requiring proof of actual knowledge of a cover-up is a standard which unfortunately would let some of our worst offenders off scot-free. In one case where Cal/OSHA obtained a criminal conviction for violation of carcinogen standard--the first such case in the nation--the employer left an open bag of asbestos fibers near his employees. It was enough in that case to show that the employer was reckless, a slightly lesser standard than that of actual knowledge, yet one that requires a showing of positive action. We would urge criminal penalties for some forms of reckless or willful behavior, as well as for knowing misdeeds.

6. Compensating Victims. It would be ironic if wrongdoers paid a fine and went to jail, but the victims had no remedy. The bill should provide courts with the authority to order restitution, including future medical treatment and death benefits in the case of carcinogens and other substances with latent effects.

7. Mandatory sentences. The highest level culpable official should be given a mandatory jail term of at least 60 days. The stigma of criminal conviction is meaningless if corporate coffers can effectively bail out those who may injure thousands of people.

8. Other Remedies. It is rare that one official's coverup will occur in isolation. Courts should have authority to order corporate probation, with an assigned special master or corporate receiver empowered to oversee company compliance for a limited time. Such a provision should be narrowly drawn to avoid further intrusion into daily operations. Courts should also be able to order public apologies and further warnings as part of a sentence or probation. Finally, a number of amendments are necessary to avoid methods of diluting the effect of hefty criminal penalties. First, corporate indemnification of the guilty should be prohibited. Second, neither an individual nor a corporation should be allowed to deduct such payments as operating expenses for tax purposes. Third, the bill should expressly provide for piercing the veil of insolvent corporations to establish personal liability where necessary. Finally, the Bankruptcy Act should be amended slightly to preclude discharge of such penalties in bankruptcy.

9. Preemption. California is moving toward the adoption of similar penalties for certain knowing cover-ups of corporate misdeeds, such as toxic discharges into groundwater. Although we doubt that H.R. 4973 could be construed to preempt such measures, we are increasingly faced in litigation by industry claims that this or that state statute is preempted by federal entry into the field. We would therefore appreciate an express provision that state statutes in this area are not preempted.

I appreciate the opportunity to testify before you today and to thank you for pursuing needed changes in our laws. We must not allow tight little islands of corporate arrogance to impose upon us a theory of risk/benefit analysis that demands that we take the risk so that profits can benefit. H.R. 4973 helps assure that responsible industry will not be undercut by unfair competition that reduces costs by reducing compliance with our labor and environmental laws. We therefore support it and urge its passage.

Thank you.

Mr. CONYERS. Our next witnesses are a panel which include an attorney, Victor Van Bourg, and employees of the Occidental Chemical Co., Jack Hodges and Ted Bricker.

We welcome you, gentlemen, before the subcommittee.

TESTIMONY OF JACK HODGES AND TED BRICKER, DBCP STERILITY VICTIMS AND OCCIDENTAL EMPLOYEES, ACCOMPANIED BY VICTOR VAN BOURG, VAN BOURG, ALLEN, WEINBERG & ROGER

Mr. VAN BOURG. Mr. Chairman and members of the subcommittee, thank you for giving us this opportunity today to talk to you for a few minutes about the kind of practical problem which occurs in the field.

The DBCP case which was known in 1977, when it generally hit the press as "The Sterility Case" arising out of Occidental, is much more than that.

I just want to give a few minutes of discussion from a legal standpoint concerning the bill and how a situation which arose in this kind of case might have been avoided if there had been a bill involving criminal penalties.

I also want to directly respond to the question concerning the fifth amendment because I think that there are many parallels which exist now.

In any event, just to give you a brief narrative without imposing on some of the things that Mr. Hodges and Mr. Bricker might want to say, our law firm is general counsel for a local union of the Oil, Chemical & Atomic Workers which represented the people in a production and maintenance unit at Occidental which was either in the process of production, modification, storage, or moving the chemical known as DBCP.

For many years some of the workers had been worried that they were not able to have children and they didn't know why. It was a matter of general discussion in the coffee room or in other places where workers gathered. There were other problems but no one associated anything to any particular incident.

The people felt generally well. They, in the normal course of their lives, went to doctors. Doctors didn't point out any specific problems. And the first general coincidence that seemed to come to

light was the fact that several people, in discussing their personal lives, determined that they had the problem of having children. Not all, but the problem was developing. At least a consciousness of the problem was developing.

Then the union, through its safety program, which is substantial, attempted to determine if there might be some generic cause at the workplace. They asked management. Management failed to respond even in a friendly way. More, there was an absolute denial that anything at the workplace could be causing any serious affects on anyone. Not just serious affects, any affects.

In any event, not to make the story too long, it eventually developed that DBCP was causative of the problem or could be causative.

Mr. CONYERS. How did that come about?

Mr. VAN BOURG. Well, through chemical analysis, testing, discussions, and going back to Denver where the headquarters of the union is located. The union has chemists that it deals with. Finally, the local union brought it to us and said, "It appears that this problem exists." Then, of course, after the initial inquiries were made and a suit was filed, there was a torrent of information brought forward by very comprehensive hearings by the State government of California which were highly publicized.

Of course, we must understand that there is a lawsuit involved and I don't want to be put in a position of saying that every fact is an absolute fact because management and the chemical companies will be countering this with their denials which they do to this very day.

But assuming for a moment that the noxious aspects of DBCP are at this moment not in controversy, I don't really think, except in a lawsuit form, that they are in controversy. People know it's a bad substance to deal with, particularly at close contact.

The fact is that we now have the following kinds of an absolute situation. Place yourself in that position, if you were a worker at Occidental in the Valley. You have to deal with your own personal problems, the myriad of personal problems that were involved affecting marriages. A number of marriages did not survive before the filing of the suit. Some were affected after the filing of the suit. There are questions as to how long this kind of lawsuit will take.

Lives are directly affected. None of the lives of the individual plaintiffs will ever be the same. Even if they had not become plaintiffs in the lawsuit, their lives would not be the same. Once it is determined clinically, which we, of course, believe it has been in this case, that there is a serious enough affect on the biological processes of a human being so that it could either temporarily or permanently sterilize—and that is a big blasted argument now as to whether this was simply temporary sterility because after termination of exposure, some people were able to have children. What difference does it make if you are talking about the concept that we are putting forward here? Namely, if there was a sufficient biological affect without any touching, without any trauma associated with the substance and the human being to affect the biological processes involved in having children, what else could be involved.

So we are now involved in the clinical process of seeing to it not only that there is a constant monitoring of these human beings for the rest of their lives but we have to have a generational monitoring. Their children and the children of their children will have to be monitored to determine whether or not there are lasting effects of effects which can be passed on from one generation to another.

And, of course, we have this tremendous amount of literature which has been developed concerning whether or not carcinogens are an aspect of this particular problem, whether or not these people will be susceptible to other diseases, and whether or not, statistically, it has come forward. And we believe it has. That is, that sterility may be one of the more dramatic things that the media are interested in. But the long-term effects of cancer and other irreversible changes in the biologic processes of people who come into contact with these substances are there.

And so why do they, these two individuals and all of the other claimants have to live with this for the rest of their lives? Their children have to live with this and why? They grow up to be adults and have to be monitored to have their children to determine whether or not there are any ill effects.

Now I want to deal for a moment just with the substance of the bill. Management has attacked and corporate America has attacked virtually every piece of legislation that has come through in this very brief window of regulatory time that we have had in this country that deals with total flexibility in production and cost control.

I say very brief window because up until the 1930's, we had virtually no industrial regulation and a great deal of the pollution with which we deal today occurred in that period of time. It is simply being exacerbated by the cybernetic effects of the population growth and the use of all kinds of technological substances.

For example, I worked as a painter. My father was a painter. We knew that one of the diseases that affected us if we stayed in that industry for life was lead poisoning. I worked in the construction industry.

Asbestos workers did not know about asbestosis. Men who worked in the mines knew about silicosis and other substances. Black lung was known, but no one knew how it was contracted.

But we now have the technology and the corporations have the technology to tell us and to protect us.

So what does this bill do? It hardly even scratches the surface because if you're talking about a $50,000 fine per count and if you're talking about the kinds of small amounts of money that you're dealing with here, you don't even deal with the concept of restitution as you would in another criminal matter of theft or something of that nature.

These men's lives are being stolen from them and there is no concept of restitution here. So what is it that this bill does and directly to the fifth amendment notion? It requires disclosure and the frightening thing about our economic situation in this country is that once disclosed, many of the workers make a choice of continuing to work there because they say, "If I have to leave this place," many with 10 to 25 years seniority, they are finished economically.

So what is this terrible thing? What is this cost problem to management to disclose? It doesn't cost management a penny to tell the truth, to disclose.

What it might cost them is that they might have to devise methods by which movement is occasioned without a physical touching but through a machine. There might be more expensive things done to safeguard the lives and well being of the workers.

That is not the kind of money that would tell you "yes" or "no" on whether or not this kind of bill should be adopted. After all, we are supposed to be a nation to whom a human life is paramount. We have butchered workers at the workplace from the very beginning of our industrial system in this country. And this particular case at Occidental has within its framework the drama to show how that occurred. That is, workers were told to work with, produce, move, manufacture, and modify a substance which since the 1930's was known to be deadly if contracted.

One of the reasons that we filed a lawsuit against the University of California and a man by the name of Mr. Hines and the Shell Development Co. was because in the 1930's, in the midst of the "Great Depression," at a time when this country had fewer than 130 million people, when California was not the kind of a populated State that it is today, there was already agricultural research being done through the University of California on this substance and it was known to be deadly at that time or so we allege and I believe our allegations are both truthful and in good faith.

Mr. CONYERS. What year?

Mr. VAN BOURG. In, I would say, 1934 and 1935.

Now remember, we are only in the process of learning all the details of this massive store. And most of the discovery is still in front of us.

We might even find out that it was earlier than that. But we know about those days. And we know that there were papers prepared in that period of time which showed the deadliness of this substance. And, yet, these fellows were told that there was nothing wrong with the workplace and that they could continue to work in close proximity to the substance.

No warning signs were posted. Nothing was told to the people. They just worked and suffered ill effects which are not known to me, you, or them. But they will have to worry about it for a very long time for which there is no recompense because under workers compensation laws, of course, Occidental is the employer. So they can only deal with medical care, temporary disability benefits, and permanent disability benefits. That is very little money. At the present time workers compensation laws in the State of California are somewhat behind the times. A maximum for a temporary disability indemnity is 240 weeks of continuous pay at $154. That wouldn't even come close to a living wage. The maximum is a death case of $55,000 for a spouse and children.

So we are talking about the fact that these folks, in order to get some kind of recompense, have to reach far beyond the workers compensation system.

A criminal penalty, if this law had existed, would have required disclosure so that these human beings could have made their decision about what to do with their lives.

But more important, they could have demanded, without a loss of their job, that certain precautions be taken in the workplace so that the effects on them would be minimal.

For example, nonincorporated associations are required to make disclosures through their elected officers. the elected officer must turn over all the books and records of the union. He cannot raise the fifth amendment defense because he can only raise it as to himself. He cannot raise it as to the union as an entity.

That is also the law as to the corporation. What we are requiring here is immediately upon knowledge or reasonable circumstances of knowledge, you require the corporate manager or corporate officer to make a disclosure because the event of coverup is what is criminal. If he does not make that disclosure, he becomes a coconspirator. That is the way it ought to be.

Mr. SENSENBRENNER. What if the disclosure itself would subject the corporation, or the officers of the corporation, to civil or criminal penalties?

Mr. VAN BOURG. It would be the same as any other corporate crime.

Supposing a corporation was a Government contractor and siphoning off Federal funds and not producing in accordance with the contract, and a manager disclosed that to the appropriate Federal inspector? That is being required now. This is the same thing.

Mr. SENSENBRENNER. This illustrates the fifth amendment conundrum which I discussed with the previous witness. If the manager discloses the required information, he is guilty of a crime under another law. If he does not disclose it, he is guilty of a crime under this bill.

Mr. VAN BOURG. Well, under any criminal notion in this country, the commission of a criminal act is a crime, re: non sequiturs or redundancies or whatever you want to say, but if you have a law which says the theft of a Postal Service vehicle is a Federal crime and you have a postmaster at a particular place who knew it was stolen and by whom and does not disclose it, that is the second crime.

In this case, you have made it very easy on folks. All you're telling them to do is to disclose. You could also make it a crime to have the substance at the workplace. All you're saying is disclose it, disclose the danger. "Your failures to disclose the danger, make you a criminal." You're darned right. That is a certain kind of an impetus to disclose, isn't it? The disclosure doesn't make the man a criminal. The disclosure doesn't make the woman a criminal. The failure to disclose is what makes it a crime in this bill. What's wrong with that? That is not a fifth amendment problem.

Mr. SENSENBRENNER. I think you see it a little bit too simplistically.

Mr. VAN BOURG. Perhaps.

Mr. SENSENBRENNER. But I will not pursue the point.

Mr. VAN BOURG. Then we should amend it to make it that simple, perhaps, if it's too complicated in its writing.

I don't see it because I deal with the fifth amendment every day in representing unions, and when I tell the judge that that's a little bit too simplistic, he says, "Well, that's what it is, Mr. Van Bourg."

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He points out to me that you cannot raise the fifth amendment before a grand jury in producing pieces of paper whose ownership is in the union even though it incriminates him, personally, because he signed it. He will go to jail. The union will not go to jail. It is exactly the same thing.

It is the failure to disclose which is made a crime. It is the failure to disclose which has created the problem for these guys. And I would like you to hear from them and then consider the fifth amendment notion, hear from them as to what the failure to disclose has meant to them in their lives and how they learned about it and what a shock it was to them.

Which one of you will go first?

Mr. BRICKER. I am Ted Bricker of the Occidental Chemical Co.

We first learned about this in a sad-mannered way. One way was by the news media, and it's terrible when you've got to work in a workplace and don't find out any information until you read about it in the paper.

We first heard about it in July of 1977. We had our theories which we discussed, like Mr. Van Bourg has said. However, as far as the technology and the manner in which to find out, we didn't have. When we did find out about it it was a shocking experience.

I, for one, am one who has complete sterility and the last count I had was about 4 months ago from Dr. Donald Wharton, and it is still zero sperm count. So therefore my possibility of ever returning is very unlikely. And if I do, there is one other factor you've got to remember. It's a carcinogenic agent. So therefore I've always got to look behind my shoulder and look ahead and say, "Well, 5 years from now there is a possibility of cancer. What about my children?"

I have a wife and two boys, one 7 and one 10, to support.

Mr. VAN BOURG. Were they born after you went to work there?

Mr. BRICKER. Yes, they were born after I went to work there. I had worked at Occidental for 11 years. We had tried to have another child 5 years after our youngest one was born. No children. And this is what caused my speculation.

There were examinations and tests to find out if I was perhaps sterile. The DBCP was not even in the picture at the time of possible sterility. That is the outcome of the research I was hesitating on earlier. This was when we learned about DBCP. We didn't know what it was, and that's the sad part about it right now. If legislation is not passed to protect us, then how are we going to know about other chemicals that they may sit on for months or years, and use us as guinea pigs until they do find out?

This is why in reading the legislation concerning the 30-day period, I hesitated on that because if the company knows that there is a possible potential hazard present, I don't think that they should sit on it for 30 days. Not when a person's life is out there on the line. I think that they should immediately stop until there is an investigation or until there is some type of experimental medical research done to justify whether or not there is a potential hazard. Then, at that time, they could either proceed or discontinue using or producing the product according to the results of the research performed.

The way it is right now, a company could have thoughts that there might be a potential hazard there but until there is legislation saying, "Hey, that's abandoned by law," they are going to keep producing it and we won't know about it.

The only information that we receive concerning the chemicals that we work with is through the news media if there is actually anybody involved in it. It could be cancer, death, or whatever.

What I like about this bill is that it protects the chemical workers in general, and this is what we have been after, Mr. Hodges and myself, for a long time. This has been a long road for us because the news media, sitting right here, has asked us thousands of questions and we can't ansswer them because we don't have the answers. The only thing we have to go on is what we are told on a piece of paper or what we are verbally told. If we are not told by the companies or somebody that it is harmful, then we don't know that. The simple reason is that there are other names for chemicals that we use other than the names that we put it under. There are several different chemicals that we blend to make one product.

The terminology that they use, half of us don't even know. We don't know where it comes from or what it is.

Mr. CONYERS. What kind of work are you doing now?

Mr. BRICKER. Right now I am working for Occidental as an electrician. I left 9 months ago out of the Occidental Chemical Division in the Agchem Department. I am still exposed to it in the areas because I work in the general area as far as an electrician.

In regard to the seniority factor, I had a choice, also. My opinion was that I know that I am zero sterility right now and it is a possibility my count will never come up, so why shouldn't I go ahead and fight and try to get something to protect my fellow workers and the workers of the future. I have already been damaged. The possibility of cancer is already there. It may show up 5 years from now or 10 years from now.

This is my reason for going ahead and staying with the department as long as I have. We did not continue to blend DBCP after we were told that it was harmful.

Mr. CONYERS. Did others make that same decision?

Mr. BRICKER. Yes, they did.

Mr. VAN BOURG. The majority. Leaving the plant without anybody to pay for that kind of a disruption would have bankrupted most of the people. They had bought homes in the area. They did not own their homes; they were paying on mortgages and would have lost that. So they had no way to recover. There is no system to compensate them for it. They are able and available to work. Even workers compensation is problematical under those circumstances.

One of the poignant aspects of this man's testimony is that he worked here first. Then his children were born, which means that they have to be monitored from a genetic standpoint to determine whether or not his exposure before they were born had any substantial effects on their offspring as well as cause preventing him from having further children.

In other words, it is clear through his case, alone, that this impact is progressive and, at the same time, not only did they fail to disclose the facts to him, but when inquiries were made, and I'd

like you to discuss that point if you can, the folks were told there was no problem.

Mr. BRICKER. Well, when we were blending DBCP in the plant it was a blending operation and manufacture.

We handled it just like we did water, because it was under no label as far as the State goes as to the hazards of it.

It was not uncommon for us to use our bare hands to open or close valves, and then wash our hands. We didn't have any protection for our feet. We were always under the impression that there was nothing wrong with it.

Mr. CONYERS. Did you wear masks?

Mr. BRICKER. No, we did not, not until after the time that we found out that where was a possibility of it being harmful. Then we continue to blend it until they said, "No, you have to stop it at that point," and that was when we did not have to handle it any more. Up until this time, they took safety precautions and this is one of the misleading things.

If you go up to a company and say, "Well, we are educating these people. We furnished them all of this safety equipment." Yes, but that was after they discovered that the chemicals were a health hazard. Sure, we are now wearing safety equipment, but that doesn't justify the last 10 years.

Mr. CONYERS. Right.

Mr. BRICKER. The chemical, DBCP, was handled with no safety precautions whatsoever. There was no label. The only thing that was actually labeled was if there was a bromaine leak, we had to know which bromaine to use in it, then you wear respiratory equipment. Other than bromaine, we were never warned that there was potential hazard to DBCP.

Mr. CONYERS. Mr. Jack Hodges, would you tell us something about your experiences.

Mr. HODGE. Well, I will tell you a little bit about how we came about this.

I was serving in a union capacity at the time, a committeeman for the Agchem Department where I still work.

I went to work in the Agchem Division in 1971. In comparison with some of the other fellows in that particular department, I was probably one of the newer ones.

I got the union position due to the fact that our previous committeeman died of cancer, I was kind of interested in righting wrongs. I didn't think it was right. So anyway, the sterility thing was kind of cropping around. I heard some of the young fellows talk about DBCP causing sterility. One fellow in particular was real worried about it. He wanted a child so bad and could not understand why his wife had not conceived. His wife was tested and she was all right. Finally he went and was tested and came back with a long look on his face and said, "I'm sterile."

I just kind of looked at him. He had been in the department quite longer than I. I don't know why I said it, but I asked, "You think it might be the chemicals doing it?" He said, "Well, I don't know." So that's where it was kind of dropped for the time being. Then the conversations started going on in the lunchroom. I started hearing more people talk about it.

"Well, I've been trying to have kids but we just can't have them for some reason or another."

I had a meeting with department heads. It was at a safety meeting that I brought to his attention the fact that I thought we might have a sterility problem. I didn't have any concrete facts. Nothing came of that; it was merely a suspicion.

The next time I brought it to the company's attention was when we were negotating a contract. We were trying to negotiate a strong health and safety language. I brought it to their attention a hundred times, and emphasized the need for this type of language. I told them I thought we had a sterility problem but nothing came of that. Nothing came of it until the union finally got something to back them and took it in to the company.

I think it is a crime for a corporation to do this to a person. The sterility factor is not a big problem for myself. Again, I am an older person and my children were born prior to my coming to work there.

I don't think a company or a corporation has a right to jeopardize my life wherein I would have to worry about cancer. There are a lot of things that I can do to myself and create cancer and that is my choice. I do not think corporations have that right to do that to me nor my fellow workers. I think it is a crime.

I am glad that such a bill has been introduced, although I really don't agree with the 30-day time limit for reporting. If there is something wrong with my automobile, I get it repaired because it is going to jeopardize somebody's welfare on the highway.

I will tell you what corporations will do when you tell them, "I'm going to give you 30 days to do something with this." What they do, if they have a particular material sitting on the shelf, they will speed up the process so they can get rid of all that particular material. I have seen this done several times.

If they find a hazard, I think we have a right to know and they should stop production of it and get it off the market until they can make it safe.

Mr. CONYERS. We are looking at that provision.

Let me ask you, counsel, what has happened as a result of this disclosure and awareness inside the company in terms of their practices? Have any of the State laws or agencies been of any help in this matter?

Mr. VAN BOURG. As my friend has just stated, they pulled this particular DBCP blending project that they had there off the line. The production ceased on that and has not been restored. They are more conscious of labeling.

There have been a number of other disclosures about this particular substance. But, really, we don't know very much about most of the other chemicals they have there. And so there is a credibility gap, not just with this chemical company but with almost all similar manufacturing entities that simply have not told us the truth and we believe that there are many chemicals with which we work that are dangerous for us. Not just a little dangerous but very dangerous. They should tell us what's in those chemicals so that we can make an individual choice. We can then sit down and insist upon certain curative or preventative methods so that we don't have the same exposure that previously occurred.

Exposure is very important. The workers were so casual at this place that the they would sit around the drums that contained the material and eat their lunch. They had absolutely no protection, no requirements to wear any masks, et cetera.

The insidious aspect is, I don't think we have to tell you what it is to sit down for a union such as OCAW, which is one of the smaller unions in the country, and negotiate with a chemical company and the oil companies which, I believe, probably have more power in many instances than the Government does, and at the bargaining table they say, as Mr. Hodges mentioned, "Well, we have this problem. We think we have real problems. We want stronger safety clauses." Management doesn't, at that time, disclose that there are problems.

That is a kind of cynicism that can only continue if there is no criminal penalty.

I am sorry Mr. Sensenbrenner has left because I have just reread the bill.

I think to make the disclosure would not subject the person to a criminal penalty as the bill is written. It is the failure to make the disclosure which subjects him to a criminal penalty. For the life of me, I don't see the fifth amendment problem.

I would like to address myself to one other point. I don't want to disagree with my friend and colleage, Mr. Weiner, about the preemption. I think if you have preemption, then there is some sense that the manager or the corporate officer will be brought before a magistrate and, at least, called upon to answer.

If States perform a similar function, that does not prevent you from having preemption in the law. It permits you to waive your function in favor of a State's function by compact. If you determine that a State such as California has a sufficient program and sufficient criminal penalties which are no less than the criminal penalties imposed by this bill, it is very simple to sign a compact with them, with their appropriate agency, to carry forward this portion of the bill's penalty program.

I am in favor of preemption because I believe most States which would have laws similar, but which would lack vigor in enforcement, would be a problem if you don't have preemption. The kind of preemption which I think would be appropriate is the kind of preemption that you have in the proviso to section 10 of the National Labor Relations Act, which says that the act is preemptive, but permits the National Labor Relations Board or an appropriate agency to enter into a compact with an appropriate agency at the State level to carry forward certain functions.

It's true that no such compact has ever been entered into the National Labor Relations Act. It might be true here that there never will. But I'm not so sure that that's a bad thing. With the present people in our State safety program in California, there would be vigorous enforcement, I believe.

There would come a time, perhaps, when for budgetary reasons, alone, this would become a low budget matter for a particular district attorney in a particular county and we would never have enforcement.

Whereas under a Federal system, you might have a little bit more vigor in the enforcement in a given time. I am not so sure that I would waive on the response on the preemption item.

Mr. CONYERS. I appreciate your response.

You are aware of the whistleblowers' protection that is being considered and restitution aspects of this matter, which might save a lot of employees the whole trouble of going the civil route if, as a part of the criminal judgment, there would be the restitution. Perhaps even including punitive damages.

Mr. VAN BOURG. Absolutely.

Mr. CONYERS. It could be included in a judgment issued in a criminal case.

Mr. VAN BOURG. One of the things that strikes me, Mr. Chairman, both of these gentlemen are even tempered in the way in which they have presented their testimony, seemingly casual about it, they haven't even attempted to tell you what really goes on in their minds when they are by themselves and with their families. No person likes to consider his own life as having been definitely shortened.

That's the kind of problem they have to consider through no choice of their own. I am surprised at how even and lacking in anger they are but it is typical of the workers at Occidental and of every other major corporation with which we've dealt.

That is, the workers are loyal to the company. They work hard. They do their job and their economic choices are so limited that even under full disclosure, the most important route for them as a practical matter is to get protection inside the plant rather than quitting.

When I first talked to these guys I asked them, "Why in the hell do you keep working there?" And they said, "Can you find us another job?" That's what restitution has to deal with, for life if necessary.

Mr. CONYERS. Mr. Miller.

Mr. MILLER. Thank you, Mr. Chairman.

And thank you for your testimony.

I think that once again we find that the situation always seems to be the same. All of the knowledge is on the side of the company. There has been prior testing. There have been scientific studies that have been suppressed and there is a failure to deliver that knowledge to the workers. The workers continue on the job and continue to expose themselves to these harmful effects. I think you said it quite correctly. It is criminal to you or your colleagues to be exposed in that fashion which I consider a willful fashion.

If the situation is as you outline, you're almost, in a sense, treating this substance like water with nobody telling you of potential harmful effects. I think that's exactly what this legislation addresses.

I also agree with you, Mr. Van Bourg, on the fifth amendment issue. The issue is failure to disclose.

Mr. VAN BOURG. That's right.

Mr. MILLER. There is no double whammy with regard to disclose. In fact, those who disclose are relieved of all liability under this provision.

Mr. VAN BOURG. As I see it.

Mr. MILLER. Interestingly, I gave a speech to the National Association of Manufacturers on this legislation on Friday and a gentleman came up to me afterwards and said, "Gee, I'm going to be getting sued for a drill press that we made many years ago. Could I just write a letter to the Government and escape all the liability for the people that are going to be harmed using this drill press?" I thought it was rather creative thinking by that person. But that is not the issue here.

It is the failure to disclose and I think you've done an outstanding job in presenting that to the subcommittee.

Mr. VAN BOURG. Thank you.

Mr. CONYERS. May I ask you before you leave, how many workers are potentially affected at this one place?

Mr. VAN BOURG. That is another item that is not strictly within our knowledge. In order to answer that question we would have to know how many workers have been on the payroll of the company since the first day that the substance was on the premises.

We have a union security system but many workers work for the grace period without ever reporting to the union or being known to the union. This union does not have a hiring hall.

There are many people who could have had casual contact and many people who could have had daily contact. I would say that if you were to take a census of everybody who has been on the premises of this one plant and has come in contact with the substance at least one, it would number several hundred.

Mr. CONYERS. Has any attempt been made by the company to go back and locate any of those people who have worked for them?

Mr. VAN BOURG. No, at least not to our knowledge.

We have named plaintiffs. We are mindful of the fact that this is not the kind of a suit in which we have the right to solicit people and we've been very careful about that.

A number of the people have gone in their own direction. Many people were frightened about having their names exposed because of personal relationships in their families. They didn't want their families to know that they had had this exposure. We've treated this matter with the utmost of delicacy and gentleness trying not to expose somebody to the litigations who did not want to be exposed. We did not frame it as class action litigation. That might come another time and from another source.

We were asked by the union to do a job for the union people who wished to have it done. That is the framework of the litigation at the present time.

I think Government today has legislation and agencies on line which could, with a simple interrogatory to the company, make that request, much the same as has been done in asbestosis cases where every person who has ever worked for a manufacturer or installer has had to disclose names under certain circumstances.

You could do this here, but remember what this has brought out. DBCP is only one of several thousand chemicals which have been used in the same way throughout the country and each of the Congressmen on the panel, perhaps, in your days of working before you became elected, may have worked in construction or in a plant or even in a clothing manufacturing establishment which brought

you in contact with these substances for which you will pay dearly with your life someday.

That is the absolute tragedy of our industrial system.

Mr. CONYERS. I think I would like to have you address the Democratic caucus to pick up the rest of the cosponsors that may not be on the bill. They think of it in those terms.

Mr. VAN BOURG. If any are from this area, I'd be glad to talk to them.

Mr. CONYERS. Thank you very much, gentlemen.

Mr. VAN BOURG. Thank you.

Mr. CONYERS. Our next witness is from the California Rural Legal Assistance Corp., Ralph Lightstone, who has represented farm workers before State and Federal agencies, seeking to ban DBCP's use.

He has been doing litigation and other kinds of work on behalf of farm workers. We are delighted to receive your statement into the record, and you may summarize as you choose.

TESTIMONY OF RALPH LIGHTSTONE, ATTORNEY, CALIFORNIA RURAL LEGAL ASSISTANCE

Mr. LIGHTSTONE. Thank you, Mr. Chairman, and members of the subcommittee for the opportunity to speak today.

The product that I will be talking about, as well, this morning, is DBCP.

One thing I would like kept in mind during the whole discussion this morning is that there are other chemicals out there like DBCP. We've just seen the tip of the iceberg in terms of the catastrophes that are going to be coming to public light during the next few years.

Mr. CONYERS. You represent those who don't have a union or don't have a collective bargaining system, for the most part, is that correct?

Mr. LIGHTSTONE. Tht's correct. Farm workers are unionizing in California and other States. But the majority are still not unionized. Those without a union are in a much more difficult position.

Farm workers are exposed to a wide variety of pesticides on different ranches in various locations over the years. It is virtually impossible to trace an injury back to a particular exposure. So that's a significant problem.

Workers at Oxychem were able to identify what had happened to them because they all worked in one location.

After the tragedy was discovered at Occidental Chemical and the other manufacturing plants, the Center for Disease Control went out into the field and began taking samples from farm worker pesticide applicators. They found the same infertility effects among those applicators.

One of the most frightening things about this is that those applicators in the field were not feeling sick. They did not know that they had suffered these effects in their bodies.

Mr. CONYERS. They had no suspicions?

Mr. LIGHTSTONE. They had no suspicions.

These were workers who had applied the DBCP.

Mr. CONYERS. Are we talking about migrant workers?

Mr. LIGHTSTONE. In this case we're talking about both kinds of workers. We're talking about farm workers who are employed applying pesticides.

Some of those do that fulltime in one location. Others move from location to location.

There are also farm workers who do not do direct application, but are doing general farm work. They are exposed to the residues of these chemicals after they are applied.

For example, DBCP was applied throughout the Southwest through open-ditch irrigation. Farm workers were out there with shovels tending the ditches and walking through the water.

DBCP not only volatilizes and presents a threat from inhalation, but it penetrates through common rubber boots, which is what they were wearing. The exposure was tremendous.

Mr. CONYERS. Can it contaminant the soil and the water, as well?

Mr. LIGHTSTONE. It can and does. And one of the most frightening things about DBCP and other pesticides is that they do not just impact on factory workers or even just on farm workers.

One of the most important things about this bill is that the impact of a coverup of the nature that went on in DBCP hits everyone.

DBCP was consumed by people all over the United States in their food for over a decade as a result of the failure to disclose the potential for contamination of the food products.

Mr. CONYERS. Were there any particular foods that were contaminated?

Mr. LIGHTSTONE. Yes. The primary foods that were contaminated were root crops, carrots, radishes, and other crops grown in the ground. In addition to that, there was apparently widespread contamination of tree fruits and——

Mr. CONYERS. Don't say oranges. Those nice, delicious, beautiful oranges that are the product of your State and which we are so proud to receive.

Mr. LIGHTSTONE. Unfortunately, including oranges and other citrus products.

One of the shocking things that this bill relates to is that agricultural researchers at the University of California found DBCP residues in the leaves of orange trees as early as 1965. They assumed at that time in their reports that those residues were the result of the trees uptaking DBCP and translocating it through the trees. They speculated that it might also be due to airborne contamination.

What they did not do, then, is check to see if it was getting in the fruit.

This research was being funded like Dr. Hines' research, by the Shell Chemical Co. And, at the same time and subsequent to the time that this research was going on, Shell was telling the Food and Drug Administration that DBCP would not contaminate fruit.

So you have the same kind of research failures, including the same connection to the manufacturer and the public university researcher that you had in the case of effects.

The research that could reveal dangers of chemicals like DBCP is not just research into the effects. Does it cause damage to an animal or humans when they are exposed to it?

The danger also comes from the level of exposure. Will there be lingering residues in the soil? Will it get into food? Will it get into water and be spread in the air?

All of that research relates to whether or not there will be a serious danger from these products.

The reality is that the pesticide manufacturers manipulate all branches of research that could reveal these dangers.

First, the manufacturers do their own research. Second, they hire priviate laboratories. I believe this subcommittee has heard from Dr. Epstein about the problem of private laboratories doing false and shoddy research. Third, they manipulate research at public universities. This is the most distressing because the public might have a false sense of security that there is at least one branch of research that is independent and could watchdog against the dangers of chemicals. It could flag the problems.

Unfortunately it is almost a universal practice that researchers into both health effects and into potential exposure dangers at public universities such as the University of California, are receiving funding from and reporting to the manufacturers.

So the chemical companies manipulate all the sources of information.

One of my recommendations to this subcommittee is that the bill be drafted to reach both the manufacturer and researchers they fund.

Mr. CONYERS. Are you involved in litigation?

Mr. LIGHTSTONE. The California Rural Legal Assistance is representing farm workers before Federal and State agencies in trying to keep DBCP off the market.

We are also involved in litigation in California over the contamination of food with pesticide residues. There are pesticides turning up in food for which there are no tolerances legal limits. These pesticides have similar effects to DBCP, they are carcinogens, they reduce sperm counts and are extremely persistent.

DBCP is not an isolated incident, unfortunately.

Mr. CONYERS. How many such pesticides would you estimate that there are on the market?

Mr. LIGHTSTONE. There is no answer yet to that question. That's one of the problems. Our lawsuit seeks to force the necessary tests to be conducted.

At a minimum there are 37 pesticides that are allowed by EPA to be in people's diets which have been identified as either causing cancer, birth defects, reduced sperm count, or mutations.

Mr. CONYERS. In addition to an unknown number of others that have not yet been determined?

Mr. LIGHTSTONE. That's correct. There is a huge data gap.

Mr. CONYERS. Has there been any lessening of a contamination by these kinds of pesticides in the fruits and vegetables that are grown?

Mr. LIGHTSTONE. I don't think there has been any lessening except for DBCP which is now being removed from the market in the continental United States.

In fact, pesticide use in general is on the increase in the United States. So the problem is certainly not lessening.

Mr. CONYERS. Thank you. Were there any other points you wanted to make before I recognize Mr. Miller for any questions?

Mr. LIGHTSTONE. Well, there are a few more.

Mr. CONYERS. Please continue.

Mr. LIGHTSTONE. One of the exhibits that I provided for the subcommittee is a copy of a pamphlet issued by the Occidental Chemical Co. The pamphlet is designed to sell DBCP.

This was being distributed in 1977, when DBCP was taken off the market. It illustrates several things, one of which is the insidious tie between the manufacturers and the University of California.

This pamphlet was given out by the Departments of Nematology at the University of California, where researchers had been doing the DBCP research for 15 years for Shell and the other companies. The pamphlet shows DBCP being worked with in ways that violate the label and are extremely dangerous.

It shows workers calibrating DBCP with no masks, no gloves, none of the necessary equipment.

Furthermore, it shows DBCP being applied by sprinkler system, being shot into the air and sprayed over vineyards and peanut farms.

The university departments which were handing these out, had determined 10 years ago that sprinkler application was an extremely stupid way to apply DBCP, because most of it evaporated. It never got to the target pest which is in the soil.

In addition to that, it creates a serious inhalation hazard because the DBCP is blowing around in the air. And here is a pamphlet prepared by Oxychem, being handed out to farmers by the university, which runs contrary to the university's own research.

Mr. CONYERS. Mr. Miller.

Mr. MILLER. I have no questions, Mr. Chairman. I am familiar with Mr. Lightstone's and CLRA's work in trying to represent these people.

I think they raise some very serious concerns for the subcommittee in the sense that these people don't have the same kind of history as he has pointed out, in terms of employment, that allows you to go immediately to the source or the cause of the illness. Because your colleagues in this occupation may not have shared those other employment experiences with you or exposure, you don't get to match experiences as the Oxychem workers were able to do.

I think the issues you raise about whether or not the research is, in fact, tainted or misused is a very serious one. I think the State legislature here is going to have to consider some other issues on their farm research. For example, who are the beneficiaries and who are hurt by that research? I applaud you for those efforts.

Mr. CONYERS. We appreciate your coming before the subcommittee. I know you will continue to watch our work and we hope you will proceed in the development of the factual situation that you have so skillfully presented to this subcommittee.

Mr. LIGHTSTONE. Thank you for the opportunity to testify.

[Written statement of Ralph Lightstone follows:]

STATEMENT OF RALPH LIGHTSTONE, ATTORNEY, CALIFORNIA RURAL LEGAL ASSISTANCE

Mr. Chairman:

Thank you for your invitation to testify on this important legislation. The product which I would like to discuss this morning is pesticides; that is, the toxic chemicals which are designed to kill weeds, insects, rodents, mites, etc. Nationwide production of pesticides has quadrupled in the past three decades. Pesticide use in California now exceeds 330 million pounds per year, or roughly 15 pounds for every person in this state. H.R. 4973 is important, because these dangerous pesticides touch every person in this country. And the individual has no choice in the matter.

The dangers of pesticides begin in the formulation plant, and on the farm, but they end up on the dinner table, or flowing out of the kitchen tap. Pesticides are often persistent, and mobile in the environment. That is why they end up in our food, water, and air. The California Department of Food and Agriculture has estimated that in California in one year over 17 million pounds of pesticides applied from aircraft miss the target crop. The problems of aerial "drift" as well as persistance in food and water have been acknowledged, but are far from being solved. Meanwhile, workers and the public

must rely on information about the dangers of these pesticides to be developed by the manufacturers and provided to themselves and appropriate agencies. H.R. 4973 can bring pressure to bear on the pesticide industry to be more candid in the future, than it has been in the past.

The need for vigilance against the hazards of pesticides is especially great because those hazards are not readily apparent to workers or the public, until it is too late. The acute effects of pesticides are obvious. Pesticides can and do kill. They cause acute illness, which is recognized as pesticide related, because the illness occurs immediately after contact with the pesticide. In California, approximately 1500 acute pesticide poisonings of workers are reported by physicians per year. (The actual incidence is believed to be much higher.) The crucial dangers, however, are the chronic effects which result from long term, low level exposure to pesticides. Such effects can include cancer, birth defects, reproductive disorders, and neurological damage. The doses which can cause these effects may not be detectable to human senses. Furthermore, the effects may not become apparent for years or decades after exposure. Because the dangers of pesticides are not readily apparent, those who know of the dangers must be required to warn those who do not.

The history of the pesticide DBCP illustrates the irresponsible conduct of manufacturers and their researchers

in the past, and the need for legislation such as HR 4973. DBCP's potential danger to people, and its residues in food, water and air were known to manufacturers and their researchers many years before the consequences were known by workers and the public. The DBCP catastrophe could have been avoided.

The dangerous effects of DBCP were first "discovered" in people in the summer of 1977 at Occidental Chemical Company's Lathrop plant. Workers there were found to be sterile, or to have reduced sperm counts. A subsequent testing program uncovered the same effects in other workers in Arkansas, Alabama, and Denver. Nor were factory workers the only victims. In the fall of 1977, the Center for Disease Control surveyed farmworker/applicators who worked with DBCP on the farm. They too had suffered significantly reduced sperm counts and abnormal FSH levels. They had been unaware of the toll DBCP had been taking in their bodies.

Although DBCP's effects on humanswere "discovered" in 1977, Dow Chemical and Shell had learned about these dangerous effects nearly 20 years earlier. If they and their researchers had acted responsibly then, this tragedy could have been avoided. The key experiment was reported to Shell in a Confidential Report (No. 278) from researchers at the University of California School of Medicine in San Francisco. The experiment showed that at the lowest levels tested, rats exposed to DBCP suffered severe testicular atrophy. The results of the experiment were not published until 3 years later. Workers and appropriate agencies were not warned or notified. As late as 1977,

after the Lathrop tragedy had been uncovered, the following interview occurred at Occidental.

> Interviewer: what was your initial feeling when you first found out that in fact these men were sterile?
> Occidental Official: Shock. We had no idea. I had no idea at all that we had any kind of process here in our plant operations that could do such a thing to a human being.
> Interviewer: But hadn't a study been done by Dow Chemical back in 1961 that indicated DBCP did cause sterility in rats?
> Occidental Official: Well, there was a study funded by Dow- that Torkelson study, Dr. Torkelson, and it did not show sterility in rats. What it showed was that with very high doses of DBCP you could get testicular atrophy, if you will, the shriveling up of the testicles. I've talked to two scientists who are familiar with the work, and both say, "Heck, we just didn't draw the conclusion that there'd be sterility from the fact that the testicles were shriveling up."

The Torkelson experiment had been conducted by Dow concurrently with the University of California study. They were published together in 1961.

The history of DBCP research at the University of California demonstrates that the public and workers cannot rely on the public university as an independent source of research to guard against the hazards of products such as DBCP. The professor who directed the University research, Dr. Charles Hine, has throughout his tenure at the University been a paid consultant to Shell. By his own admission, during these DBCP research years, Shell directed his research priorities. Meanwhile, Shell has been making annual"gifts"to the University for toxicological research. The gifts request that Hine oversee the research.

Such relationships are especially disturbing, because University of California reports, and statements of University professors carry an appearance of objectivity and independence. Such appearances do not necessarily reflect reality.

The hazards of products such as DBCP are measured in their potential to contaminate food, water, soil, and air, as well as in their toxicological effects. It is equally critical that all information relating to such contamination potential be disclosed. Once again, in the case of DBCP, researchers at the University of California connected to DBCP manufacturers had uncovered DBCP's contamination potential in the mid-1960's.

In 1965 and 1966, researchers at the Davis and Riverside campuses of the University of California found DBCP residues in orange tree leaves, which they believed had been translocated through the roots of the tree. They also found that tomato seedlings absorbed the compound. There is no indication that they took the next step and checked to see if the fruit contained residues. Shell was financing this DBCP research through a series of 27 grants to both campuses between 1956 and 1973. The instructions accompanying these grants were very clear. "More specifically,"wrote Shell executive W.E. McCauley in 1966,"we are interested in the development of data to support the use of Nemagon Soil Fumigant (DBCP)." Meanwhile, Shell had convinced FDA in 1963 to establish tolerances (legally permissible

69-943 O - 81 - 23

amounts of a pesticide in food) for inorganic bromides (breakdown products of DBCP) rather than DBCP, because DBCP itself would not turn up in food. They were wrong. In 1977 it was discovered by Canadian researchers that DBCP commonly was present in root crops where it was used. Later, the California Department of Food and Agriculture found DBCP in tree fruits as well. Americans had been eating DBCP contaminated fruits and vegatables for over a decade as a result of this research failure.

The same researchers also discovered that DBCP can be moved by irrigation water in soil, and that sprinkler application of DBCP results in major losses of DBCP into the air. Nevertheless, it was 1979 before it was discovered that DBCP was contaminating water throughout California, and that tens of thousands of people had unknowingly been ingesting it.

All of the research just described would indicate to a reasonable person that a serious danger was associated with the use of DBCP. In 1979, after the toll of casualties had mounted, the California Dept. of Food and Agriculture conducted thorough studies to complete the research of decades before. It found: widespread DBCP contamination of water and food; persistance of DBCP in the soil for more than a year after application, and in leaves and bark for many months. It found that under typical application techniques on the farm,

air levels were far in excess of those that had severly injured Dr. Hine's rats in 1958. In every crucial respect, the University researchers failed to carry out DBCP testing to its logical conclusion. They failed to look for a no effect level in rats. They failed to check fruit, as well as leaves. They failed to see how far DBCP could be transported by the irrigation water. The one thing that has not failed is the continuous flow of money from the pesticide manufacturers to the University and its researchers. What all of this means is that the University cannot be relied upon by the public to provide an independent check on the hazards of products such as DBCP.

The connection between the University of California, its researchers, and the industry can also be seen in a pamphlet, which I am providing to the committee. The pamphlet, entitled "What is a Plant Parasitic Nematode?" was produced by Occidental Chemical Company to promote sales of DBCP, but distributed by the University of California's nematologists. This pamphlet is hazardous to both farmers and farmworkers, and it runs contrary to the University's own research. First, it shows DBCP being applied andcalibrated by persons who are not wearing required safety gear. Secondly it shows DBCP being applied by sprinkler application, which is extremely hazardous to workers, and extremely ineffective. The DBCP volatilizes into the air when applied by this method.

Private research submitted by pesticide manufacturers to support registration of their pesticides has also been severely criticized as misleading. In June, 1977, the EPA reported more than 225 pesticide registrants of 400 products with 300 different chemicals had used chronic toxicity studies which were highly suspect. The studies had been conducted by Industrial Bio-Test Laboratories of Illinois. Industrial Bio-Test had previously been accused of falsifying results of tests on drugs, which had been submitted to FDA. A 1978 Calif. Dept. of Food and Agriculture review of its toxicity files indicated that submissions from Industrial Bio-Test had highly irregular designs. Put another way, the defects should have been obvious to the manufacturer which submitted the reports, as well as the agency receiving them.

The responsibility for the completeness and accuracy of all research which reveals the potential dangers of pesticides must fall squarely on the manufacturer and its officers. They should be held accountable for failing to disclose crucial information about the dangers of products such as pesticides. Since public institutions such as the University of California cannot be relied upon to warn society, the enactment of legislation such as H.R. 4973 is even more crucial.

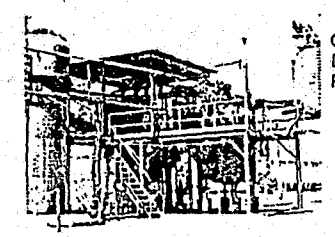
Table 2.2-1

Production of Synthetic Organic Pesticides, United States, 1952 - 75

Year	Active Ingredient Production	Change from Previous Year (percent)
1952	417,624,000	--
1953	355,953,000	-14.8
1954	419,274,000	17.8
1955	506,376,000	20.8
1956	569,927,000	12.6
1957	511,552,000	-10.2
1958[a]	539,396,000	5.4
1959	585,446,000	8.5
1960	647,795,000	10.6
1961	699,699,000	8.0
1962	729,718,000	4.3
1963	763,477,000	4.6
1964	782,749,000	2.5
1965	877,197,000	12.1
1966	1,013,110,000	15.5
1967	1,049,663,000	3.6
1968	1,192,360,000	13.6
1969	1,104,381,000	- 7.4
1970	1,034,075,000	- 6.4
1971	1,135,717,000	9.8
1972	1,157,698,000	1.9
1973	1,288,952,000	11.3
1974	1,417,158,000	9.9
1975	1,609,121,000	13.5

[a] Estimated by The Pesticide Review, USDA.

Source: USDA, 1976a

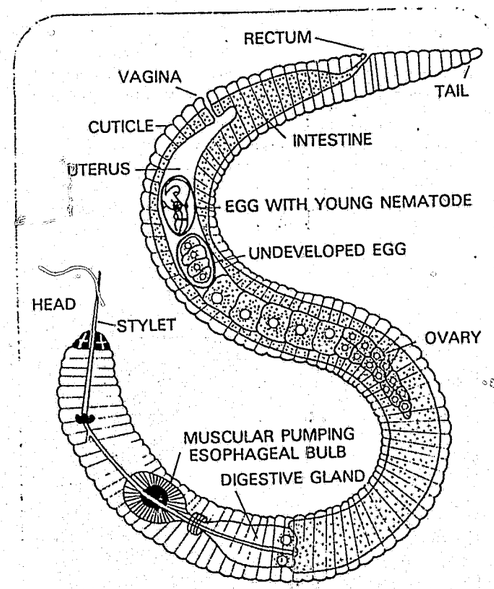


Occidental Nematocide Division's Manufacturing Plant at Lathrop, California.

TABLE OF CONTENTS

WHAT IS A PLANT PARASITIC NEMATODE ?

A schematic diagram of a plant parasitic nematode showing vital organs and the general physiology of the parasite.

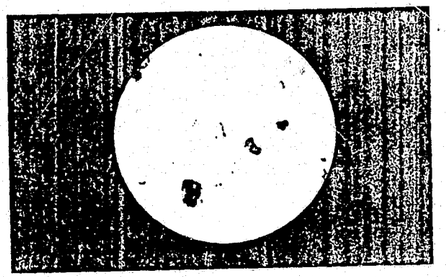


Plant parasitic nematodes represent only abo 300 species of approximately 25,000 species of nematodes which have been identified. Nematodes, as a whole, are very small wormlike creatures also known as round worms and eelworms. They exist everywhere attacking animals, algae, fungi and plants.

The fundamental difference between plant parasites and so called free living types, is the existence of a stylet or spear with which the nematode sucks the plant juices and causes damage. Plant parasites are usually small ranging in size from 200 microns to 8MM in length. The females take on a variety of shapes from wormlike larvae to mature, spherical, obese or kidney shaped. Most are bisexual requiring the male for reproduction, but some are parthenogenetic not requiring male fertilization.

Normally the life cycle is in six stages including the egg, 4 larval stages and the adult. The length of time for each of these stages not only varies with the species involved but with temperature, moisture and presence of a suitable host.

The nematode feeds through its stylet which punctures plant cells. Various enzymes are injected into the cells. These enzymes start the digestive process, produce side effects in the plant sometimes causing erratic plant growth and other adverse conditions such as, reduced production, quantity of crop and a large variety of other detrimental effects.



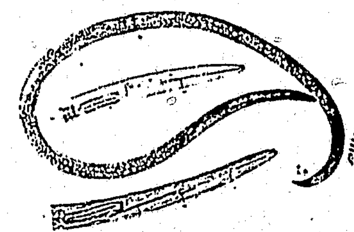
A Dagger nematode as seen through our laboratory microscope.

OXYCHEM® maintains a licensed laboratory which determines the presence of specific nematode species in soil samples when submitted by its salesmen and dealers according to the proper procedure. The fundamental purpose of these nematode analyses are as sales aids, although they are scientifically accurate.

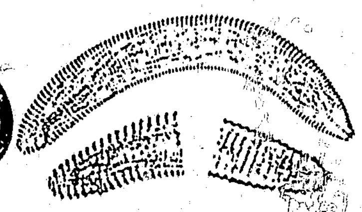
Of course, the final and fundamental proof of the desireability of treatment is in the actual results that are obtained by proper use of the products.

NEMATODES WE ARE MOST CONCERNED WITH

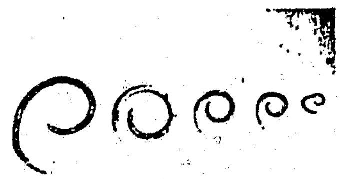
Root Knot Nematode At least 18 Species	Over 2,000 plants are hosts. They include Apricots, Peaches, Almonds, Prunes, Grapes, Berries, Cotton, Beans, Carrots, Curcubits, Cole Crops, Tomatoes and Peanuts. Root-knot is the most easily recognizable nematode in the field. Other less obvious species are equally damaging.
Root Lesion Nematode	At least 15 species with wide host range. Woody plants — Perennials and annuals. Vegetables and Field crops heavily damaged. Wide distribution from 8000 feet in Sierras to 200 feet below sea level in Coachella.
Dagger Nematode	Grapes, Cotton, Citrus, Grass, Figs, Peaches, Cherries, Coffee, Pines, Soybeans, Spruce, Clover, Maple, Alfalfa, Strawberries, Tomatoes, Roses and Others.
Stubby Root Nematode	Radish, Dill, Tomatoes, Broccoli, Cauliflower, Cabbage, Kohlrabi, Lettuce, Peaches, Grapes, Coffee, Cotton, Corn, Soybeans, Sweet Potatoes, Cranberries, Onion, Pines, Blueberries, Sugar Cane, Radish, Pepper, Vetch, Ornamentals, Celery, Wheat, Alfalfa, Oats, Watermelon, Grasses, Sugar Beets, Spinach, Strawberries, Apples.
Citrus Nematode	Citrus, Grapes, Olive, Lilac
Pin Nematode	Walnuts, Figs, Celery, Parsley, Peppermint, Tobacco, Carrots, Loganberries, Raspberries, Grapes, Cranberries, Clover, Pineapples, Grass, Celery, many woody plants.
Soy Bean Cyst Nematode	Soybeans, Legumes, Beans, Vetch. These attack a wide range of weeds and cultivated plants.
Reniform Nematode	Cowpeas, Beans, Cucumbers, Eggplants, Okra, Pineapples, Bermuda Grass, Cotton, Soybeans, Tomatoes, Tea, Clover, Clove, Ornamentals, Sweet Potatoes
Ring Nematode	Peaches, Pine, Grapes, Roses, Cranberries, Citrus, Vetch, Rice, Figs, Walnuts, Plums, Peanuts, Tobacco, Carnation, Ornamentals, Almonds, Apricots, Cotton.
Spiral Nematode	[illegible], Yam, Sugar Cane, Cotton, Bluegrass, Carnation, Lima Beans, Tomatoes, Rye, Barberry, Boxwood, Soybeans, Grapes, Banana Trees
Sugar Beet Nematode	Spinach, Sugar Beets, Broccoli, Brussel Sprouts, Cabbage, Cauliflower, Chinese Cabbage, Radish, Rape, Swiss Chard, Table Beets, Turnips, Tomatoes. Weeds, Mustard, Chickweed, Goosefoot, Lambsquarter, Purslane, Knotweed, Pigweed, Shepherd's Purse.



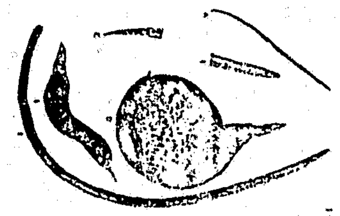
One of the most devastating, and largest of plant parasitic nematodes is the Dagger nematode. It has been known to "take out" a stand of pulp timber before it could be harvested.



Sometimes called the "cold weather nematode," The Ring nematode is a persistent pest on perennials, and devastating on grapes.



Spiral nematodes, one of the cotton parasites, are easily controlled by DBCP.



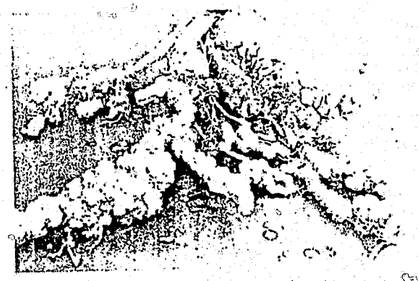
Root Knot nematode (Meloidogyne) mature female magnified 336X, pear or lemon-shaped white, cuticle tender; found completely or almost completely embedded in roots or other plant tissue, nearly always in distinct knots; eggs extruded into a gelatinous mass attached to posterior part of female.

WHAT TO LOOK FOR... to be sure nematodes are the problem!

There are several ways that this determination can be made. One of the obvious symptoms of nematode infestation is the wilting of leaves during hot periods, followed by their comeback during the cooler hours of the days.

Others are the presence of visible nematode galls on roots, patches of poor growth in otherwise good fields, death of fast growing plants, such as tomatoes about fruiting time.

TOMATOES



Tomato roots showing extreme knotting from Root Knot nematode damage. At this stage both plant and crop are doomed.

Nematodes decimate a tomato root system and the crop is lost.

LETTUCE

Lettuce is not immune from the attentions of Root Knot nematodes.

MELONS

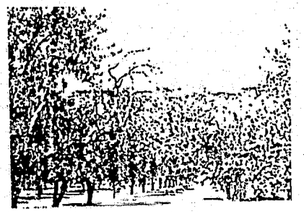
Even advanced melons put out new healthy roots when DBCP protected them from nematodes.

CARROTS

Malformed carrots such as these can be protected against nematodes with economical, effective, long lasting DBCP.

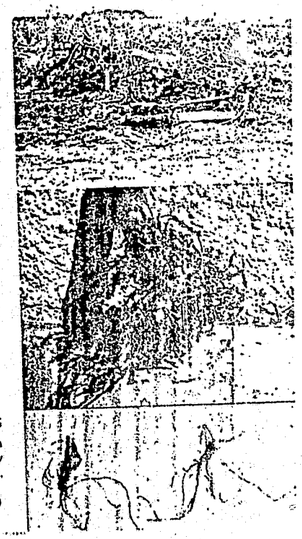
PRUNES

Mature prune trees show a "die back" on limbs characteristic of a nematode infestation.



GRAPES

As with cancer, if the disease is caught in time, it can be corrected. Left unattended the end result is almost certain.



PEACHES

A malformed and Root Knot galled root of a peach tree shows what little chance the tree has of survival.

BEANS

Decimated Root system on beans caused by Stunt nematodes.

OXY DBCP...

THE NEMATODE CONTROL FOR MOST MAJOR CROPS

WHAT IS OXY DBCP?

Chemical Name: 1,2 Dibromo-3-chloropropane
OXY DBCP Nematocide (100%) contains not less than 95% 1-2, Dibromo-3-chloropropane by weight and not more than 5% other nematocidal active compounds, including a slight percentage of an inhibiter to minimize acidic formation.

Properties:

Lbs. per gallon (100%)	17.3
Expansion to 100 degrees F.	Very slight
Boiling Point	385 degrees F.
Freezing Point (100%)	41 degrees F.
Freezing Point of Solutions:	
DBCP 15-E	35.5 degrees F.
DBCP 12	33.5 degrees F.
DBCP 12-E	33.0 degrees F.
DBCP 50-S	32.0 degrees F.
DBCP 50-E	30.0 degrees F.
DBCP 25-S	14.0 degrees F.
Flash Point (100%)	Over 175
Vapor Pressure	Less than 1
Solubility	Completely soluble in aliphatic and aromatic Hydrocarbons. Slightly soluble in water. 0.1% by weight.
Color	Water white to amber (100%). Darker brown in formulations.
Odor	Strong and distinctive.
Water Content	Less than 200 parts per million.
Corrosive Action	Non-corrosive to copper alloys and steel when water content is less than 200 PPM. Corrosion may occur if left in opened steel drums, or over a long time in closed drums in damp atmosphere.
Stability	Chemical stable except with dilute inorganic alkaline chemicals or active metals.
Toxicity	Not classified as a Class B Poison. Moderately toxic by inhalation or swallowing. Slightly toxic by skin absorbtion, almost completely non-irritating if washed off with soap and water after exposure. If swallowed can cause acute pain in the digestive tract, and congestion in the lungs. If high vapor concentrations are breathed in, nausea, inflamation of eyes and moderate depression of the nervous system can result. Treatment: Induce vomiting, keep patient prone and quiet. Get medical attention at once. If spilled on body or clothes, remove clothes, rinse thoroughly and wash freely, including eyes. Use precautions. Don't breathe vapors or permit contact with clothes or skin. Wash before eating or smoking. Handle in areas with plenty of fresh air and wear synthetic rubber gloves. Keep out of reach of children and animals. No hazard to wildlife when used according to the label.
* Controlled	All soil nematodes.
Crop Phytotoxicity	None, when used according to the label. Also no ill-effect crop residues.

OXY DBCP remains in the soil longer than other nematocides, but leaves no residues harmful to beneficial soil organisms or growing crops.

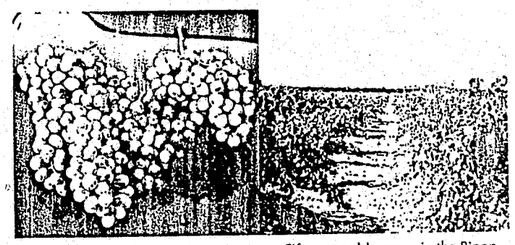
RESULTS AFTER USING DBCP

VEGETABLES

Tomatoes protected by DBCP produce a bumper crop. Lack of protection shows in two rows missed.

Young cabbage plants show response to DBCP protection against nematodes.

GRAPES

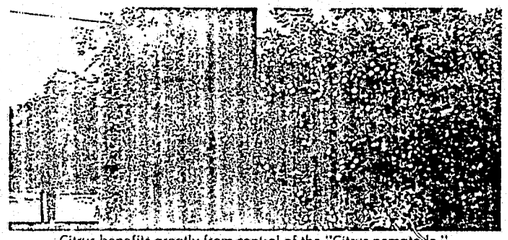


Where quality is as important as quantity DBCP nematode control improves bunch size and color.

Fifty year old grapes in the Ripon area respond to nematode control by DBCP. Treated and untreated vines.

The proof of the Raisin Pudding is in the counting of trays. Where DBCP controls nematodes the raisin count skyrockets.

TREES



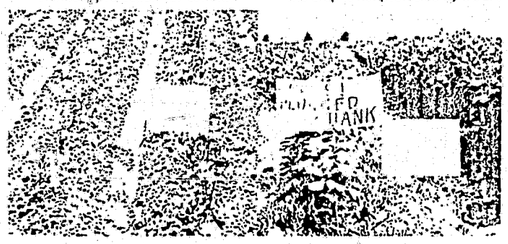
Citrus benefits greatly from control of the "Citrus nematode." Picture on left shows an untreated orchard in Southern California. Picture on right in an adjacent orchard treated with OXY DBCP shows a bountiful harvest.

Walnut trees at the Anderson Barngrover Ranch at Linden, California, show the benefits of controlling the Root Lesion nematode. Picture on right indicates what could be the final end of unprotected trees.

COTTON

From seedling stage to harvest DBCP provides long lasting economical protection for cotton.

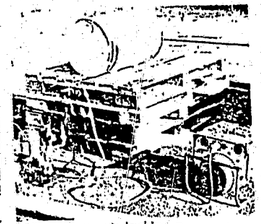
A skip in control measures shows what nematodes can do when the crop is not protected by DBCP.



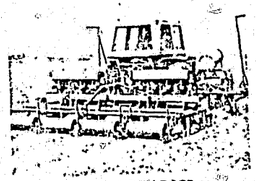
Young cotton takes advantage of DBCP protection.

EQUIPMENT & APPLICATION METHODS

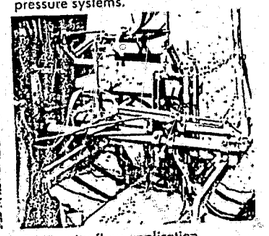
Positive displacement pump system for precise metering of DBCP into sprinkler irrigation line. OXY Patent No. 3,321,966.



Where power is lacking a portable generator provides the electricity to inject DBCP into pressure systems.



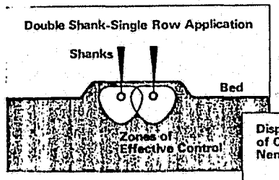
1. Pre-plant OXY DBCP on broccoli showing bed sealing process.



2. Gravity flow application, pre-plant application, and no pump involved, constant flow of DBCP.

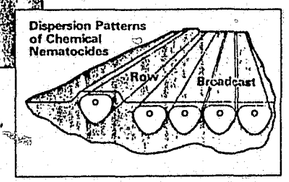
Injection shanks added to "Ripper" rig—used on soybean fields in Missouri, Boot Heel and N.E. Arkansas.

Application of DBCP with bedder.



Single shank in the row, or broadcast with multiple shanks, 12" apart.

Double shanks in a single row broadens treated area. Planting row is between two shanks.



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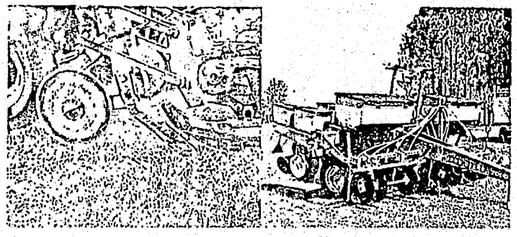
4 OF 10



Application at time of planting, using backswept knife and rolling coulter combination, to cut through possible field trash.

Application through coulter rig in Georgia and Alabama. This rig plants peanuts, fumigates, applies granular insecticide and fertilizer all in one trip through the field.

Venturi device for application of chemicals through irrigation water, as used by Oklahoma State University.

Home-made venturi device as used in Central Texas.

DBCP application post-plant on peanuts through sprinklers, is now approved in Texas and Oklahoma.

Pressure injection of DBCP into irrigation water on peanuts in Texas.

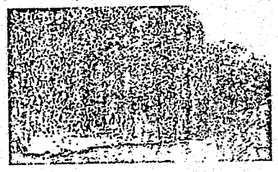
Calibration of flow through gravity flow device into irrigation water in the Rio Grande Valley of Texas.

DBCP applicator on Ripper rigs in N.E. Arkansas, excellent way for preplant application to soybeans.

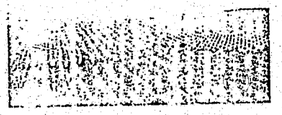
69-943 O - 81 - 24

CITRUS

Badly infested orchard — Mission, Texas, NOT TREATED.



Same orchard, treated area.



Florida Citrus — evidence of past damage by nematode.

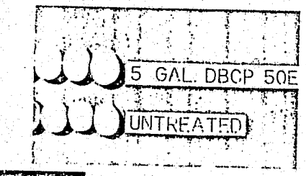
Severely infested grapefruit, Mission, Texas.

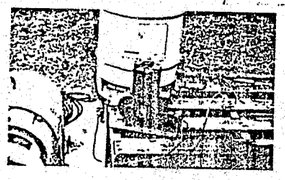
GRAPES

DBCP* applied into pressure systems with very effective results.

*Follow label recommendations as to quantities and methods of applications.

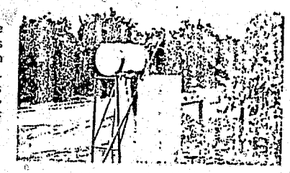
Comparison of treated versus untreated berry size on Thompson Seedless Grapes.

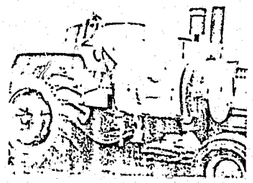




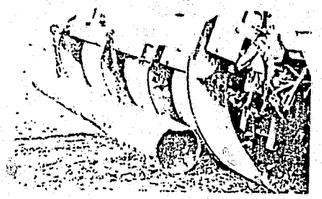
A popular method of injecting OXY DBCP into pressure systems. The small pump pressurizes the chemical into the pressure water line.

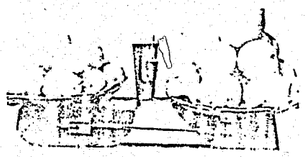
In places where turbulence is available OXY DBCP is metered into the irrigation water at the standpipe. Metering equipment is highly accurate, and only the necessary amount of the chemical is applied.



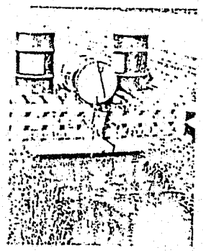


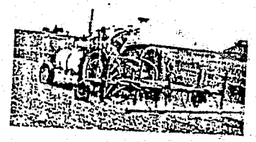
Preplant fumigation with OXY DBCP. This shows deep placement of the fumigant. Shanks deposit the chemical at least 8 to 10 inches deep.





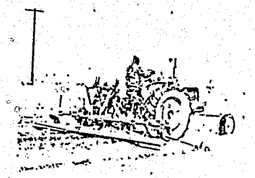
A thorough mixing of OXY DBCP with irrigation water is necessary, and here it is very efficiently utilized.

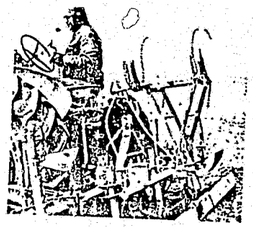




COTTON

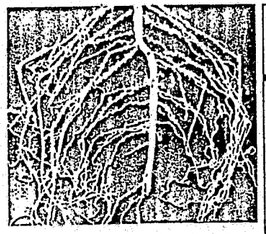
Application equipment is now so easy to calibrate and operate farmers can apply their own DBCP preplant on cotton.



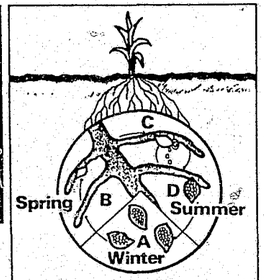


Repression of cotton growth in row skipped by DBCP applicator.

SOYBEANS



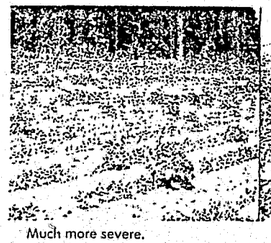
Close-up of roots infested with Soybean Cyst nematode.



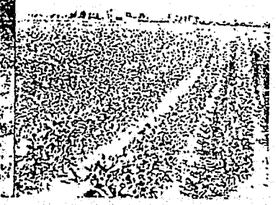
A Cysts overwinter in the soil.
B In Spring the larvae hatch and invade roots.
C After 30 days, females produce eggs. Some larvae hatch and infect the roots the same year. Other are retained in the female body. From 3 to 4 generations are possible in a growing season.
D After 2 to 3 months, females turn into highly resistant brown cysts containing eggs and larvae.

Above ground symptoms.

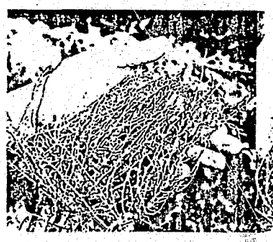
Lifecycle of Soybean Cyst nematode.



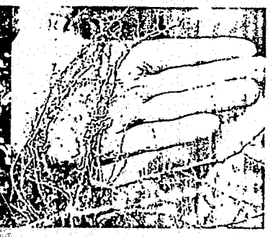
Much more severe.



Race 4 of Soybean Cyst nematode on picket variety soybeans.



Treated with DBCP.



Untreated.

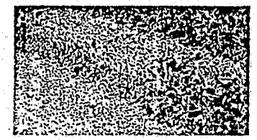
Non-fumigated and fumigated soybeans.

Fumigation benefits (Arkansas).

Root Knot nematode on soybeans (Arkansas).

Fumigated vs. non-fumigated.

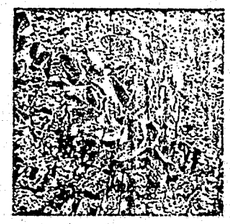
Damage in soybean field in N.E. Arkansas caused by Race 4 Soybean Cyst nematodes.



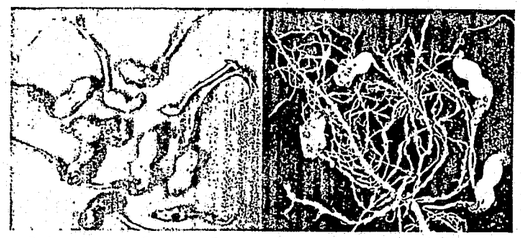
Close-up of same spot showing Race 4 on Soybean Cyst nematode damage.

Plugged up root systems of soybeans by Soybean Cyst nematode caused this wilting, even though good field moisture conditions exist.

Tiny white cyst are visible, protruding from roots.



PEANUTS



Pod symptoms of peanut Root Knot nematode.

Peanut Root Knot root and pod damage.

Root and pod damage by Root Lesion nematode.

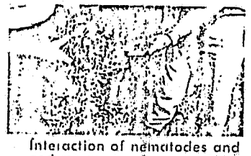
Pod and nut damage by Root Lesion nematode.

Peanut Root Knot nematode.

Northern Root Knot nematode.

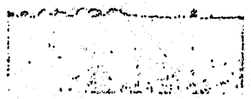
Difference between Root Knot Gall and Rhizpbiun (n-fixing Bacteria) Gall.

Damage caused by Ring nematodes on Oklahoma peanuts.



Interaction of nematodes and pod rot causing fungi on Oklahoma peanuts.

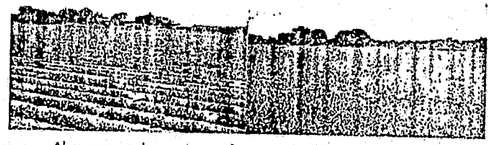
Interaction of fusarium and nematodes on peanuts.



Treated and untreated areas in Texas peanut field.

Difference between treated with DBCP through the sprinklers and no treatment at all!

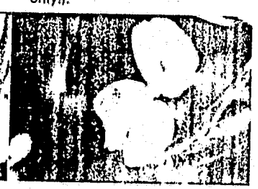
Plants from the untreated area, same field—



Above ground symptoms of nematode damage in peanuts.

Best growth stage in peanuts for application of DBCP through the sprinklers (Texas and Oklahoma only!).

Peanut plant in "First Pegging" stage.



Peanut flower.

U. C. Report No. 278

CONFIDENTIAL REPORT

To: Shell Development Company
Emeryville, California

From: Department of Pharmacology and Experimental Therapeutics
University of California School of Medicine, San Francisco

Dibromochloropropane: 50 Vapor Exposures and Ancillary Blood Studies

Submitted by: H. E. Anderson, M.D.
C. H. Hine, M.D., Ph.D.
R. J. Guzmann, B.A.

21 April 1958

ABSTRACT

Fifty exposures to the vapors of DBCP retarded growth even at [illegible] ppm level, and lethality occurred at 10 ppm. No rats survived [illegible] ppm. The other toxic effects were related to epithelium, expecially the lungs, kidneys, and testes internally, and the cornea and skin [illegible]epilation) externally.

Increase in liver/body weight ratio appeared at 5 ppm, and in [illegible]/body weight ratio at 10 ppm. Testes were decreased in size at [illegible]pm, significantly at 10 ppm; some degree of azoospermia was seen [illegible] levels.

Hemoglobin was not affected by the vapor exposures, but leuko[illegible]s were decreased at 80 ppm. On repeated intramuscular injection [illegible]injections in 12 days) there was no consistent decrease in nucleated [illegible] of the bone marrow, and no significant decrease in circulating [illegible]ytes.

INTRODUCTION

[illegible] acute and chronic toxicity of DBCP (1, 2-dibromi-3-chloropropane) [illegible] irritating properties were reported in U. C. Reports 208 and 231; the [illegible] a chronic feeding experiment were given in U. C. Report 228. It [illegible] to have minimal irritating effects, and was slightly toxic percu[illegible]ly. According to the results of acute vapor studies, and of 50 expo[illegible] 5, 10, 20, and 50 ppm, it compared favorably with other common [illegible]s such as methyl bromide, dichloropropane, ethylene dibromide, [illegible]5-85. Visceral damage was not noted on repeated vapor exposure, [illegible]ory irritation and hepatic damage resulted from acute exposure [illegible] 370 ppm.

The present report describes the results of 50 exposures to 5, 10, 20, [illegible], the concentrations being frequently checked to insure close con[illegible] to desired concentrations. Included also are the results of repeated [illegible] details, concerning the effects on the hemopoietic system.

EXPERIMENTAL DESIGN I

[illegible] sample. The sample of DBCP used in this study was labelled [illegible], 95% 1, 2-dibromo-3-chloropropane and 5% other halogenated C_3 [illegible]s.

[illegible] animals. A group of 94 male rats of the Long-Evans [illegible] received from a local supplier (Mt. Diablo Laboratories) was held in [illegible] quarters for two weeks to permit adaptation to laboratory conditions. [illegible] of this period the weight range was 82 to 160 Gm. From those [illegible] 8 to 140 Gm. (119±2), 75 were selected and randomized into 5 [illegible] 15 rats each, for use in the experiment. They were maintained on [illegible] green diet, with free access to food and water except during the [illegible].

Equipment. The rats were exposed to DBCP in steel chambers approximately 200 liters in capacity, and the different concentrations of vapor were produced with a constant-metering device which continuously delivered the fluid to the evaporator. Here it vaporized into the air entering the chamber. The air flow was maintained at 15 to 20 liters per minute, depending on the concentration in use.

Chemical analysis. The actual concentration of DBCP vapor was checked frequently by a method developed by the Analytical Department of the Shell Development Company (EMS 4/7/52). A measured volume of air was passed at the rate of 0.04 cu. ft. per minute through a furnace (1000°C.) to liberate the halogens; these were absorbed in 2.5% disodium carbonate. The sample was then titrated amperometrically in dilute nitric acid with standard 0.1 N silver nitrate, using as an indicator the diffusion current at a rotating platinum electrode and employing a saturated calomel electrode as a reference. The diffusion currents were plotted against the respective volumes of titrating solution and the endpoint taken as the intersection of the two straight-line portions of the curve.

Method. The control rats were exposed to uncontaminated air, and the experimental groups of 5, 10, 20, and 40 ppm of DBCP. Exposures were made daily, five days a week, for a total of 50.

During the course of the experiment, the rats were examined daily for signs of toxicity or pharmacologic effect, and they were weighed weekly. Necropsy was performed on animals that died, when feasible, and suitable tissues were retained in 10% formalin for microscopic examination.

The day after the fiftieth exposure, the survivors were weighed and decapitated under light ether anesthesia. Blood was caught at this time for comparison of leukocyte counts and hemoglobin concentration. After careful

examination, the livers, lungs, kidneys, spleens, and testes were freed of connective tissue, lightly blotted, and weighed individually for calculation of organ/body weight ratios. These and the percentage weight values were compared by the Student t test to determine statistical differences between experimental animals and controls. Specimens of brain, thymus, heart, lung, liver, kidney, testis, adrenal, bladder, pancreas, spleen, and small intestine, were preserved in 10% formalin for microscopic study.

EXPERIMENTAL DESIGN II

Test sample. The same sample of DBCP was used as in the vapor study. It was diluted to 10% with propylene glycol for use.

Test animals. Two groups of 5 rats each were used in this study, of the same strain and same origin as in the vapor study, but not of the same weight. The weights ranged from 117 to 147 Gm.

Method. Blood was taken from the tail vein (proximal end). The rats were warmed in an oven for five minutes at 37°C. prior to the bleeding. The first group received 25 mg./Kg. of DBCP intramuscularly daily for three days; blood samples were then taken. Four days later (eighth day) the rats were weighed and a second three-day series of injections was given. At the end of the period (twelfth day) the final blood sample was taken, and the rats were weighed and then killed to secure the femoral bone marrow.

Each blood sample was smeared on slides and four sets of counts made of the leukocytes; an average was then determined. Similarly, the bone-marrow smears were counted in 4 areas each. There was no attempt to differentiate between the types of cell present, and the figures represent total nucleated cells per femur.

The second group of rats was given exactly the same treatment, except that propylene glycol was injected instead of DBCP.

RESULTS

During the first week of the experiment, the rats exposed to 10 and 20 ained little in weight. Those exposed to 40 ppm showed low gain or oss of weight, and diarrhea was noted occasionally. Four rats in the group died during the second week, and nine more died during the week. The two survivors were in poor condition, emaciated, with discharge. One was abnormally excitable; this rat died during the week, at the 18th exposure and the last rat died two days later.

There were five survivors in the 20-ppm group, the deaths occurring een the 35th and 48th exposures. In the 10-ppm group there were two s, at 38 and 50 exposures, and there were no deaths in the 5 ppm group e controls.

Depilation began to appear during the second week of the experiment, ding two rats in the 20-ppm group and one in the 40-ppm group. Other in the 20-ppm group and one in the 10-ppm group became affected later. epilation was sometimes localized, e.g., on the hip or the nape of the , and sometimes extensive, involving most of the body. No signs of tion occurred in the controls or in the 5-ppm group.

Dulling of the corneas was first noted during the fifth week of exposure, ree rats exposed to 10 and 20 ppm. In one rat of each group the right ea alone was affected; in one of the 20-ppm group both corneas were . One rat of the 10-ppm group held its right eye shut, although no gross ge was visible; one rat exposed to 5 ppm held both eyes closed without apparent lesion. By the sixth week, two more rats of the 20-ppm group e affected, one having both corneas dull, and the other showing a prom- nt white lesion on the right cornea.

Among rats that died, the gross lesions were especially prominent in s, kidneys, and testes. Testes were usually extremely atrophied. physema and atalectasis were usual in the lungs, while kidneys were ge and pale. Livers were occasionally dark in color and spleens some- es small. Stomachs showed swollen or hemorrhagic mucosa after nine eeks, and animals that died still later also showed hemorrhage of the intes- inal mucosa.

At necropsy of survivors, atalectasis and localized ischemia were seen n the lung of one control animal, while another had an abscess or tumor, 1 x 1 x 1.5 cm. in size, adherent to the diaphragm. This was unfortunately lost in processing. Among animals exposed to 5 ppm, three showed notable atalectasis, involving a third of the large lobe in one animal and the whole rear lobe in another. A fourth animal had sparse perirenal fat, enlarged leen, and pale brown kidneys, while a fifth had its left eye closed although the cornea appeared normal. Four of the animals had testes one-third of normal in size, while the others had testes of normal size.

Six of the 13 survivors at 10 ppm showed large areas of lung atalectasis and two of these showed hypertrophy of a left lobe. One of these lobes was extremely large, with an area of necrosis 1 cm. wide on the lateral aspect. One rat showed a hemorrhage at the superior pole of the right testis. Only one of the rats had testes of normal size; the others were about half this size. Only four of the rats had visible peritoneal fat.

Three of the five survivors at 20 ppm had severe atalectasis, and in one of these the hypertrophy of the left superior lobe had pushed the heart into the right thorax. All testes were half of normal size, and no peritoneal fat was visible.

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United States Department of Justice
Washington, D.C. 20531

Microscopically, there was no appreciable difference between slides ...m survivors and those that died during the experimental period. The ...anges were similar in all groups, increasing in severity with the increase ... concentration of vapor. All control tissues were within normal limits.

In the 5-ppm group the changes were focal in type and limited to the ...pithelium of the testes, collecting tubules of the kidneys, and the bronchioles. ... half the animals there was variation from focal degeneration of testicular ...pithelium with atrophy, to complete degeneration with complete azoospermia. ...here was also focal bronchopneumonia in three rats.

In the 10-ppm group, 12 testicular sections showed either focal alteration ... complete azoospermia. In 9 rats there were moderate to extensive alter... ...ons in the lung parenchyma, varying from focal abscesses to widespread ...onchopneumonia. One section showed necrosis of lung tissue.

All of the testicular sections in the 20-ppm group showed complete ...oospermia with necrosis of the epithelium lining the tubules. One slide ...owed focal necrosis of the pancreatic epithelial cells without involvement ... islet cells. Two slides showed focal degeneration of gastroenteric epi... ...elium. All sections but one showed severe involvement of kidney epithelium ...d in several there was alteration in the cells of the glomeruli.

At 40 ppm the effects were similar and more extensive. In addition, ...e slide showed focal degeneration of brain tissue and massive hemorrhage ...to the adrenal gland.

The pathologic changes produced by vapor exposure varied somewhat ... the different organs, but seemed selectively associated with epithelial ...ssues. Small doses seemed to affect the epithelium of the smaller bron... ...hioles first, with intercellular edema, vacuolation of the cytoplasm, and ...teration in nuclear size and staining reaction that led in some cases to a

...ible increase in size of the nucleus. At higher doses there was loss ... these epithelial cells and plugging of the lumen by proteinaceous debris ...d tremendous numbers of polymorphonuclear leukocytes. In some sections ...m the 10-ppm group, there was widespread bronchopneumonia that seemed ...ated to a breakdown in the integrity of the epithelial cells of the smaller ...onchioles.

Changes in the renal epithelial cells were more common as the dose ...reased. These changes were similar to those in the lung, with the excep... ...n of polymorphonuclear leukocyte infiltration.

Testicular changes consisted of early degenerative changes in the epi... ...lium at low dosage, increasing at higher levels to complete degenerative ...ange in the epithelial cells, once again without an inflammatory response.

Changes in hepatic cells were occasional and consisted of vacuolation ... cytoplasm, alteration in size and staining of nucleus, and hemorrhage into ... hepatic sinusoids.

It is possible that the focal degeneration in one pancreas and the focal ...eration in one brain were artefacts not referable to the toxic action of ...CP.

Retardation of weight gain was significant in all the experimental groups ... <0.01), increasing with the concentration of vapor (Table 1). At 10 ppm, ...re were 6 rats that weighed at the time of necropsy the same as, or less ... their original weight. All survivors at 20 ppm had gained somewhat ...eight, but those that died lost weight, one weighing only 90 Gm. at death.

SUMMARY

1. Groups of 15 rats were given 50 exposures to DBCP vapor over a ... of ten weeks. The concentration of 40 ppm was lethal to all rats in ... weeks. The concentration of 20 ppm was lethal to 10 rats, and 2 died ... ppm. Only at the lowest level, 5 ppm, and in the control group, did ... rats survive.

2. The usual signs of toxic effect included depilation, corneal damage, ... weight loss. Retardation of weight gain appeared even at the 5 ppm level.

3. Lesions were found most commonly in the lungs, kidneys, and ..., although the alimentary canal, the liver, and other organs were ...sionally affected. The damage appeared to localize in epithelial tissus.

4. Increase in liver/body weight ratio appeared at 5 ppm, and kidney/... weight ratio increased at 10 ppm. Testes decreased in size at 5 ppm ... difference was not significant until 10 ppm.

5. The hemoglobin was apparently not affected but the leukocyte ... was lowered significantly by the exposure to 20 ppm.

6. Repeated intramuscular injection of 25 mg./Kg. of DBCP, two ... of three daily injections four days apart, caused no significant decrease ...ocytes, and no consistent decrease in nucleated cells of the bone ...ow.

References

1. Report 228: An evaluation of the degree of toxicity of 1,2-dibromo-3-chloropropane. I Chronic feeding experiment in rodents. E. E. Anderson, C. E. Hine, J. K. Kodama, and J. S. Wellington, 15 Nov. 1954.

2. Report 230: Idem II Percutaneous toxicity and irritation studies. E. E. Anderson, C. G. Hine, and L. G. Rice, 7 Jan. 1955.

3. Report 281: Idem III Acute and chronic vapor exposure of rodents. C. H. Hine, E. E. Anderson, J. K. Kodama, and J. S. Wellington, 12 January 1955.

...ble 1. Effect of Exposures of Rats to DBCP Vapor

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...	Mortality Ratio	Weight Gain(%)	Blood Studies Hemoglobin	Blood Studies Leukocytes	Organ/Body Weight Ratios (%) Liver	Organ/Body Weight Ratios (%) Kidney	Organ/Body Weight Ratios (%) Testis
...	0/15	108	14.9	5323	3.57	0.624	1.02
...	0/15	82*	16.8	7100	3.94*	0.341	0.88
...	2/15	15*	16.0	6000	4.06*	0.329*	0.53*
...	10/15	39*	14.3	3390*	4.74*	0.341*	0.52*

* Significantly different from the control value

...ble 2. Repeated Intramuscular Injection of Rats with DBCP, ...ven in two series of three daily doses, over a period of twelve days)

...se (...g./Kg.)	Body Weight (Gm.) and WBC count ($x10^3$) Day: 0	4	8	12	... mcl.	Nucleated Marrow Cells ($x10^6$)	Mortality Ratio
...0	WBC 7.2 Wt. 171	7.7	14.2 177	11.5 185	60 8	140	1/5
...	WBC 10.1 Wt. 141	10.9 145	12.4 157	14.2 158	41 12	170†	0/5

... Received propylene glycol

† Mean of 10 normal rats of the weight-range of the experimental rats

69-943 O - 81 - 25

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1, 2 – Di Bromo, 3 – Chloro Propane

1957 Vapor Toxicity – Rats

I Chemical Analysis

The method was developed by the SHELL Development Co Analytical Dept EMS 4X 7/52.

Method Summary: A measured volume of air is passed through a furnace (1000°C). where halogens are liberated, these are absorbed in 2.5% Na_2CO_3. The sample is then titrated amperometrically in dilute nitric acid with std $AgNO_3$ (.01N) using an indicator de diffusion current at a rotating platinum electrode + employing a saturated calomel electrode as reference. The diffusion currents are plotted against the respective volumes of titrating solution + the end point taken as the intersection of the two straight line portions of the curve.

For detailed procedure + report: see EMS 4X 7/52 (Emeryville Methods Section).

II Blank Det

(a) 0.045 ml of .0100 N $AgNO_3$ = .00045 mg

(b) Blank on 0.5 cu ft of air = .065 ml = .00025 mg

(c) Blank on 0.5 cu ft of air Thru furnace = .072 ml = .00032 mg

III Standard 0.1 N HCl

(a) 0.25 ml from tube supply = .0981 N

(b) " = .0995 N

(c) " = .102 N

6 150

8 Jan-57 IV — Known Volume of 0.1% DBCP

1 ml of 0.1% DBCP (in acetone) was placed in a 500 ml (glass joint) erlenmeyer & hooked up to furnace (a tee tube between, the other end open) + continuously volatalized til nothing remained. The acetone on reaching the furnace was seen to ignite rather violently + the process was discontinued as being too hazardous.

Theoretical meq for one ml of 0.1% DBCP = .0253
ⓐ 1 ml DI = .0363
ⓑ — = .0540

Both values are quite high. ⓐ 1.5X ⓑ 2X
The reason for this is unknown other than perhaps errors in dilution – but matter was not pursued further at this time as I just was @ curious to see if furnace was liberating the halogen. If necessary will return to this problem later.

9-Jan-57 V — Samples Taken from small chamber at 40 ppm

ⓐ Calculations: DBCP M Wt = Sp Gr = 2.08

1 ppm = .00965 mg/l — 40 ppm = .386 mg/l

Maximum on "P" 2.31 ml min × 10^{-3} = 4.8048 mg/min DBC

$.386 \overline{)4.8048}$ = 12.44 l

Rotometer "B" on 10.6 = 6.50 l/min
Rotometer "C" 9.3 → 6.00 l/min
12.50 l/min

Theoretical MEQ in 0.3 cu ft = .0415 meq

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Jan 57 ⓑ C.R. = .04 cu ft/min ; Temp = 1100°C

		Meq = .0401 = 98%
ⓒ	Same condition	Meq = .0395 = 96 %
ⓓ	Same condition	Meq = .0401 = 95%
10 Jan 57 ⓔ	C.R. .08 cu ft/Min	Meq ≅ .0304 = 75%
ⓕ	C.R. .08 cu ft/Min	Meq = .0250 = 63%
ⓖ	C.R. = .04 cu ft/Min	Meq = .0390 = 95%

∴ Conclude That method is O.K. + that Best collection rate = 0.04 cu ft/Min

11 Jan 57 Chamber #1 will be set up for 5 ppm
#2 10 ppm
#4 20 ppm
#5 40 ppm

Records of these will be found on following four pages.

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CHAMBER #1

DATE	SAMPLING LOCATION	SETTINGS	Theoret PPM	Furnace Temp	Collection Rate .04 ft³/min	SIZE SAMPLE	MEQ Actual	PPM actual
13 Feb		4hr / 7					7	
14 Feb		4hr / 11					6	

Chamber #1

Date	Sampling Location	SETTING	Theoretical PPM	Size of Sample
Jan				

CHAMBER # 2

9

DATE	SAMPLING LOCATION	SETTINGS	Theoret PPM	Furnace Temp	Collection Rate .04 ft³/min	Size Sample	Meq Actual	PPM actual	
27 Jan		1hr 56	40						68 ?o
29 Jan		1hr 35							55%
31 Jan		1hr 35						56	18 ?o
4 Feb		1hr 68						7	
5 Feb		15 min / 80						16	
5 Feb		1 hr / 60						39	
15 Feb		15 min / 80						22	
18 Feb		15 min / 80						11	
19 Feb		15 min / 60						28	
20 Feb		15 min / 60						34	

DATE	SAMPLING LOCATION	SETTINGS	Theoret ppm	Furnace Temp	Collection Rate	Size Sample	Meq actual	ppm actual	IST.
					.16 ft/min				
29 Jan		1hr/56	40						68%
		~~1hr/50~~ 1hr/55							55%
									<50%
31 Jan		1hr/55						56	18%
4 Feb		1hr/60						7	
5 Feb		15min/50						16	
5 Feb		1hr/60						39	
11 Feb		15min/50						22	
18 Feb		15min/50						11	
19 Feb		15min/60						28	
20 Feb		15min/60						34	

CHAMBER # 4

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DATE	SAMPLING Location	SETTINGS	Theoret ppm	Furnace Temp	Collection RATE .16 ft/min	Size Sample	Meq actual	ppm actual	
29 Jan 57		M/48						44	34%
31 Jan		0/50						14	47%
5 Feb		0/50						20.4	
18 Feb		0/50						23.2	
19 Feb		0/50						27	
19 Feb		0/55						11	
20 Feb		0/60						11	

CHAMBER # 5

DATE	SAMPLING Location	SETTING	Theoret ppm	Furnace Temp	Collector Rate	Size Sample	Mag actual	ppm actual	
3 Jan		1h/60			114 #/hr			6.5	1690
4 Feb		15 min / 80						7	
✓		15 min / 80						6	
5 Feb								10	
13 Feb		1 hr / 60						10	
18 Feb		1 hr / 60						10	
19 Feb		1 h / 60						13	
20 Feb		1 hr / 60						13	

10 Jan 57. A colony of 44 male Long Evans Rats weanlings from Mr. Dibble animal suppliers. Were housed 3/cage in exposure room.

17 Jan 57 - Rats are quite small but appear healthy - will weigh them next week.

24 Jan 57. Rats weighed. Range is 92-140 (75 rats) others were ~~set aside but~~ discarded. These 75 rats were randomized + assigned to one of five groups.

30 Jan 57. Rats weighed Range is 110-155

31 Jan 57. Exposure Started

Group I	0 ppm	chamber #	3
Group II	5 "	"	1
Group III	10 "	"	~~2~~ 5
Group IV	20 "	"	4
Group V	40 "	"	~~5~~ 2

8 Feb. ~~I~~ Exposure Started Rats weighed - 3 highest groups show quite an effect. The highest group (V) has lost out. others have gained little there is some diarrhea present.

15 Feb. Deaths have occurred as noted on page 14-15. Gross Exam reveals the effect to be mostly on lungs + kidneys. The testes are also quite atrophied. Some showed depilation. ~~[illegible]~~ Rats # 31, # 32, 41 show depilation. Whether this is due to compound or not is questionable. In this regard of interest is the fact that a cage mate of 31 + 32 # 33 shows perfect hair distribution.

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28 Feb. Rats weighed #31 + 32, +41 depilation 31+32 is all over body — while 41 is confined to nape of neck.

Rat #41 + 35 the last survivors of Group V are in poor health — bony, nose runny, #35 seems to be quite excitable.

7 March : Rats weighed
#9 corneas dull.
#11 rt cornea dull.
#23 eyes shut.
30 rt cornea dull
52 eyes shut
75 rt eye shut
31, 32, 41 same as last week.

March Rats weighed all above same as last week
#12 shows a very prominent white lesion on rt cornea.
#27 dull corneas.

8 March. Rat #58 Died over weekend. Too autolysed for autopsy — Testis appear to be of good size...

March Rat #26 Dead — autolysed — but can see lymphosarcoma in lungs; testis atrophic; Depil over rt + left hip.

9 March Rats weighed —
#33 Dead testis atrophic; mid lobe of rt lung — pneumonia

March. #11 Dead testis small; lung emphysema. spleen very small; stomach swollen mucosa red (

April #27 Dead. Depil over thighs ventrally. Lungs pneumonia, liver black + autolysed, spleen very small (Cont

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Group	Cage	No.		24 Jan	30 Jan	8 Feb	28 Feb	8 March	14 March	21 March	29 March		
I	1	1	Bl•	112	130	180	208		220	230	250	254	
		2	Bl	114	136	180	210		224	220	240	250	
		3	BlWh	132	155	210	260		290	290	310	330	
I	2	4	Bl•	110	130	155	186	190	206	214	230	220	
		5	•Bl	130	144	180	234	246	268	280	300	310	
		6	Bl	128	148	175	222	240	254	250	258	260	
III	3	7	Bl•	124	138	130	150	166	170	160	160	156	
		8	Bl	128	154	162	180	190	188	174	158	Dead 3 April 124 Grams	
		9	BlWh	120	146	142	146	152	168	160	150	150	
III	4	10	BlWh•	124	154	164	174	192	204	210	204	190	
		11	BlWh	120	146	150	180	192	180	150	122	Dead 31 March	
		12	Bl	126	152	142	144	156	170	210	164	158	Dead 15 April 110 Gm
II	5	13	Bl•	98	114	130	180	148	210	210	220	222	
		14	Bl	100	118	130	190	210	220	228	236	240	
		15	BlWh	96	120	148	206	238	250	240	244	250	
V	6	16	Bl•	108	130	90	D	? Exp	~~200~~				
		17	•Bl	108	116	110	D	8 Exp	~~254~~				
		18	BlWh	128	150	100	D 10 Exp						
I	7	19	Bl•	126	148	190	226	236	260	240	250	240	
		20	Bl	122	146	196	232	242	264	264	270	250	
		21	BlWh	120	138	170	218	220	240	240	250	240	
II	8	22	Bl•	118	140	160	176	200	210	228	210	210	
		23	•Bl	122	124	160	170	180	190	170	180	188	
		24	Bl	104	128	158	140	170	160	180	188	162	
IV	9	25	Bl•	92	110	116	126	140	150	150	150	148	
		26	Bl	108	128	130	130	120	110	90	D	23 Mar	
		27	BlWh	108	122	100	100	110	130	120	100	Dead 2 April 80 grams	
III	10	28	BlWh•	100	120	116	112	130	150	130	132	128	
		29	BlWh	100	120	134	150	162	170	170	178	174	
		30	Bl	106	128	128	138	152	168	160	172	180	
IV	11	31	BlWh•	138	154	104	142	150	148	140	130	112 Dead 12 April	
		32	BlWh	116	134	120	128	132	142	130	122	114 Dead 8 April 90 Grams	
		33	Bl	112	136	142	140	160	180	154	110	D 29 March	
V	12	34	Bl•	122	148	112	D 9 Exp						
		35	Bl	128	144	110	110	D March 4					
		36	BlWh	110	130	90	D 10 Exp						

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Group	Cage No	Rat No		24 Jan	30 Jan	7 Feb	18 Feb	7 Mar	14 Mar	21 Mar	29 Mar	4 Apr	11 Apr
[illegible]	13	37	Bl wh•	124	140	150	254	270	300	290	296	300	324
		38	Bl wh	130	152	190	248	264	284	280	284	240	
		39	Bl	116	144	150	260	280	310	310	300	310	
[illegible]	14	40	Bl wh•	140	150	130	D 10 exp						
		41	Bl wh	136	150	124	108	100	D. March				
		42	Bl	122	150	120	D 10 exp						
[illegible]	15	43	Bl•	148	154	155	168	198	208	200	210	214	
		44	Bl	110	124	134	168	202	210	200	220	238	
		45	Bl wh	130	154	156	164	192	198	190	208	210	
[illegible]	16	46	Bl wh	120	154	160	160	180	200	190	168	154	Dead 14 April
		47	Bl	104	110	112	142	150	170	156	144	138	Died 15 april 90/[illegible]
		48	Wh	112	134	140	140	142	160	151	160	168	
[illegible]	17	49	Bl•	108	128	110	118	130	136	130	138	134	
		50	•Bl	122	140	150	158	180	194	140	190	160	died
		51	Bl	110	120	108	120	150	168	160	164	158	
[illegible]	18	52	Bl•	116	146	172	180	200	220	224	220	230	
		53	•Bl	126	148	154	200	240	254	260	264	270	
		54	Bl	102	114	140	162	190	210	210	214	210	
[illegible]	19	55	Bl•	120	138	134	D 14 exp						
		56	•Bl	136	152	160	D 14 exp						
		57	Bl	130	148	158	D 14 exp						
[illegible]	20	58	Bl wh•	120	130	120	132	130	126	Died 15 March			
		59	Bl wh	122	134	140	136	150	156	146	136	130	
		60	Bl	110	130	150	150	160	166	162	158	168	
[illegible]	21	61	•Bl	134	148	180	240	254	260	270	300	304	
		62	Bl	130	152	200	250	270	280	270	296	302	
		63	Bl wh•	140	155	190	230	240	262	260	276	294	
[illegible]	22	64	Bl•	116	132	100	D 14 exp						
		65	Bl	128	142	120	D 14 exp						
		66	Br	130	148	110	D 9 exp						
[illegible]	23	67	Bl wh	110	130	124	160	178	148	200	210	218	
		68	Wh	120	144	154	170	158	149	170	170	150	
		69	Bl	96	124	120	140	150	150	160	156	150	
[illegible]	24	70	Bl•	130	154	190	214	224	240	240	260	262	
		71	•Bl	112	132	160	146	214	220	212	238	230	
		72	Bl	106	128	160	200	230	248	240	256	263	

Group	Cage [illegible]	Rat No				8 Feb	15 Feb	7 Mar	14 Mar	21	28	4 Apr
[illegible]	25	73	Bl wh•	140	155	140	180	200	200	210	216	220
		74	Bl wh	108	130	124	138	140	130	120	120	168
		75	Wh	116	128	120	115	130	132	130	110	110

8902
1067520
1056608
10972/74 = 148.27
118.7 ± 12

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2 April. Ref # 27 cont from page 13
Kidneys large + pale
testes ; prost non epistand

3 April Ref # 8 Dead outside
normal hair distribution
Lungs : Bronchiectasis and or pneumonia
Liver - Very dark ; Kidneys : large
GI tract - Regressed distension
testes -- atrophic

4 April Rats weighed + computed

8 April #32 Dead between 4:30 + 8:00 PM Thymus at 8:00 PM
This rat presents a picture of extremely poor health -
There is depilation over the ~~portion~~ ~~the~~ caudal
2/3 of his back - rat weighs 90 Grams

The thymus is not identifiable - there are two small
nodes which might be it + were taken for histology
The rt upper + left lower lobes of lungs are
atelectatic ~~as~~ the remaining lobes appear
congested + emphysematous
The heart appears to be quite small
The liver is very dark in
The stomach shows what appears to be foreshortened
with in in its contents are a brown black color -
Parts of the intestines are black dark ~~color~~
probably due to presence of blood in lumen
The spleen is quite small
The kidneys do not remarkable. Slightly adrenal
The testis had ascended into peritoneal cavity
but are of a surprisingly good size - appearing
quite normal
The Rt femur was removed + this presents

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5 April 5") an unusual picture, the distal ~~end~~ and
shows a very purple surface + I think this indicates
very acute hemopricea. A slide was made of
the bone marrow of a tibia as that of the femur
was not seen - The bone marrow is a red color
14 April #31 Dead - No tissues
Testes atrophic - pneumonia

17 April #46 Dead - too autolyzed for good specimen but
his diet is good ; large pneumonia + emphysema,
testes very atrophic

15 April #12 + #47 Dead
#12 : All of rt side of lungs atelectatic + or pneumonia
Left side congested + emphysema
Liver small + brown
Stomach + intestines distended
TESTES VERY ATROPHIC
Bone marrow appears normal

#47 Rt Upper Lobe pneumonia -
TESTES - VERY ATROPHIC

Mr. CONYERS. Our next witness is the attorney for the Center for Law in the Public Interest, Attorney Alletta Belin, accompanied by Mr. Tom Hayden.

Welcome to the subcommittee.

The Center for Law in the Public Interest has undertaken litigation in the areas of corporate responsibility, employment discrimination, transportation, criminal justice reform and civil rights.

Since early 1979, the Center has been actively urging the State of California to refer violations of occupational health and safety laws for criminal prosecution and has published a report entitled "Criminal Enforcement of California's Occupational Health Laws," which we are very pleased to receive into the record, as well as your prepared testimony.

We a welcome an old friend, Tom Hayden, who is the chairman of the Campaign for Economic Democracy.

We welcome your statement Attorney Belin, and you may proceed.

TESTIMONY OF ALLETTA D'A. BELIN, ATTORNEY, CENTER FOR LAW IN THE PUBLIC INTEREST, ACCOMPANIED BY TOM HAYDEN, CHAIRMAN, CAMPAIGN FOR ECONOMIC DEMOCRACY

Ms. BELIN. Thank you, Chairman Conyers, Mr. Miller. Thank you for the invitation to speak today on H.R. 4973.

I believe the criminal sanctions provided in this bill will provide a much-needed deterrent against conscious and economically moti-

vated decisions on the part of corporate management, which will cause death and serious physical injury to countless workers and members of the public throughout this country.

The work of the Center for Law in the Public Interest in the area of occupational health, I believe, provides a clear demonstration of the need for criminal sanctions of the sort provided in H.R. 4973.

The number of deaths and serious debilitating disease caused by exposure in the workplace to toxic substances is shocking and has been described already in testimony before this subcommittee.

According to the Department of HEW, at least 80,000 people a year die of cancer caused by exposure to toxic substances in the workplace. That's at least one-fifth of the cancer deaths each year in this country.

Even more shocking is the evidence that in many cases the deaths are not just the result of simple ignorance, but of conscious decisions to go ahead with practices and products in the face of known dangers and to cover up those dangers.

This subcommittee has already heard extensive testimony regarding the conscious decision of the asbestos industry to suppress information on the harmful effects of that toxic substance.

What must be emphasized, however, is the numbers involved there, that those decisions, according to HEW, that have resulted in and will continue to result in the deaths of between 2 and 2½ million people who worked with that substance during and after World War II, long after the asbestos industry know of the lethal and debilitating affects of asbestos.

Unfortunately, asbestos is merely one of the most egregious examples of a phenomenon that has occurred over and over again with many other substances. Data on the toxic affect of vinyl chloride, BCME, benzene and many other substances, has also been knowingly suppressed by industry causing death and physical injury to countless workers and members of the public.

There is every indication that these sorts of business practices will continue unless and until strong incentives are enacted to deter such behavior.

Last spring, the Center for Law in the Public Interest, with the help of Mr. Hayden's organization, the Campaign for Economic Democracy, published a report analyzing the criminal enforcement of California's occupational health laws.

We found that the civil enforcement mechanisms which consist, usually, of very small fines, were relatively ineffective in deterring statutory violations in the first place, and in detrerring repeated misconduct. Companies have continued on a regular basis to violate those laws.

For example, occupational health inspections in California in 1977 and 1978, resulted in citations in 40 percent of the inspections. And under the Occupational Carcinogens Control Act, which is a California law which regulates about 20 known carcinogens in the workplace, during the first 4 months of enforcement of that law, the Division of Occupational Safety and Health they found 65 percent of the companies in violation of that law.

This is not surprising in light of the minimal civil penalties that are commonly imposed. For a nonserious occupational health violation, the average penalty is $10. For serious violation, that is one which could result in a substantial probability of death or serious physical harm, the average penalty has been $239.

Even the most egregious, willful, or repeated violations of the health standards carry a maximum civil penalty of $10,000.

Mr. CONYERS. Has that ever been levied, to your knowledge?

Ms. BELIN. No, not to my knowledge. I believe, in one case, we saw a $5,000 penalty levied, but in general never more than $1,000.

Mr. CONYERS. And no criminal prosecutions?

Ms. BELIN. One criminal prosecution after we published the report. That's for occupational health violations. And we're still working with the State to try to get ythis to become a more regular procedure.

Mr. CONYERS. Are you suggesting it was because of your activities that the prosecution occurred?

Ms. BELIN. I was suggesting——

Mr. CONYERS. Modesty aside for the moment. How did it happen?

Ms. BELIN. Well, up until we began our research on the report about a year ago, and there had never been prosecution for any occupational health violations here in California or, indeed, anywhere, although the State was regularly referring safety violations for criminal prosecution.

We began meeting with State officials, including Mr. Weiner who was here earlier today, and they expressed quite a bit of enthusiasm for it. It just had never happended before.

Soon after we had one or two meetings with them and began urging criminal prosecution, they began supplying us data for the report, and they did refer the first case for prosecution. This first criminal case was one of the cases that we had come upon in our research, the Brassbestos Co.

Back to what we found in our report, we found that over a 14-month period, 35 companies in California were cited for serious violations involving known carcinogens. A total of 78 serious violations were cited and the fines for all of those 78 serious violations together totaled $49,000.

Civil fines are never levied against Government entities and in most cases there is just a $1,000 fine for a serious violation.

Mr. CONYERS. What period of time did that cover?

Ms. BELIN. That covered 14 months, from January 1978, to March of 1979.

The fact that these civil fines are so minimal is significant because most decisions made by corporate management are made on a purely dollars-and-cents basis.

Unfortunately, this has been true in many cases even when those decisions have direct impact upon the physical well-being of workers and members of the public. Thus companies may find it cheaper to market an unsafe product and pay the resulting civil damages or civil fines than to change the product to make it safe.

The same is true for substances in the workplace. The company may find it cheaper to just have controls in the workplace which do not comply with the statute and to pay the resulting fines because that is much cheaper than to actually change the engineering controls in the workplace.

Mr. CONYERS. I presume these are conclusions you've drawn in the course of the study. Have any of the companies told you that that was their practice, that it was easier to pay the penalty and continue the violation rather than to correct the known violation?

Ms. BELIN. Well, frankly, we have not had too many direct dealings with the companies, themselves, since we were just going through the State files on the companies. So I have never actually asked them. It is our conclusion that civil fines or damage awards will never be adequate to prevent this sort of behavior.

In contrast, a criminal law which holds corporate officials or a corporation, particularly the officials, themselves, personally accountable can provide a deterrent for this behavior.

Criminal penalties have helped secure compliance with a number of different kinds of laws affecting the public health and safety.

It's our feeling that companies and corporate officials, once aware that their suppression of information may rest in criminal prosecution, will insure that such information be fully disclosed.

The notoriety attached to criminal conviction along with the resulting economic ramifications appears to be and can be effective in this sort of white-collar crime.

The possibility of a jail sentence is an effective deterrent, regardless of how often the jail sentence, itself, is imposed. The effect is in the conviction, not in the exact nature of the penalty. Nevertheless we would certainly argue that jail sentences are appropriate in serious violations of this sort.

Also strict probationary terms can be another strong incentive to strict compliance with this law.

Mr. CONYERS. Do you go so far as to recommend that corporations be kept on probation with periodic checks?

Ms. BELIN. Yes, I would recommend that that would be a very effective way of enforcing this law because you can't throw a corporation in jail and that would seem to provide the best means of insuring compliance.

I won't go into all of the specific comments in the bill which I have outlined in my written testimony. I would just emphasize two particular points.

The first one is that we feel very strongly that the bill should cover not only those who do discover serious dangers, but those who should have discovered those dangers.

The way it's written right now really creates an incentive for people to close their eyes to dangers and not to ferret them out.

Furthermore, this language encourages an overall lack of accountability which is often a problem in enforcing criminal white-collar penalties.

We would, in fact, recommend that H.R. 4973 expressly require that companies assign specific individuals with responsibility for various areas for disclosing information of areas.

The second point that I would emphasize is that the restriction of application of H.R. 4973 to only those products or practices which will cause death or serious bodily injury is restriction that might make it virtually impossible to apply the law. It's unclear whether statistical evidence of the danger of some product or practice would be sufficient to meet that standard. It seems unclear whether even asbestos and other situations that have been described before the

subcommittee would necessarily meet that standard. And we would recommend that it be recast to cover those products or practices which could result in substantial probability of death or serious physical harm.

Thank you.

Mr. CONYERS. That's a suggestion that has been made and one in which we are sensitive and supportive.

Are there any points in your case that you would want to bring to our attention? Was there something particular about Brassbestos and Glenn Roller and Brown and AMVAC that caused you to sort them out?

Ms. BELIN. All of those situations would emphasize my first comment about the language of the statute which is that it should not only be knowing but it should be where employees should have known. Because in those situations, even if it is true that the corporate officials knew, it's extremely difficult to prove and it's extremely difficult to prove beyond a reasonable doubt.

Each of those case studies would be perfect illustration of the need for the change in the language.

Mr. CONYERS. Well, thank you very much.

I would like to welcome Tom Hayden. We will enter your criminal enforcement study into our record and point out that in addition to the Campaign for Economic Democracy, he also chairs the State of California Solar Council which advises the Governor on solar energy power and, as well, represents the State in the Western SUN Solar Conference of the Western States. He, in addition, is on the border regional commission dealing with relations with Mexico in energy and economic development.

Welcome before our subcommittee, Tom. We will be anxious to hear any additional comments as well as your prepared statement at this time.

Mr. HAYDEN. I would like to thank you, Mr. Chairman and counsel, for having these hearings and describe briefly what we do and then respond to the two questions that were asked by counsel, which were, first, to provide some documented evidence of cases, and second, some comments on the bill, itself.

The Campaign for Economic Democracy works, among other things, on a program to try to reduce the threat of occupational disease, the threat of cancer particularly in the State of California, insofar as an altered business policy and governmental policies can achieve those ends.

We have an educational project and an organizing project along these lines. We work very closely with the Brown administration on their occupational health and safety programs and especially on the issue of criminal penalties.

I am glad that Alletta Belin from the Center for Law in the Public Interest is here although I think that if she wants the full history of how that small but important change came about in California, she would have to say more.

The center's study, provided the factual foundation that allowed the Governor and State OSHA officials to move ahead, I think, in the direction that they wanted to and very much to her credit and Jed Collins.

The issue, I think, has been stated well in previous testimony that I have read and so I would like to come very rapidly to the examples that you asked for of where information may have saved lives or where penalties for the withholding of information may have saved people.

I think that H.R. 4973 begins to redress a balance in which too long in the marketplace it has, frankly, paid to kill. It has been cheaper to expose workers in communities to hazardous substances than it has been to clean them up.

Redressing that balance is urgent on a number of fronts in California. First of all, herbicides. In the forests of the northern part of our State for years, phenoxy herbicides have been sprayed without any particular regard for the exposure to the counties and the people living there.

This herbicide, as you know, was used as a defoliant in Vietnam and exposure to the dioxin in it has resulted in cancer cases and birth defects both in Vietnam and among Vietnam veterans here.

Communities here are now paying that price because of the spraying of the forests.

Chemical companies involved did not acknowledge the hazards or distribute any information about 2,4,5-T until they were finally pressured to do so as a result of work done by independent scientists.

Mr. CONYERS. Is that Dow Chemical?

Mr. HAYDEN. Yes.

Mr. CONYERS. And others?

Mr. HAYDEN. Yes, there are others; 2,4-D is being sprayed although it may also contain chemical components, the dangers of which have not been acknowledged.

There have been citizens' initiatives in Mendocino County which passed and another in Humboldt County this fall that would seek to ban the use of these poisons.

I think that whether or not those pass, H.R. 4973's provisions would assist in guarding against other such exposures in the future by forcing the companies to be more forthright.

Second, pesticides. You have heard from Ralph Lightstone and, I suppose, some others about that situation so let me simply say that while the new regulations in California stiffen the process of reregistration, that increased penalties for failure to reregister information about pesticides would provide a greater impetus to make our new regulations work.

Third, waste dumps. The State of California has, apparently, 3,000 waste dumps according to EPA and they have virtually abandoned any attempt to succeed in what we call their search and destroy operation.

It is, for example, a tragedy for those of you who have been to Buffalo, N.Y., and have seen the Love Canal, as I have, could find the same thing in Riverside, Calif., with little or no visibility or public attention.

There is a dump there that's in a ravine above several housing tracts. Several years ago when the rains flooded the ravine, the whole area was covered with a kind of milky brown water that went into people's basements and surrounded their houses. And in the wake of that, community people began to form groups to find

out what was happening. They discovered that over a 17-year period for over 24 hours a day, corporations had been dumping significant amounts of unknown chemicals into the ravine and probably down into the water table.

We have been organizing with residents of that community who are demanding a cleanup. There is not much that can be done for the people there and, perhaps, not very much for their water table that's been affected.

However, there are mitigations policies that are possible and, of course, the future is ours to handle differently.

California's waste disposal law currently requires reporting to the State by companies that are disposing of hazardous waste. But, again, tough criminal penalties would provide a backup to insure that newly discovered hazards get reported and handled effectively.

Fourth, water contamination. It is a very serious problem. You have heard testimony about the illegal dumping practices by Occhem in the San Joaquin Valley.

Let me say something additionally about Santa Monica, to give you a second example. Where I live, the city of Santa Monica, has found that its water supply has been contaminated by trichloroethylene. It is a discovery that caught the community by surprise and led to a community realization that the public is really unaware of what chemicals are used throughout the city, let alone what risks they pose.

As a first step, we have introduced an ordinance in Santa Monica which will require disclosure of hazardous chemicals that are handled and disposed of in the city's industrial operation.

This is the most effective way of achieving adequate emergency preparedness, making adequate zoning decisions and preventing needless exposure.

However, the city is ill-equipped to enforce such a law and Federal criminal penalties would, again, add teeth to such a disclosure ordinance.

Mr. CONYERS. That is probably the situation that many cities and communities find themselves in even where their citizens are strongly in support of improvements in the kinds of policies that are being articulated before the subcommittee; wouldn't you say?

Mr. HAYDEN. I would imagine so. I think that city staffs are underequipped to handle the problem and that most responsible agencies are unaware of the problem and usually the public doesn't know that the problem is in their midst.

Mr. CONYERS. It just occurred to me, Mr. Hayden, that with the reduction in State funding, it may be a little naive for us to assume too much more strengthening of the role of State agencies because they are probably not going to be able to finance themselves adequately.

Mr. HAYDEN. That is correct. If you assume a decline of public funding for the public sector, then you would have to increase the criminal liability of the private sector or else you would have no regulation because the public sector's regulatory power is weak enough as it is. Budget cuts will weaken it further and if there is nothing on the private sector, then you have a situation ready made for uncontrolled runaway technology.

Mr. CONYERS. I might as well carry it one step further. By fighting inflation and balancing the budget at the Federal level, would mean that general revenue and State revenue-sharing funds which might, arguably, be supportive of some of these programs will not be coming forward, making criminal prosecution even more necessary than ever.

As a matter of fact, in entering the 1980's, it appears that we're in a whole motion of cutting back the Government just at the point where we've made important new discoveries and steps forward from the 1970's. We're sort of meeting our new information and intelligence by reducing the ability of government almost at all levels.

Mr. HAYDEN. Except for the Pentagon as I think you're well aware, Mr. Conyers. We could reduce the military budget, still have a balanced Federal budget and put more funds into the war against the chemical environment.

But that is not on the agenda.

I wanted to mention a fifth area that we are working in and that is the emergency preparedness which is a catch term for the capacity of local firefighters, police, city officials, and health officials, to deal with the immediate hazards of trucks that turn over, trains that turn over, explosions, emissions, the kinds of things that can catch a community in a disaster which requires immediate action.

There have been, for example, plant emissions in several cities in Orange County that have resulted in dangerous exposures to the community.

Last June, there was a plastics manufacturing plant named Fiberite in the city of Orange which was responsible for an emission of chemical vapor which made a number of community people quite ill. Several citizens had chemically related bronchitis and severe liver damage.

The plant, Fiberite, claimed only carbon dioxide and water had escaped and they would not initially give out information on the accident or the content and nature of the vaporous cloud that was released saying that that information was proprietary.

We worked with the community and developed an organization which, through the pressure that it placed on the company and the publicity that was generated, resulted in the facts coming out that a toxic level of phenol had been present in the emission.

I could give you similar cases in Costa Mesa and other parts of Orange County that underscore the importance of having criminal penalties for these kinds of coverups.

The solution is very, very complicated and long term. I think that H.R. 4973 is a step toward the solution in the sense that it makes it more expensive for employers to withhold information.

However, our experience in California shows how difficult it is to prosecute corporate violators. If an individual, a private citizen, were charged and brought to court on grounds of gassing their neighbors or poisoning their children, they would be given long-term sentences or, perhaps, the death penalty, but there is no such penalty for corporate violators.

Mr. CONYERS. In Texas, $239 will net you a life sentence.

Mr. HAYDEN. That is correct.

And as I think Alletta Belin's testimony indicated, we only move toward a policy of seeking criminal penalties in California after there was work by citizens' organizations and after they were able to bring the results of their work to the attention of sympathetic State officials and after meetings with the Governor were held. After all of that, there still has not been a single conviction and jail sentence achieved.

Now just in conclusion, I wanted to make some comments on loopholes in H.R. 4973 which might make it more palatable for passage but could leave community groups and working people frustrated as they try to use the law to redress their grievances.

Mr. CONYERS. When you say loopholes, that suggests that they were knowingly put there.

Mr. HAYDEN. The word "knowingly" is exactly what I was going to comment on.

Mr. CONYERS. "Knowingly," I know you were.

Mr. HAYDEN. I think that you make the point exactly. To require that managers knowingly fail to warn affected employees allows them to create a corporate structure that shields them from information that they ought to know and, thus, they have a legal defense.

Mr. CONYERS. They might even go as far as having one person appointed receiver of all information which probably would be his official title. Then everyone else could say, "Well, if nobody told him, we were obeying the law. None of us had knowledge and he is charged with receiving and having all the knowledge."

Mr. HAYDEN. There is a doctrine of gross negligence that ought to be considerd as part of this law that to claim a lack of knowledge about poisoning your own workers come close to situations in 20th century history in which people were put on trial and ignorance was no excuse.

Thank you very, very much for going to the trouble and having the commitment to travel around the country trying to create public interest in this subject and in the need for passage of this kind of law.

Mr. CONYERS. Do you have, Mr. Hayden, any view of the situation as it relates to other States in the Union? I am impressed by the fact that if California is the lead State, then what has come clear to me is how bad, perhaps, the other several States in the Union may be in this regard.

After all, the record here is hardly one to be proud of or to be used as an example. Yet, I've heard many times that this probably is where there is as much development going on at the State level in this area as anywhere.

Mr. HAYDEN. It probably is so and with the passage of toxic chemical bills that are being introduced with broad support in the legislature, California may, in fact, go further this year in toughening its policies.

The fact remains that it's a reactive approach, it's an after-the-fact approach to a problem that has accumulated over many years, sometimes knowledgeably and sometimes in ignorance.

Now we have to undo the damage. It's almost like a cat-and-mouse game. If you allow the corporate cat to make any and all decisions in an economic marketplace that encourages evasion and

if any of the regulatory mouse tries to catch them, the results have got to be damage to children. And it's got to be loss of life. It's got to be damage to the environment.

There is no way that the regulatory mouse can catch the corporate cat. You have to make the original decision a responsible one.

Mr. CONYERS. Let me ask you, do you have any idea what the industry and corporate response may be in this regard?

We have had indications that there may be a surprising receptivity toward the kinds of standards that are being promoted in this legislation.

Is this some naive eastern optimism or is this grounded on any reality at all?

Mr. HAYDEN. Usually we in the West are accused of being naive optimists. I don't know.

I think that Peter Weiner who testified earlier has had direct dealings with industry and has found a mixed response and could give you more information about who is favorable and who isn't.

I think what is needed by industry is a firm definition of what the rules are and then they will abide by them. When you have a vague climate and the civil penalties are so marginal, then you are really encouraging the worst behavior.

In fact, I don't blame corporations. I blame government because government sets the rules of behavior and if you set rules that tell people that it is cheaper to make an environmental mess than to clean it up, why should they not make the mess? If they spend money on safety, their competitors are going to beat them out. Any competitor who cuts corners is going to beat them out. I think it's more a problem with government and the rules that government sets.

Mr. CONYERS. Well, there is a marked reluctance on the part of government to set these rules.

Mr. HAYDEN. I am not sure why that is. I cannot imagine that there is a powerful constituency in favor of creating a more chemical environment. Government is responsible to taxpayers, people, workers, and we are a contaminated State. California is a State which, more than any other, is supposed to be proud of its environmemt.

Mr. CONYERS. Well, I would suggest that unless the citizen movement not only continues but is greatly increased, the government responsibility which you have so aptly described will probably not come about. As a matter of fact, it hasn't come about before now until organizations like yourself and others who have testified here before the subcommittee have moved it to action.

I think we have an interesting governmental problem. Here we have overwhelming citizen support for stronger regulatory controls to be put on industry with regard to matters that affect their life and health. And, at the same time, you have a marked reluctance on the part of government at all its levels to do what is clearly and obviously in the national and the public interest.

It seems to me that when we get down to the mechanisms of control, the influence of corporate and industrial sector upon public policy may be greatly disproportionate to its numbers in society. We may be witnessing the relationship between those who manage the industrial sector and those who in Government make

public policy decisions and find that their views are greatly related, one being impacted on and affected by the other, notwithstanding a tremendous public sentiment that may be literally clamoring for action.

It seems to me that the catalysts are still community, civic, political, and environmental organizations who are still needed as a catalyst.

Mr. HAYDEN. I'd be glad to take your advice.

Mr. CONYERS. You already have, unfortunatly, fortunately for us.

Counsel, do you have questions?

Mr. GREGORY. No questions, Mr. Chairman.

Mr. CONYERS. Questions?

Ms. OWEN. Yes, I have just one question and I will direct it to both of you.

Assuming that a business wants to comply with this legislation, exactly what kind of evidence of danger do you suggest should put them on notice that it is the sort of danger about which they should notify the government?

Ms. BELIN. Exactly what kind of evidence?

Ms. OWEN. In other words, on one hand, there are some egregious instances where there are several studies, all of which show pretty much the same danger. Supposing on the other hand, that there is just one study, and that that one study shows only instance of danger in 100,000 cases of exposure.

Is that the sort of danger that a company should notify the government about under this kind of legislation? How strong does the evidence have to be before they have this duty to notify?

Ms. BELIN. I guess my feeling is that the way it's always been up until now is sort of backward, that you don't have to notify or do anything until after you already have lots and lots of evidence of harmful effects.

So I don't know even if there should be a lower limit, there ought to be disclosure of information.

Ms. OWEN. Just any information at all?

Ms. BELIN. Information on the dangers of certain substances.

Ms. OWEN. What if there is, perhaps, a question in this business person's mind about the reliability of the information concerning the danger? Would he still be bound to notify?

Ms. BELIN. I would say so just because error ought to be on the side of disclosure. And it is so hard to draw those lines. I, myself, don't feel terribly comfortable with the industry who has the economic interest in the product to make those sorts of determinations that the burden ought to be to disclose any information on the dangers.

Ms. OWEN. Let me direct this question to Mr. Hayden.

I notice in your statement you mentioned the possibility of imposing a form of strict liability in these situations. Do you think that that would be appropriate where, perhaps, the evidence of danger is unreliable? Is it really fair to impose strict liability for failure to warn under those circumstances?

Mr. HAYDEN. I think that there is nothing wrong with the appropriate manager as the wording of the bill goes, saying that he thinks that such a report is unreliable.

As long as the affected people, the employees, are given full disclosure of the report and it is not knowingly kept from them.

I don't know the example that you're thinking of, if any, that's come up in this hearing.

Ms. OWEN. I am speaking hypothetically at this point merely because I think there will be a lot of business people out there who will not know whether or not something constitutes the kind of danger they should report.

I think a lot of times this is not really clear.

Mr. CONYERS. Are you raising the question of whether it's lethal or maybe less than fatal?

Ms. OWEN. I am asking what kind of evidence they need to have before they have a duty to report that it is a possibly serious danger?

Mr. HAYDEN. Well, there are official standards that are set by Cal/OSHA, by Federal OSHA, by EPA, et cetera.

Those have been criticized by industry as being too onerous and criticized by ourselves as not going far enough. Some of us believe that we will be proven right in the assertion that there is no safe exposure to certain things. There is no such thing as a little exposure being all right. Certainly, any report that indicated to me, coming from these agencies, that there was some question about substances used in the workplace, I would think an employer would be obliged to pass it on.

If the CED chemical research team were to come up with a report and it was printed on the front page of the Chronicle asserting that there is some new dangerous substance, I would think anything that was in the newspapers would be certainly in the realm of information that the employer ought to draw the employees' attention to. The employer can always argue that it is safe. The employer can go on the floor, the employer can touch it. The employer can immerse himself in it to basically carry out his commitment to its being perfectly safe. He can take his children, his wife, et cetera.

Usually what happens is it is a complete reverse. The employer has nothing to do with it and hires lawyers to attack reports.

Ms. OWEN. Thank you.

Mr. HAYDEN. Sure.

Mr. CONYERS. We are very grateful to have you both before the subcommittee. I know you will continue to watch our work.

We have a number of modifications that have been introduced into a new revision that we are working on which we will be happy to make available to you very shortly.

Mr. HAYDEN. Thank you.

Mr. CONYERS. I notice that this is a preliminary analysis that suggests that your work here is going to continue.

Ms. BELIN. We expect so, yes. We wanted to get that report out quickly because the findings were so shocking and we only had time to do the analysis of 14 months of data just on the Carcinogens Control Act. We may well do a followup study to see what is happening now and, perhaps, do a study on other noncarcinogenic but toxic substances.

Mr. CONYERS. I take it this is a work of first instance that hasn't been done before.

Ms. BELIN. No, it's never been done. As I said earlier, there has never been a criminal prosecution anywhere in the country for occupational health violations, and there has never been any analysis of criminal versus civil sanctions in such instances.

Mr. CONYERS. Well, I hope you continue your good work and I thank you both very much for your testimony before us today.

Ms. BELIN. Thank you.

Mr. HAYDEN. Thank you.

[Written statements of Alletta d'A. Belin and Tom Hayden follow:]

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STATEMENT OF ALLETTA d'A. BELIN

CENTER FOR LAW IN THE PUBLIC INTEREST

BEFORE

THE SUBCOMMITTEE ON CRIME OF THE

HOUSE JUDICIARY COMMITTEE

ON

H.R. 4973

MARCH 24, 1980

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE:

Thank you for the invitation to speak today on H.R. 4973. The criminal sanctions provided in this bill will provide a much-needed deterrent to purposeful and economically-motivated decisions by corporate management which cause death and serious physical injury to American workers and consumers.

Last spring, the Center for Law in the Public Interest, with the help of the Campaign for Economic Democracy, published a report analyzing the criminal enforcement of California's occupational health laws. We found that civil enforcement mechanisms, consisting primarily of small fines, were ineffective in preventing companies from conducting their business in such a way as to jeopardize the lives of their employees and members of the public. As a result of our report, the first criminal prosecution ever brought for an occupational health violation was brought last spring in Orange County, California.

I. Effectiveness of Criminal vs. Civil Sanctions For Wilful Corporate Actions Endangering the Public Health and Safety

The shocking extent of the problems in the area of occupational health provide a clear demonstration of the need for H.R. 4973. Most health experts agree now that between 80-90% of cancer is environmentally caused, and is thus preventable if healthy personal and corporate practices are developed and followed. In recent years, as thousands of new chemicals have been developed, manufactured and introduced into the marketplace, the incidence of cancer has been rising dramatically. In 1900, cancer caused less than 4% of all deaths in the U.S., but by 1975 that percentage totalled 18%, making cancer the nation's second leading cause of death.1/ In 1975, approximately 665,000 new cancer cases were diagnosed in the United States, and there were 365,000 cancer deaths.2/ The Department of Health, Education and Welfare estimates that at least 80,000 of these deaths (more than one-fifth) have been caused by worker exposure to carcinogens while at the worksite, and hypothesizes that the rise in numbers is the direct result of the use of new industrial substances and procedures.3/

Asbestos is perhaps the best known of all occupational hazards. This subcommittee has already heard extensive testimony regarding the conscious decision of the asbestos industry to suppress information on the harmful effects of that substance. What must be emphasized, however, is that those knowing and willful actions of corporate management have resulted in and will continue to result in the death of millions of people in this country. Former HEW secretary Califano stated in 1978 that as many as 51% of the 4 million persons who have worked heavily with asbestos since the beginning of World War II, long after the asbestos industry knew of the dangers of exposure to asbestos, will die of lung cancer or other diseases as a result of their exposure to asbestos.4/ In addition, as many as one-half million of the 4 to 7 million workers who have had a lighter exposure to asbestos during this period will die of asbestos-related diseases. As Dr. Epstein pointed out in his testimony before this subcommittee, the history of asbestos is merely the most egregious example of a phenomenon that has occurred over and over again as new chemicals and substances have been introduced into the market. Data on the toxic effects of vinyl chloride, bischloromethylether (BCME), benzene, chlordane/heptachlor, and kepone have all been knowingly suppressed by industry, causing death and physical injury to countless workers and members of the public.

These facts underscore the vast numbers of deaths and physical injuries already caused to workers and others by past business practices. Unfortunately, there is every indication that such practices continue as no incentives to alter such practices are enacted.

In our analysis of the enforcement of California's occupational health laws, we found that civil enforcement mechanisms were relatively ineffective both in deterring statutory violations in the first place and in preventing repeated misconduct. Companies continue on a regular basis to violate occupational health standards. For example, occupational health inspections in California in 1977 and 1978 found approximately 40% of the companies in violation of health standards and orders.5/ And, in the first four months of the operation of California's Occupational Carcinogens Control Act, which regulates approximately twenty known carcinogens including asbestos, 65% of the inspections resulted in issuance of citations.6/

This is not surprising in light of the minimal civil penalties that are commonly imposed. The average penalty for a non-serious occupational health or safety violation is only $10. For a serious violation, that is, one which "could result" in a "substantial probability" of death or serious physical harm, the average penalty is $239.7/ Even the most egregious willful or repeated violations of California's OSHA standards carry a maximum civil penalty of $10,000.8/

In preparing our report, we found that over a fourteen month period, thirty-five companies in California were cited for serious violations involving known carcinogenic substances. A total of seventy-eight serious violations were found and cited, which resulted in fines totaling altogether only $49,000.9/

Such minimal civil fines are significant because most decisions made by corporate management are made on a strictly dollars and cents basis. Unfortunately, this has been true in some cases even in making decisions which directly affect the health and safety of the public. Thus, companies may find it cheaper to market an unsafe product and pay any resulting fines or damage awards than to make that product safe. Similarly, in too many cases, companies have concluded that it is cheaper to expose their workers to dangerous toxic substances than to establish an effective system of engineering controls to protect the workers.

Boiled down to essentials, the economics may be expressed in terms of the following four costs:

(1) Prevention costs (changing design of product or process to make it safe);

(2) Appraisal costs (testing and inspecting individual products and devices to make sure they are not defective and unsafe);

(3) Internal failure costs (throwing out bad products, reworking or repairing them);

(4) External warranty costs (where unsafe product or process allowed to operate, reimbursing damages inflicted and otherwise paying costs incurred).

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A company's financial goal is to keep the total four costs at a minimum. It makes no difference whether the costs incurred are external warranty costs or prevention costs, as long as they are kept at a minimum. Therefore, if it is cheaper to spend nothing on prevention and appraisal, while paying maximum internal failure and external warranty costs, than to spend enough on prevention so as to eliminate external warranty costs, it is in the company's financial interests not to prevent an unsafe product or practice. In that manner, the company may proceed with a practice or product which it knows will be unsafe, because in the end it is cheaper to do so.

Civil fines or damage awards will never be adequate to prevent this sort of behavior. In contrast, a criminal law which holds corporate officials personally accountable can serve as an effective deterrent. Criminal penalties have helped secure compliance with many statutes and ordinances, particularly those which were enacted to protect the public health and safety.10/ As the U.S. Supreme Court stated in upholding the strict criminal liability provisions of the Food, Drug & Cosmetic Act,

> "in providing sanctions which reach and touch the individuals who execute the corporate mission . . . the [Food, Drug and Cosmetic] Act imposes not only a positive duty to seek out and remedy violations where they occur but also, and primarily, a duty to implement measures that will ensure that violations will not occur. The requirements of foresight and vigilance imposed on responsible corporate agents are beyond question demanding, and perhaps onerous, but they are no more stringent than the public has a right to expect of those who voluntarily assume positions of authority in business enterprises whose services and products affect the health and well-being of the public that supports them." (United States v. Park, 421 U.S. 658, 672 (1975).)

Companies and corporate officials, once aware that their suppression of information may result in criminal prosecutions, will ensure that such information be fully disclosed. The notoriety attached to criminal conviction, along with the resulting economic ramifications, appears to be effective in this type of "white collar" crime, and civil sanctions can achieve no equivalent effect.11/ The possibility that judges may be reluctant to impose jail sentences on individuals who are convicted does not detract from the effectiveness of criminal sanctions for the same reason: the stigma and bad publicity stem from the conviction, not the penalty. The possibility of a jail sentence, no matter how unlikely, provides corporate officials with a strong incentive to comply with the law.

The primary function of the criminal sanction is thus two-fold: First, criminal convictions of the companies and officials who unlawfully cover up information can bring an end to such activity either by placing the violator in jail or by stigmatizing the offender to such an extent that he or she desists. Second, and equally important, the use of criminal penalties not only acts to deter the company or official against whom charges are brought from future violations, but, in addition, it deters all other companies from violating the law. The availability of criminal sanctions thus imposes an affirmative duty on all companies and corporate officials to ensure that information concerning dangerous business products or practices will not be covered up.

II. Recommendations for H.R. 4973

Before discussing specific provisions of H.R. 4973, I have one general observation based on our experience in urging criminal prosecutions for occupational health violations. Although California's occupational health officials agreed that some companies needed the added threat of criminal liability to spur them to comply with the law, the state was exceedingly reluctant to refer such cases for criminal prosecution because of what were perceived as nearly insurmountable proof problems created by the need to establish all elements of the crime "beyond a reasonable doubt." To be sure, it is not easy to obtain convictions involving white collar crimes because the chains of responsibility and of causation are often far more attenuated than in other sorts of crime. Thus, to ensure that H.R. 4973 will not be a mere showpiece but will in fact be brought to bear against guilty corporate officials, it must be very precisely drafted. Every word and phrase must have a clear and unmistakable meaning and no loopholes can be left.

(1) § (a)(2)

The bill should be expanded to cover not only those who discover serious dangers but also those who should have discovered such dangers. The present language discourages individuals from seeking out problems and, instead, adds incentive for them to close their eyes to any potential dangers. Furthermore, this language encourages an overall lack of accountability. One of the problems in bringing criminal prosecutions has always been the difficulty of attaching responsibility for action or inaction on any individual or group of individuals. H.R. 4973 should expressly require that companies assign specific officials responsibility for various aspects of product and practice safety, so that such officials will be sure to carry out their responsibilities diligently, knowing that they could face criminal liability if they knowingly choose not to pursue evidence of serious dangers.

(2) § (a)(3)

Criminal liability should attach to those who either fail to warn an appropriate federal agency or fail to warn affected employees. Section (a)(3) as presently written seems to require that an appropriate manager fail to warn both.

(3) § (b)(1)

The present language defining "appropriate manager" is very unclear. It should be redrafted to clarify that criminal prosecutions can be pursued against both the responsible corporate officials and the corporate entity itself. And the bill should forbid reimbursement of any kind, direct or indirect, of fines imposed on an individual from corporate funds. Otherwise, such reimbursement will surely take place in one form or another and will vitiate much of the effect of criminal sanctions, both by financial restitution and by undercutting the stigma attached to criminal conviction.

(4) § (b)(2) and (3)

The terms "product" and "practice" should be defined in such a way as to cover dangerous products that are used in the manufacturing process but are not an end-product of that process. The current definition of "practice" appears to be circular. These terms should be expanded to include, for example, toxic substances used as cleaning solvents but which are not incorporated into the manufactured product.

(5) § (b)(5)

The restriction of application of the statute to only those products or practices which "will cause death or serious bodily injury to an individual" would make it virtually impossible to obtain criminal convictions under this bill. It is unclear whether statistical evidence of a product's danger would ever be sufficient to satisfy this standard. And courts would probably not interpret this language to mean that evidence that at least on death or injury would result from the product is sufficient. It is possible that even the most egregious cases, such as those involving the Ford Pinto, asbestos, or the Firestone 500 would not create liability under his language, particularly because the standard must be met beyond a reasonable doubt. The term "serious danger" should cover products or practices which could result in a substantial probability of death or serious bodily harm.

(6) This bill should expressly include protection for employees or others who complain about violations. One of the biggest obstacles to effective application of this bill promises to be the lack of any independent outside oversight of corporate decision-making. Only if those inside the company speak up will violations ever be noted and prosecuted. Yet, the pressures that can be exerted on employees not to voice their safety concerns can be enormous, ranging from dismissal or demotion to more subtle discrimination such as failure to promote. An explicit prohibition of any sort of retaliation against such "whistleblowers" would go a long way towards providing such persons the protection they require.

(7) Although the courts are relatively free to impose such probationary terms as they choose upon convicted corporations or corporate officials, a provision which expressly authorizes the court to establish a special master or referee to oversee corporate activity would be very useful in two respects. First, it would act as an added deterrent to misconduct by warning corporate management of another possible consequence of any cover up. Second, it would increase the likelihood that courts would use such a probationary measure. This is particularly important in light of the fact that jail sentences are, as a practical matter, not often imposed on white collar criminals and are not an available sanction against corporations themselves.

FOOTNOTES

1/ Epstein, The Politics of Cancer, at pp. 15-21.

2/ Ibid, at p.8.

3/ "Estimates of the Fraction of Cancer Incidence in the United States Attributable to Occupational Factors," National Cancer Institute, National Institute of Environmental Health Sciences, and National Institute of Occupational Safety and Health, September 11, 1978. The American Cancer Society estimates that in 1978, there were 38,800 cancer deaths in California and 66,000 new cases of cancer diagnosed. (1978 Cancer Facts and Figures, American Cancer Society.)

4/ Cal-OSHA Reporter, May 8, 1978, at pp. 1503-04; Los Angeles Times, June 28, 1978; see also CCH Employment Safety and Health Guide, September 19, 1978, at pp. 13,050-13,053. Dr. Philip Polakoff, head of the Western Institute for Occupational Safety and Health, estimates that there may be as many as 400,000 people in the San Francisco Bay Area alone at high risk for asbestos-related diseases because during World War II over 2.5 million people worked at shipyards in northern California. (Cal-OSHA Reporter, May 8, 1978, at p. 1504.)

5/ Cal-OSHA Reporter, April 3, 1978; June 12, 1978; September 25, 1978.

6/ Cal-OSHA Reporter, December 26, 1977, at p. 1362.

7/ California Occupational Safety and Health Act - A Program Review, Joint Legislative Audit Committee, February 20, 1979, at p. 37.

8/ Cal. Labor Code § 6425.

9/ Criminal Enforcement of California's Occupational Health Laws, Center for Law in the Public Interest, May, 1979.

10/ See, e.g., 33 U.S.C. §§ 1319, 1321, 1344 (Federal Water Pollution Control Act); 33 U.S.C. § 407 (Refuse Act); 42 U.S.C. § 7413 (Clean Air Act); 7 U.S.C. § 1316(b)(Federal Insecticide, Fungicide, and Rodenticide Act); 15 U.S.C. § 2615(b)(Toxic Substances Control Act); 42 U.S.C. § 6928(d)(Resource Conservation & Recovery Act); 33 U.S.C. § 411 (Rivers & Harbors Act); 16 U.S.C. § 1538 (Endangered Species Act); Cal. Health & Safety Code § 42400 (nonvehicular air pollution control); Cal. Pub. Res. Code § 456.3 (state forests); Cal. Health & Safety Code § 25191 (hazardous waste control); 15 U.S.C. §§ 1, 2 (Sherman Antitrust Act); 15 U.S.C. § 8 (Wilson Tariff Act); Cal. Bus. & Prof. Code § 16757 (combinations in restraint of trade); Cal. Bus & Prof. Code § 16804 (combinations to obstruct sales of livestock); Cal. Bus. & Prof. Code § 17100 (unfair trade practices); 15 U.S.C. § 77x (Securities Act of 1933); 15 U.S.C. § 78ff (Securities Exchange Act of 1934); Cal. Corp. Code § 25540 (corporate securities law).

11/ One striking case where criminal sanctions have had dramatic effects has been prosecutions for nursing home abuses in the city of Los Angeles. In 1975, the vast array of nursing home abuses in Los Angeles was extensively documented in the "Hearing Examiner's Report on Nursing Homes" prepared by the Los Angeles City Attorney's Office. The report summarizes the testimony of over 500 witnesses who detailed hundreds of examples of abuses resulting in enormous physical, psychological, and financial injury to the nursing home patients. Between 1975 and 1978 the Los Angeles City Attorney's Office filed twenty criminal cases for nursing home abuses as a result, twenty staff members and licensees were convicted at twelve nursing homes. Of those twelve facilities, eleven were sold and are under new management (a condition agreed to by facility owners to avoid future probation violations and a possible jail sentence). A county health inspector reports that the great majority of these establishments now provide an adequate standard of care. (See Aileen Adams and Lynn Miller, "Implementation of a Model Misdemeanor Nursing Home Enforcement Program," 10 University of West Los Angeles Law Review, 141-158 (1978).)

STATEMENT OF TOM HAYDEN
CHAIR CAMPAIGN FOR ECONOMIC DEMOCRACY
BEFORE THE SUBCOMMITTEE ON CRIME
MARCH 24, 1980
ON
H.R. 4973

The Campaign for Economic Democracy (CED) is pleased to support HR 4973. The time is overdue for employees and surrounding communities to achieve the right to know the extent of dangerous substances produced and spread through their immediate environment. We live in a workplace, community, and household environment threatened by dangerous, toxic, and carcinogenic substances of all kinds. The least to which the public is entitled is information about the chemical context that threatens their lives and those of their children.

Those of us working daily on the human dimension of this crisis have no way to write a price tag on human life. But in the current marketplace the prevailing norm often is that it pays to kill. Although corporate managers are human beings who usually prefer a healthy and lifesupporting workplace for their employees, the domination of the bottom line often requires that they cut costs by sacrificing years of the lives of their employees. It is as if the economic system rewards those who cut the corners of safety and punishes those who make extra investments in the protection of their employees.

HR 4973 begins to redress this inhuman balance, placing greater penalties on employers who knowingly fail to inform

their employees of dangers to their lives on the job.

Our experience in California organizing against the corporate/environmental causes of cancer shows us that a basic need for information is prevalent in the workplace and community. The threat of criminal penalties can provide the incentive necessary for corporations to make such information available. Here are some examples:

1. Herbicides In the forests of northern California for years phenoxy herbicides like 2,4,5-T have been sprayed without regard for community exposures. This herbicide was used as a defoliant in Vietnam and exposure to its deadly contaminant - Dioxin - has resulted in soaring cancer rates and birth defects there and among Vietnam veterans here. Now communities here are also paying the price of increased birth defects and cancer because of the spraying of the forests. Dow Chemical Corporation did not acknowledge the hazard or distribute any information about 2,4,5-T until finally forced to do so as a result of work done by independent scientists. And 2,4-D is being sprayed, although it may also contain chemical components, the dangers of which DOW Chemical has not acknowledged.

To protect citizens against this particular hazard, CED is currently supporting an initiative to ban the use of these poisons aerially in Humboldt County, similar to the initiative passed by voters in Mendocino County last November. H.R.4973's provisions would assist in guarding against other such senseless exposures in the future by forcing companies like DOW to be more forthright.

2. Pesticides Pesticides are used in massive quantities on California's extensive cropland. Use of restricted pesticides has been encouraged by routine re-registration with no analysis of reasonable and safe substitutes. Together with a statewide coalition , CED has worked to institute new regulations which would force chemical companies to provide updated pesticide information to the Department of Food and Agriculture. Because chemical salesmen double as "pest control advisors", most California growers -and consumers who buy the food - are unaware of alternatives such as Integrated Pest Management (IPM), which could reduce the cost and toxicity of our harvests. Though the regulations stiffen the process of reregistration, increased penalties for failure to do so would provide the impetus to make the new laws work.

3. Waste dumps Communities are being increasingly exposed to dangerous and usually unknown chemicals leaching out of waste dumps,with no information on the long term effects. In the county of Riverside, for example, a dump so dangerous as to be termed "Love Canal West" is left leaking into the community and its water table. Its owner has long gone out of business, and the large corporations who dumped there left with no responsibility for the contamination of the community's soil, air, and water supply. Over a 17 year period, dumping occured 24 hours a day and no adequate records are available. CED has been organizing residents of the community who are demanding clean-up.

This is only the most serious example that has been found of late. The EPA has found 3000 storage, handling, and disposal sites in California alone and has given up its "search and destroy" operation in a state of virtual hopelessness.

California waste disposal law currently requires reporting to the state by companies disposing of hazardous waste but again, tough criminal penalties will provide the back-up to insure that newly discovered hazards get reported and handled effectively.

4. Water Contamination The state's water supply has been increasingly polluted. In the San Joaquin Valley, illegal dumping practices by a pesticide manufacturing subsidiary of Occidental Petroleum named Oxychem resulted in high public exposure to the carcinogen DBCP. (Workers in the plants had previously become sterile due to high exposures.) Concealment of the danger of DBCP by the companies involved had gone on for years.

Drinking water all over the Los Angeles basin has recently been discovered to be contaminated by trichloroethylene, a known carcinogen. In Santa Monica, one of the largest supplies of drinking water has been contaminated. The community suddenly realized they are unaware of what chemicals are used in the city, let alone the risks they pose. As a first step,CED has introduced, an ordinance which will require disclosure of hazardous chemicals handled and disposed of in the city's industrial operations. This is the most effective way of achieving adequate emergency preparedness, making adequate zoning decisions, and preventing needless exposures. However, the town is illequiped to enforce such a law. Federal criminal penalties would add teeth to such an ordinance.

5. Emergency preparedness Irresponsible plant emissions in several cities in Orange County have resulted recently in dangerous exposures to a whole variety of chemicals.

Last June, a plastics manufacturing plant named Fiberite in the city of Orange was responsible for an emission of chemical vapor which made a number of community residents quite ill. Several citizens experienced chemical bronchitis and severe liver damage. The plant claimed only carbon dioxide and water had escaped, and would not initially give out information on the accidental reaction which resulted in the vaporous cloud, claiming that such information was proprietary. CED organized the community and after tremendous pressure and publicity was generated, the facts came out that toxic levels of phenol had been present in the emission.

Similar examples of this chain of events - chemical exposures from industrial operations; community health effects; organizing; and ultimate discovery of company irresponsibility in the communities of Costa Mesa and Brea - serve to underscore the importance of criminal penalties for cover-ups.

The only short-run solution to these myriad problems is a system of penalties that makes it more expensive for employers to withhold information than to reveal it. HR 4973 is a step in this direction.

However, our experience in California shows how difficult it is to prosecute corporate wrongdoers. California has the toughest environmental health and safety in the nation. State officials of CalOSHA this last year agreed to pursue criminal penalties - instead of inadequate fines - against corporate lawbreakers. However, not a single conviction and jail sentence has been achieved.

Loopholes in the law make prosecution all the more difficult. And HR 4973, for example, requires that managers "knowingly" fail to warn affected employees and inform government agencies. This requirement of proof alone will get many employers off the hook of accountability. Instead, there should be a form of strict liability for unreported hazards to human life.

Nevertheless, HR 4973 is a step forward in warning employers that public anger is escalating and increased penalties will be imposed until humane corporate behavior is achieved. The American people, who have long paid the bill, are entitled to a full accounting of the risks inherent in the petrochemical age.

Mr. CONYERS. Our next witness is chairperson of the Coordinating Committee on Pesticides, Mary Shinoff, who has been working with a number of environmental, labor, health and consumer organizations and citizens in connection with health, environmental and economic effects of pesticides.

She has worked in occupational health for 9 years, taught at the University of California at Berkeley, worked for Cal/OSHA, investigated the Johns-Manville Corp. matter with regard to the asbestos issue, has been a technical consultant for 5 years, and has published extensively on this matter.

We welcome you before the subcommittee, Ms. Shinoff. Your prepared testimony will be incorporated in the record, and you may proceed.

TESTIMONY OF MARY SHINOFF, CHAIRPERSON, COORDINATING COMMITTEE ON PESTICIDES

Ms. SHINOFF. Thank you very much for having me here today.

As you mentioned, I represent the Coordinating Committee on Pesticides which is a statewide coalition that includes labor, environmental, consumer and health organizations as well as about 500 individual members.

We are allied with one common concern about health, environmental and economic effects of pesticides and our primary concerns are with workers, consumers, and promotion of alternatives to pesticides.

In the course of the last 2 years, we have encountered tremendous opposition to our goals from the chemical corporations and big agriculture in the State of California.

The use of pesticides in California in ubiquitous in every setting from agriculture to home use and relatively little is known about the toxicity of these chemicals because of industry's refusal to release information about them and the accompanying policy of the California Department of Food and Agriculture that bars access to what are defined as trade secrets.

In the registration of new pesticides, the only source of toxicity data that is used by the California Department of Food and Agri-

culture are industry tests. Under the cover of trade secrets, the public is refused access to this information and must rely upon independent evaluations that are far and few between.

Despite evidence on a number of pesticides that are registered as being carcinogenic, mutagenic, or teratogenic, the Government continues to reregister these. And it may, indeed, take an act of Congress to remove some of these pesticides from the market.

Only in cases where workers and consumers have proven with their own bodies that the chemicals are, in fact, carcinogenic or teratogenic has action been taken to ban their use.

In many cases, the health effects of these pesticides only show up after years of exposure have produced irreversible and tragic harm to workers and consumers.

As an organization, we are concerned not only with the known effects of pesticides and other chemicals but with the unknown effects, as well. We question the effectiveness of present regulation in stemming the tide of hazardous chemicals into our homes, air, water, food, and workplaces.

Therefore we support this legislation as a step in the right direction of increasing corporate accountability.

Our attempts at obtaining information from the corporations on the toxicity of specific chemicals or obtaining any acknowledgement of the apparent effects of specific chemicals have, over the years, met with consistent denials, obfuscation, and delays. Industry has consistently taken the position that "chemicals are innocent until proven guilty." And, "chemicals have rights, too," thereby placing the entire burden of proof upon the workers and consumers that we represent.

We are thus forced to rely upon the grisly science of epidemiology, counting bodies—to prove our case.

Industry argues the economics of the issue, to wit: it is too costly, the plants will close down, people will be thrown out of work. There is also a threat to move overseas. Hooker Chemical has recently laid plans to open a toxic waste dump in a Third World country because—they say—the cost of environmental regulations are too great in the United States.

The truth is, the real cost of corporate coverups of chemical toxicity have been hidden and they are being borne by the public via medical costs, property damage, increased taxes for regulation, and so on.

If we can acknowledge that most cancers are environmentally induced as the National Cancer Institute and the American Cancer Society and the Department of Health and Human Services has said, then the current cost of cancer treatment which is $1.8 billion a year should laid at industry's door.

Also, the "Atlas of Cancer Mortality" for the National Cancer Institute has shown a strong correlation of high cancer rate with proximity to chemical and oil refinery plants.

We may see in the not-so-distant future a staggering increase in costs of all kinds: Medical costs, lost wages, costs of supporting children born with birth defects and the greatest costs, however, are not economic, in our opinion.

How can one quantify in dollars the lifelong anguish of a child born with a birth defect or that child's parents' suffering? And

what are the costs to society of supporting such a child? These questions cannot be answered.

Based upon well-known investigations of the asbestos and DBCP cases, there is no doubt in my mind that industry is often aware of the potential health effects of products that they manufacture for years before workers or the public are informed.

And I want to make especially the point that DBCP and asbestos are far from being isolated examples but they are, in fact, the tip of the iceberg. Withholding of information about the toxicity of chemicals is standard industry practice: In my experience in the field of occupational health which is over 8 years, I have encountered numerous cases of workers who were experiencing health effects from industry products, from unidentified chemical products. Part of my work has involved attempting to identify the ingredients of these products. To track down toxicity to correlate health effects with the ingredients of a chemical product is an incredibly long and frustrating process. It often ends up with nothing because we cannot get the basic information out of industry.

Even when hazards become known, workers must continue, out of economic necessity to work in plants where they are involuntarily exposed to lethal chamicals. We are concerned about unknown hazards. Yet, what is known is bad enough and DBCP is only one such example.

You've heard all about the DBCP, I think, ad nauseam. The only point I want to add to that is that Dr. Hine, who is the person who did the research on DBCP has now been appointed codirector of a residency program that was set up because of the DBCP tragedy.

Also, as you've heard, DBCP has continued to be manufactured in the United States. It is manufactured at AMVAC. It is also being smuggled back into the United States. At least in California at this time, the Department of Food and Agriculture is not checking food for DBCP residues.

We are also concerned about unknown hazards and the example of Toxaphene might be a good one to look at briefly. It's an organochlorine pesticide which is related to DDT and literally thousands of pounds of it are used in California every year. It's been in use for about 20 years on a wide variety of crops including lettuce and tomatoes and other crops as an insecticide.

There have been residues of toxaphene in food detected by the Department of Food and Agriculture. Last year the National Cancer Institute said that it was a suspect carcinogen. The Department of Biochemistry at the University of California at Berkeley has studied the chemical and has determined that it is mutagenic. And, yet, it continue to be used.

Workers that I have had contact with and consumers, certainly, are exposed unknowingly to the chemical. Thus, we are once again faced with the impossible situation of proving beyond a shadow of a doubt that the chemical will harm us rather than the other way around.

There are many other examples that I could cite: the example of the phenoxy herbicides that Tom Hayden referred to in his testimony. The studies on that began in the early 1940's, at the latest. We've known about that for some time.

To this day, just a couple of weeks ago, there have been a number of workers that I have seen who are exposed to the phenoxy herbicides in both urban and rural areas who did not know what the chemical was, had no idea what the toxicity of that chemical was and suffered severe neurological damage as a result.

As I said, we are in general support of the bill and I want to make several coments on it that I hope will help to strengthen the bill, based on our experience.

In section B(2), which talks about your definition of a product as a product of the business entity. It's not clear to me whether this bill will cover only manufacturing industries or how it will affect employers who purchase products from another employer and then use it in the workplace, knowing about the hazards.

For example, if a farm worker is poisoned by a pesticide used by a grower who purchased it from Shell and the grower knows of its toxicity which is often the case, who would be liable in that case?

And also how would a corporate consultant such as Charles Hine be affected by this legislation?

Another concern that we have is around the definition that a serious danger should be enough to convince a reasonable person.

In my experience, many corporate managers feel themselves to be reasonable people. They simply don't believe and they are not convinced by evidence that we might find convincing and I would suggest that your bill try to be more specific, perhaps, about what kinds of things constitute a serious danger.

For example, is evidence of mutagenicity on a short-term salmonella test adequate to constitute a serious danger that would convince a reasonable person? Or is the evidence of cancer and birth defects in laboratory animals enough to convince a reasonable person?

Also in the definition of "serious bodily harm," It is unclear to me how sterility, birth defects or gradual genetic degradation would fit in.

In other words, it appears to be primarily focusing on acute and direct injuries rather than long-term health problems.

On the definition of sufficient description of danger, this general concept has been discussed a lot around the right-to-know issue as to what is considered sufficient. Is it enough to inform workers about the acute toxicity, about the chronic toxicity, about laboratory tests on animals? What kind of information should be given to workers and what can still be withheld?

There is also the issue of liability. I worked on a piece of legislation that was before the State assembly this year on the right-to-know issue. One of the things that we were concerned about in writing that legislation was to be sure, first of all, that just because a manager informs a worker about the hazard of a product does not mean that they are therefore not responsible or not liable for any health damage that might flow from exposure to that product because workers have to continue, as Van Bourg said, to work to the plant.

The other aspect of it is if workers are informed, are they then liable, are they then responsible?

Milton Friedman has taken a positive stance toward the right-to-know issue. He feels that there should be deregulation and workers

should be informed about everything that is happening in the workplace and then let the marketplace operate.

Mr. CONYERS. Is the worker empirically negligent if he continues to work?

Ms. SHINOFF. That's one of the concerns that we have, right. Is there a possibility under this legislation that it could be construed in such a way that a worker would end up being liable for continuing to work once he had been informed.

Since workers are not in an equal partnership with management, they certainly do not have the resources to compete with management in the sense that I am talking about. There should be some definite protection.

When we wrote the right-to-know legislation for the State, we incorporated that in the legislation saying that the legislation in no way implied that the workers were liable because they had been informed.

We're also, of course, concerned about the "trade secrets" issue and it's not clear exactly how that would get worked out. And that, of course, is the biggest obstacle to getting information.

So that's basically our testimony.

Mr. CONYERS. Well, we thank you. You've raised a number of possible revisions, some of which are excellent.

If we try to detail a sufficient description of the danger, we may end up writing something that might get extensively long.

I like leaving this to the judgment of a reasonable person even though corporate managers may not always be reasonable people. It's not their standard. It would be the court's standard of what is a reasonable person would do.

Ms. SHINOFF. Is there a definition of that, what is a reasonable person?

Mr. CONYERS. No, there is at the law, there will be a finding at the law in each case of what would be reasonable.

Back to your old "reasonable man" theory in negligence, what would a reasonably prudent man do without, which is different for each particular situation in which he finds himself, as would be found by a court or a jury.

So that that would eliminate us trying to describe every imaginable situation that could come up. Because if we left anything out, then we would have to construe that that was not meant to be included.

But I think that this broader stroke of the legal brush probably helps us out of a situation that would become really quite long.

Mr. RAIKEN. As the chairman stated, you've raised several excellent points about specific areas of the bill which you're recommending we address.

Several of them, the record should reflect, we are beginning to address in meetings that are ongoing with the Justice Department to try to arrive at tighter language in various sections of the bill, including sections that you rightly pointed out need tightening.

For example, Ms. Shinoff, I think the record should reflect the point that you make, at the top of page 5 of your testimony, that the way we define section B(6), under the current draft of H.R. 4973, leaves it vague as to how sterility, birth defects or gradual genetic degradation would fit in.

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I think we're now prepared to let the record reflect that this is how we are thinking of redrafting that section: in the definitions section of the bill that defines "serious concealed danger," we're thinking of adding the phrase "likely" instead of the words "will cause death or serious bodily injury" to, first of all, close that loophole.

If we use the word "will," a defense attorney for a corporation or corporate manager could conduct his entire defense on the question of whether his client knew with 100 percent certainty that death or serious bodily injury would result. We're going to change that to "likely" which means more probable than not, which we think is probably a more reasonable standard.

The new draft that's under consideration proceeds to address your concern by saying "likely to cause death or serious bodily injury to a human being, including a human fetus." And the danger is not readily apparent to the average person.

I think you'd probably agree that that would allay your concerns addressed at the top of page 5, wouldn't it?

Ms. SHINOFF. Yes, I think so.

The basis for that concern comes from the DBCP workers' difficulty in getting compensation for their conditions because sterility has not impaired their ability to work, and under workers compensation law they can't be compensated.

Industry is also arguing the position on some children that have been born to the workers there with rather massive birth defects that those children are also not entitled to compensation because it was an injury flowing from the workplace.

Anything that this bill can do to insofar as amending that situation is definitely a step in the right direction.

Mr. RAIKEN. Could we, Mr. Chairman, just let the record reflect a list of some of the major environmental, labor, consumer, and health organizations for whom the witness has authority to speak for through the Coordinating Committee?

Ms. SHINOFF. You want me to cite those?

Mr. RAIKEN. Yes, some of the major ones. I understand the Sierra Club, for example, has authorized you to speak for them.

Ms. SHINOFF. Yes, the Sierra Club, Environmental Defense Fund, Friends of the Earth, CRLA is a member, United Farm Workers, Oil, Chemical & Atomic Workers Union Local 1-5 and Local 1-326, International Chemical Workers Union, Teamsters Local 85, International Longshoremen & Warehousemen Local 10 and 6.

Mr. CONYERS. If there are additional ones you haven't thought of please feel free to submit them.

Ms. SHINOFF. OK.

Mr. RAIKEN. Thank you.

Mr. CONYERS. Thank you very much.

[Written statement of Mary Shinoff follows:]

STATEMENT OF MARY SHINOFF, COORDINATING COMMITTEE ON PESTICIDES

Mr. Chairman, the Coordinating Committee on Pesticides is a statewide coalition that includes labor, environmental, consumer and health organizations allied around a common concern about the health, environmental and economic effects of pesticides. Our primary concern is with workers, consumers, and the promotion of alternatives to pesticides. In the course of the last two years, we have encountered tremendous opposition to our goals from the chemical corporations and big agriculture in the state. The use of pesticides in California is ubiquitous in every setting

from agriculture to home use. Relatively little is known about the toxicity of these chemicals because of industry's refusal to release information about them and the accompanying policy of the California Department of Food and Agriculture that bars access to what are defined as "trade secrets."

In the registration of new pesticides the only source of toxicity data that is used by the California Department of Food and Agriculture are industry tests. Under the cover of "trade secrets" the public is refused access to this information and must rely upon independent evaluations that are few and far between. Despite evidence on a number of already registered pesticides as being carcinogenic, teratogenic, or mutagenic, the CDFA continues to re-register them. It may indeed take an act of Congress to remove many of these pesticides from the market. Only in cases where workers and consumers have proven with their own bodies that the chemicals are in fact carcinogenic or teratogenic, does the state government take action to ban their use. In most cases the health effects of these pesticides only show up after years of exposure have produced irreversible and tragic harm to workers and consumers.

The most frightening fact is that the damage done may never be identified at all but merely result in a gradual genetic degradation or a general rise in the cancer rate. The now well-known examples of DBCP, asbestos, vinyl chloride, were only recognized by the public and the regulatory agencies that struggle to protect the public after rare and unusual conditions appeared in exposed workers.

As an organization, we are concerned not only with the known effects of pesticides and other chemicals but with the unknown effects as well. We question the effectiveness of present regulation in stemming the tide of hazardous chemicals into our homes, water, air, food and workplaces. We support this piece of legislation as a step in the right direction of increasing corporate accountability.

Our attempts at obtaining information from corporations on the toxicity of specific chemicals or obtaining any acknowledgement of the apparent effects of specific chemicals have met with consistent denials, obfuscation, and delays. The current controversy around the phenoxyherbicide, 2,4,-D, is one example. Industry has consistently taken the position that "chemicals are innocent until proven guilty" and "chemicals have rights, too", thus placing the entire burden of proof upon workers and consumers. Their attitude is absurd and outrageous but is nevertheless their first line of defense. We are thus forced to rely upon the grisly science of epidemiology—counting bodies—to prove our case. Our position is that if there is any reasonable indication that a chemical may cause cancer, birth defects, mutations, long-term neurological disease or other serious harm to people that it should not be marketed at all. The fact is, industrial practice is entirely the opposite.

Industry argues the economics of the matter: to wit, it is too costly, the plants will close down, people will be thrown out of work. There is also a threat to move overseas and Hooker Chemical has recently laid plans to open a toxic waste dump in a Third World country because the costs of environmental regulation are too great in the United States. The truth is, the real costs of corporate cover-ups of chemical toxicity have been hidden and they are being borne by the public via medical costs, property damage, increased taxes for regulation and so on.

If we can acknowledge that most cancers are environmentally induced (American Cancer Society, National Cancer Institute, US Department of HEW), then the cost of current cancer treatment—$1.8 billion—should be laid at industry's door. Accordingly to Sam Epstein, author of the "Politics of Cancer", we are only at the beginning of a major epidemic of cancer resulting from workplace and environmental exposures. The National Cancer Institute has published its Atlas of Cancer Mortality showing a strong correlation of high cancer rates with proximity to chemical and oil refining plants. We may see in the not-so-distant future, a staggering increase in costs of all kinds—medical costs, lost wages, costs for the support of children born with birth defects. The greatest costs, however, are not economic. How can one quantify the cost in dollars of the lifelong, anguish of a child born with a birth defect or that child's parents suffering? What are the costs to society of supporting such a child? These are unanswerable questions because we are faced with an immorality on the part of corporations that is difficult to grasp in its' enormity and inhumanity.

Based upon well-known investigation of the asbestos and DBCP cases, there is no doubt in my mind that industry is often aware of the potential health effects of products that they manufacture. In eight years of experience in the field of occupational and environmental health, I have encountered innumerable cases where workers experience health effects from unidentified chemical products. Attempts to identify the ingredients of these products, to track down their toxicity, to correlate the health effects with the ingredients, are incredibly laborious and frustrating and all too often fruitless. Even when the hazards become known, workers often must continue to out of economic necessity to work in plants where they are involuntarily

exposed to lethal chemicals. We are concerned about unknown hazards; yet what is known is bad enough. DBCP is one such example.

Let me present a very brief chronology of the DBCP tragedy. In 1958, Dr. Charles Hine, UCSF professor, long-time consultant to Shell Oil corporation and a number of other industries (Dow, DuPont, the tobacco industry), conducted research indicating that DBCP was a cause of damage to the testicles in rats and a potential carcinogen. Three studies later, an article was published in a scientific journal regarding the effects of DBCP. This information did not become generally available to workers or the public at that time. It was not until 1977 when 35 workers at the Occidental Chemical Corporation's Lathrop plant were found to be sterile or to have impaired fertility, that a great hue and cry was roused resulting in the final ban on DBCP by the EPA in 1979. Subsequently, it has been discovered that Occidental Chemical knew that it was polluting the wells in the San Joaquin Valley not only with DBCP but with other pesticides as well. This information was withheld from the state agencies and the valley residents. In addition, the CDFA was not testing food crops for DBCP residues as a routine matter. In the wake of the DBCP uproar, DBCP, residues were discovered on food crops in significant amounts. Thus, the effects of the corporate cover-up reached far beyond the workplace to encompass consumers and community residents. The key point is that Dr. Hine and Shell Oil corporation withheld this information from the public resulting in serious health damage and cancer cases potentially reaching as high as 140,000 according to EPA.

You will hear from the workers who were exposed to DBCP at the Oxy plant. I wish to point out that they are having difficulty in obtaining worker's compensation for their injury because their sterility has not impaired their ability to perform their jobs. In addition, if, as it appears may be the case, DBCP is a cause of birth defects, their children may also be denied any form of compensation. Industry is arguing that injury to their children is an injury flowing from the workplace, is thus covered by worker's compensation law. Thus preventing these children from suing Occidental Chemical. I can think of no more towering immorality than for industry to take the position of denying damaged children compensation.

DBCP has continued to be manufactured in the United States at AMVAC corporation in Los Angeles. It is also manufactured in other countries as is the case with many banned pesticides. Only 3 weeks ago, it was discovered that DBCP has been smuggled back into the United States for agricultural use. It may also be on imported foods. We are not finished with this chemical or its perpetrators yet.

What of unknown hazards? The example of toxaphene may be a good one to examine. Toxaphene is an organochlorine pesticide, chemically related to DDT. Thousands of pounds of toxaphene are used in California every year. It has been in use for about 20 years on lettuce, tomatoes, and other crops as an insecticide. Residues of toxaphene have been detected by the CDFA. In 1979, the National Cancer Institute released information indicating that toxaphene is a suspect carcinogen. The University of California, Berkeley, Dept. of Biochemistry has also studied the chemical and concluded that it is mutagenic. The chemical continues to be used. Workers are exposed unknowingly, consumers eat lettuce with toxaphene on it. We are once again faced with the impossible situation of proving beyond the shadow of a doubt that the chemical will harm us rather than the other way around.

There are many other examples that I could cite of chemicals and drugs that are positive on mutagenicity and carcinogenicity tests that continue in use. It is the hope of the CCOP that this bill will aid in stepping up the costs to industry of covering up the dangers of their products in the name of profit.

The CCOP is in general support of the bill as one means of obtaining corporate accountability. However, I wish to offer some comments in the spirit of constructive criticism based on our experience and concern about corporate cover-ups and environmental disease.

1. Section (b)(2) discusses the definition of "product" as a "product of the business entity". It is not clear whether this provision means the bill covers only manufacturing industries or how it will affect employers who purchase dangerous products knowing of the effects. It is often the case that an employer will use a chemical in production purchased elsewhere. ie: If a farmworker is poisoned by a pesticide used by a grower who purchased it from Shell Oil and the grower knew of the pesticides's toxicity who would be liable?

2. Section (b)(4) defines the term "discovers" and states that the serious danger should be such as to "convince a reasonable person". In my experience, many corporate managers consider themselves to be "reasonable people" and cannot be convinced by evidence that we might find convincing. I would suggest that the authors of the bill consider more specificity in this matter. ie: Evidence of cancer/birth defects in three species of lab animals; evidence of mutagenicity on short-term

tests. These measures could help to ensure that the burden of proof is shifted to the corporations.

3. Section (b)(6) defines "serious bodily harm". It is unclear from this section how sterility, birth defects, or gradual genetic degradation would fit in. In other words it appears to be primarily oriented toward acute, direct injuries rather than long-term health problems.

4. Section (b)(7) requires a "sufficient description of danger". This general concept—what is adequate warning—has been much debated around the right to know issue. What is considered "sufficient"? Managers could be required for example to inform workers about all known toxicity of a product, both chronic and acute and about methods of protection that the worker can use.

5. One major concern that I have regarding this legislation is this: If a manager informs his employees and Federal agencies would this exempt him or the corporation from liability? If workers are informed about the hazards of a product would this create liability for them if they continue to work with product?

It is not sufficient to inform workers about hazards and expect them to "take responsibility" for the consequences of continuing to work. The "right to know" issue has received some support from such figures as Milton Friedman, noted economist, on the basis that informed workers will then force their employers to correct unsafe conditions—a sort of "let the marketplace operate" concept—with the caveat that regulation be eliminated, of course. In my opinion, this is an erroneous stance as workers are not in equal competition with employers not do they have the rights and resources that corporations have.

Mr. CONYERS. Are George Kilbourne and Steven Kazan here?

[No response.]

Mr. CONYERS. Mr. Willie Jackson, Mr. Willie Gordon, and Mr. Jerry DeMeo, are you present?

Please come forward to the witness table? We will take a brief recess and continue momentarily.

[There followed a short recess.]

Mr. CONYERS. I want to thank the witnesses for bearing with the necessities of the interview.

We now have a panel of witnesses. Mr. Willie Gordon, president of the White Lung Association, an association started in 1979 to represent asbestos lung disease victims. The association has 600 or more members throughout California working as volunteers in an effort to educate their fellow workers of some of the hazards that are associated with some of their working conditions.

We also have Mr. Willie Jackson, vice president of that same association. He is a Federal Government employee who has worked in civil rights activities and has represented workers in a variety of complaints. And, last but not least, Mr. Jerry DeMeo, who works at the Long Beach Naval Shipyard and who, himself, has been disabled by asbestos. He has been a past vice president of local 2293 of the International Brotherhood of Electrical Workers and has developed a very practical experience involving lung diseases.

We welcome all of you before our subcommittee. Have you decided who will proceed first?

Mr. GORDON. I will.

Mr. CONYERS. You are Mr. Willie Gordon?

Mr. GORDON. Yes.

Mr. CONYERS. Welcome to the subcommittee.

TESTIMONY OF WILLIE GORDON, PRESIDENT, WHITE LUNG ASSOCIATION, ACCOMPANIED BY WILLIE JACKSON AND JERRY DEMEO

Mr. GORDON. My name is Willie Gordon and, as Mr. Conyers noted, I'm president of the White Lung Association. I would like to

thank the subcommittee for giving me the opportunity to come here and speak.

I've worked around asbestos for quite awhile, sometimes unknowingly. I'd say for the first 5 or 6 years that I worked with asbestos I was not aware of asbestos or aware of the dangers that asbestos created.

I first came in contact with asbestos while working in an automobile agency. The mechanics would true the brake shoes. That is smooth the outer part of the brake shoe. The asbestos would stack up in little piles. I would sweep it up and when I swept it up, it would scatter all over the place. I would pick it up, put it in the trash cans. The mechanics also exposed me and everyone else in the area by blowing the hose to clean the brake drums out.

I worked there for about 2 years, still not knowing that asbestos was dangerous.

In 1965, I started working at the Long Beach Naval Shipyard. I started there as a laborer. Many, many days, I recall now, that we pulled the old asbestos loose from the ship, we helped install the new asbestos. Several times we would lay down and take a nap on it during lunchtime. Because we then worked in the hold of the ship and we only had a 30-minute lunch. It would take about 15 minutes to come of the ship. So we'd take our lunch with us and we'd lay down and sleep, play cards, or whatever, during our lunch break.

Mr. CONYERS. You were doing this in an area in which asbestos existed?

Mr. GORDON. We used asbestos as our tables and our pillows.

Mr. CONYERS. What form was it in?

Mr. GORDON. It was in the form of pads rolled up.

Mr. CONYERS. It was in rolls?

Mr. GORDON. Rolls, yes.

Mr. CONYERS. What size?

Mr. GORDON. I think the type we used at that time was something like maybe half an inch thick.

Mr. CONYERS. And how wide?

Mr. GORDON. Oh, anywhere from 4 to 5 feet.

And like I say, during our lunch period, we would just take it open, roll it out and sit down and play cards.

Mr. CONYERS. You were a Federal employee. Did this occur in a Federal facility?

Mr. GORDON. Yes; I was a Federal employee.

And this went on for about, in fact, until about 2 years ago and we were told that we would have to take X-rays because they suspected that there was a good chance that a large percentage of the people in the yard had asbestosis.

Everyone was given an X-ray with the promise of an X-ray every year thereafter. I haven't seen an X-ray since then. I only had the one, and no one has had one since then. However, we were promised an X-ray every year.

As I look back, if I had to do this all over again, I wouldn't take the job. I make pretty good money at it but I wouldn't take the job. Right now I have asbestosis. It's supposed to be in the first stages, but this was 3 or 4 years ago. I don't know what stage it's in now. I hope it doesn't get any worse for the time being because the people

that I know that have it are having a tremendous amount of trouble getting money to support themselves.

I can consider myself lucky, though, because I have known a lot of people personally that have worked at the yard before me that have died.

I was sitting here a few minutes ago and I happened to make a list of the names of the people that I have worked with, and that I have known personally. It reads like a group of names after a battle. And I listed them in this order. I looked at the date and I know a guy; we were real close, named Hogan, and he's dead. Another fellow I worked with real close for a long time named Williams. He's dead.

Mr. CONYERS. From what?

Mr. GORDON. Asbestosis, lung cancer.

I worked with another friend of mine, Johnson, he is dead. He died about 2 weeks ago. Another fellow, general foreman, I knew him well; I also knew his son. Dead. Another guy, Glixberg, dead.

Then we go to the wounded. Mr. DeMeo, myself, another close friend of mine, Horton; Alexander, Richards, Stanfield, Mason, Burino, Moss, I could go on and on like this. Some of them are worse off than I am, like Mr. DeMeo. His problem is more of an advanced stage than mine is.

I talked with another fellow named Mr. Golden. His problem is even at a more advanced stage than Mr. DeMeo's is.

Part of our organization is to visit people that have asbestos problems. We visited Mr. Golden and he's swollen. He has lung cancer and I don't think they've even told him that he has it. But he's swollen and he couldn't even shake hands with us because of pain, he couldn't shake hands.

He said he worked on the job for 29 years and 9 months. There was asbestos right in the open where he worked. No one ever told him it was dangerous. No one told him it was asbestos.

Well, we talked with him in February. He said the last time that he worked was in October and he hadn't received a penny from anyone. There is no one, but he and his wife, and he has not received 1 penny.

Mr. CONYERS. Are you working?

Mr. GORDON. I am working now. I am still in a position to work. I will work as long as I can.

Mr. CONYERS. Where do you work?

Mr. GORDON. I work for an electronics mechanic for the Navy. I still work for the Long Beach Naval Shipyard.

Mr. CONYERS. Do you have a claim in for asbestos?

Mr. GORDON. Yes; I have filed a claim.

Mr. CONYERS. Do you receive regular medical checkups?

Mr. GORDON. No; the last one I got, like I said, was about 3 or 4 years ago with a promise of getting one every year.

The stewards in my local have been constantly asking, "When are we going to get our X-rays?" As far as I know, no one has asked anyone or given anyone another X-ray or told anyone anything about it.

So as far as I can see, it's forgotten, unless someone really brings it to their attention again. I brought it to the attention of the

Metal Trades Council, the head of our union. I haven't heard anymore from it one way or the other.

But what is important to me and the other people that work there, I would say, is to find out what stages it has advanced to. Because, as I said, 4 years ago I was in the beginning stages. I don't know what stage I am in now.

To tell me that it's not necessary that's kind of ridiculous because I think it's necessary for everyone to really know. And there is no answer. Whenever someone asks me, I go and ask the powers that be, and nobody gives me any kind of answer. "We'll get around to it. See so-and-so," this type of answer.

I am all in support of this bill because as I said, when a man dies you can only call it murder because when a man dies from being killed by anything, another man knowingly produces, knowing it is dangerous, it is murder.

We do have in this country a law against murder. As one of the gentlemen said earlier, if I broke a law by speeding, whatever it is, if I'm caught and convicted for it, I will either go to jail or I will pay a fine.

A fine, to me, means a big thing. But a fine to the company that manufactures dangerous products doesn't mean too much of anything.

Mr. CONYERS. Do you have any suggestions in terms of restitution for the people who are suffering from this disease? What do we do for them?

Mr. GORDON. There should be something in H.R. 4973 that would make the manufacturer responsible for people who have caught diseases like this, and make it so that people wouldn't have to go through so much of a hassle to get their money. I mean not going through the lawsuits and compensation office and this type of thing.

You know you've committed this crime, you know you've concealed it and you're responsible for this man being sick. And now that the man has to be cared for, he should be paid a certain amount of money for this.

I don't think the Federal Government should pay for the mistake the manufacturer is making.

Mr. CONYERS. Well, thank you very much.

We will incorporate your statement into the record, Mr. Gordon.

We now call on Mr. Willie Jackson. We will incorporate your statement and you may proceed.

Mr. JACKSON. Thank you.

I am Willie Jackson, vice president of the White Lung Association. I am grateful for the opportunity to testify before this subcommittee hearing on H.R. 4973.

In the years that I have served as a labor representative, I've known many workers who were suffering from disabilities as a result of health hazards encountered in their workplace.

The feeling that I am immediately struck with when I give them counsel is one of helplessness. I feel this way because some of the victims are literally wasting away before my very eyes.

At times the workers would complain of illnesses that would not go away and doctors could not tell them exactly what was wrong with them, sometimes even when they knew.

Many of the victims express their need for financial and emotional help. Their family members also undergo traumatic experiences, and they also experience emotional crises.

One addition to H.R. 4973 is that it should include statements that should any individual aid directly or indirectly the corporation or the company in the coverup of a known hazard in the workplace, they shall be guilty of a criminal act.

Workers have been made the economic scapegoat of the corporation. The corporation managers have repeatedly shown that the mighty dollar is more important than a human life by willfully concealing known health hazards in the workplace that could produce diseases like the one that comes from asbestos exposure.

Some of these diseases which are asbestosis, mesatheliona, lung cancer, and gastrointestinal cancer.

Concealment of work hazards which cause these serious diseases should be considered a crime of the highest order.

A general glance at the not-too-distant past will show that diseases have the ability to destroy nations and dynasties. Because it has been shown that diseases have the ability to destroy nations, destroy thousands or millions of U.S. citizens, the act of knowingly concealing or covering up a known health hazard is a detriment to the Nation as a whole and can be equated with treason in some instances.

The exact number of persons killed or permanently disabled will never be known because many have changed jobs or are no longer working. Further, they will not be known because of inadequate recordkeeping and willful neglect. And because professionals such as doctors and others are usually greatly respected and have a certain mystique. Large numbers of them have been compromised by corporate management. H.R. 4973 should make it a crime, a criminal offense, for any individual to directly or indirectly aid in the concealment of a known health hazard caused by unsafe working conditions.

Deceptions are still going on in the process. For example, the report that appeared in the Oakland Tribune on January 29, 1980. It reported that a U.S. Geological Survey scientist stated that there is a harmless asbestos and he named chrysolite as the harmless one.

However, the scientist did not mention the fact that there are two different chrysolites, and that the one that is used most predominantly is the one that is very harmful.

From the many victims and family members I have talked with, I have discerned a great fear that grips them. They express the concern that no one cares about their plight.

Seeing companies producing havoc and destroying families, I submit that the concept of H.R. 4973 is an idea whose time has come.

Thank you.

Mr. CONYERS. Thank you very much.

Mr. Jerry DeMeo.

Mr. DEMEO. Yes, thank you, Mr. Chairman.

I wish to relate that I am still the vice president. You mentioned the International Electrical Workers. Although I am not working at the Federal installation at this moment, we feel that the legisla-

tion being introduced by you and Congressman Miller, H.R. 4973, is urgently needed to save millions of lives in this country.

As vice president of my local 2293 of the International Brotherhood of Electrical Workers, I have become aware of hundreds of cases whereby people of all ages, both young and old, have contracted sicknesses and diseases because they were not made aware of the potential danger or hazard of that disease. One of the very dangers I'm referring to has disabled me. It was while working at the Long Beach Naval Shipyard, Terminal Island, Calif., that I contracted or developed asbestosis.

As you know, this disease has no known cure. Like Willie Gordon here, if I had known of the extreme danger at the time I first started working there, I would have definitely left for some other form of employment which was safer.

And some manufacturers and people, I have been told, have willfully concealed from the public the deadly danger or hazards of their products.

This, I believe, is criminal and those responsible should be held accountable for their actions because it's a very sad day for us and for our country when we will allow people to put money ahead of lives.

I hope this sin is corrected by this pending legislation.

Although we know there is no amount of cure, we are concerned with compensation because, as Mr. Gordon said, there are a lot of people out there that are having a rough time of it because they are not being compensated.

I brought with me a letter which I would like permission to have read here. The gentleman is a coworker of mine who worked his way up from a laborer to a superintendent and was superintendent at the shipyard facilities in charge of about 1,000 men, roughly.

And I would like to read to you his lettter.

Mr. CONYERS. Please proceed.

Mr. DEMEO. Thank you. This is dated December 17, 1979.

I feel that this letter puts it all in a nutshell. All the statistics that you hear about don't really mean anything.

It says:

DEAR JERRY. I was glad to get your Christmas card today and your note. I am sorry you have been injured and that you have had to be away from work so long.

Your comments about working with your Congressman are interesting. I am also working with Congressman Dan Lungren. My own case is still not settled.

I am this far on it. They have acknowledged that my asbestosis is work-related. They gave me $12,000 for the loss of my left lung and they paid all medical bills. I have been on civil service retirement pending the approval of the Labor Department annuity.

It has been over 2 years since I filed for compensation annuity. Congressman Lungren checks on the progress of my case every 30 days—but all he can learn is that two doctors have my files under consideration. However, I know of two cases where the Labor Department annuity has been granted in the last few months.

One is Walt Legrand, and he gave me the phone number. The other is Angelo Richetti. I don't have Angelo's number. But my opinion about the delay is that there is more involved than inefficiency and bureaucratic bungling.

I believe there is a delaying policy set by Ray Marshall and President Carter. This policy is nationwide and not just the west coast.

I was in touch with my friend, Pete Martin, my counterpart at Philadelphia Naval Shipyard. He ran into the same delaying tactics. Pete died from lung cancer this July.

Also my counterpart at Bremerton (naval shipyard) had his left lung removed—asbestosis.

It angers me that the Government could regard so many of us expendible. I'll be glad to talk to you after the holidays. I've put your new phone number in my book.

I've become bored since I left the very active shipyard job, so I went to the unemployment office and they had a planner and estimator at a refinery maintenance company. It was an office job in an air-conditioned office.

When I went to my doctor to get clearance for the job, the doctor would not agree—he said, "my lung would not stand the pressure of any kind of work"—so here I am between an agency that will not give me a disability annuity and a doctor that says my condition will not allow me to work.

Ed Whitmire—former production control, code 375—put me in touch with a San Francisco lawyer who has an office on the same block as the Labor Department's office. Ed says he knows the staff there and has walkin privileges.

If I don't get any notice in January, I am going to turn my case to him and see what he can do.

Jerry, I hope you have a good holiday. I will be talking—witness crying—to you soon.

As ever,

CARL.

Mr. CONYERS. Let me ask you this. Is it the policy of the naval shipyard to pay or to acknowledge asbestosis through workmen's compensation claims?

Mr. GORDON. As I understand it, they haven't started paying compensation claims yet. The person is put on disability and he's drawing 75 percent of his pay until the claim is acknowledged and then it just lasts awhile. Then you're put on disability.

But as far as I know, the Government is not paying compensation claims for asbestosis yet.

Mr. CONYERS. You have not been compensated?

Mr. GORDON. No, I haven't received any money at all for it.

And I think that the gentleman he's referring to here, the $12,000, was just the disability, the fact that he can't work anymore. And because it was job-related, then he would get it.

Mr. CONYERS. I didn't mean workmens compensation. I meant the Federal equivalent.

Mr. GORDON. That's what I had reference to, too.

Mr. CONYERS. You say they do voluntarily pay the claim?

Mr. GORDON. Any disability that you have, if it's job-related, you're given 75 percent of your base pay. This is what he was talking about here, the money that he received. It wasn't because of the asbestosis or because of the loss of a lung. It was because they found out the loss of the lung was job-related, asbestos-related. Then he could no longer work. He would be entitled to 75 percent disability.

But this is in no way to be asbestos related. The same thing would have happened if he had gotten a leg cut off, in other words.

But absolutely he is not being paid at all for the asbestos.

Mr. CONYERS. Mr. DeMeo, what happened to the gentleman that wrote the letter to you?

Mr. DEMEO. I talked to him last night and he's deteriorated. He says he can't speak more than 10 minutes.

Mr. CONYERS. His situation has deteriorated greatly even since the letter? What is his age?

Mr. DEMEO. I believe he's about 60 or roughly thereabouts—between 55 and 60. He never smoked. He used to run and led a real sporting life. He never smoked or drank.

Mr. CONYERS. I take it he was more or less athletically oriented?

Mr. DEMEO. Athletic, right.

I asked him, "Can you run anymore?" He said, "No."

Mr. CONYERS. I assume the White Lung Association was formed then to give moral and psychological support to the individuals and the families who have been affected by the asbestos lung disease; is that correct?

Mr. GORDON. Well, it's an educational self-help program that we have, unlike unions, where we just deal with members. We deal with the public in general. We've had to reach the people in the homes, schools, churches, or whatever.

Mr. CONYERS. How do you do that?

Mr. GORDON. We do it through literature. We've been using the news media fairly well lately. And we pass out pamphlets.

Mr. CONYERS. What do you tell people in the pamphlets?

Mr. GORDON. We tell them the dangers of asbestos, where the asbestos could be found. I have a copy of it if you'd like one.

Mr. CONYERS. Yes, but please continue to describe it, anyway.

Mr. GORDON. Where they might find it, what danger it is to them. For example, we found out that a lot of people don't even know what asbestos is.

So we take it upon ourselves to notify people in different areas. We go to different meeting places and start talking about asbestos, and people say, "Asbestos? What does that mean?"

I've gotten so much of this. I found out it's amazing that people don't know anymore about it.

Mr. CONYERS. Counsel Steve Raikin, have you any questions?

Mr. RAIKIN. I would ask all three witnesses if your employer ever told you you were being exposed to a substance that is known as asbestos which is believed to have caused irreversible and fatal lung disease?

Mr. DEMEO. No, they never did.

Mr. JACKSON. No, they never have.

Mr. GORDON. No, I was never told.

Mr. RAIKIN. Do you think that the Miller bill, if passed by the Congress, will prevent other workers in the future from catching fatal diseases such as those that you and your friends have apparently encountered?

Mr. DEMEO. I hope so. I really hope so.

Mr. JACKSON. I say it will certainly help in that process. I don't know whether it will completely eliminate it but to move closer to that process is very helpful.

Mr. GORDON. I think we've caused the manufacturers to be much more careful. If he felt that he was going to jail or he had to pay $250,000 or half a million dollar fine and pay this employee for being disabled the rest of his life, not just one but thousands of employees, I think you could almost eliminate this type of thing.

Mr. RAIKIN. Would all of you favor an amendment to the Miller bill allowing for restitution for victims like yourself?

I understand that you, Willie Gordon, know of one case, for example, where the victim was off from work for 8 months and was paid no disability whatsoever.

Mr. GORDON. That's right.

Mr. RAIKIN. Would you favor that kind of an amendment where the court could directly award victims like yourself restitution?

Mr. GORDON. Yes, I believe that it should be done directly through the court if the bill is passed, the amendment put onto the

bill. It should be passed directly through the court that immediately upon needing aid, the employer would have to pay the individual for his disability and not wait around for 7 months to determine whether he should get any money from someplace, or not.

Mr. DEMEO. Yes, I feel that most of these people served our country, some were veterans, combat veterans. I think back when we went into the service and we served our country. Here we give away millions of dollars to foreign countries and never bat an eyelash. But when it comes to taking care of our own who are desperately in need, we seem to do nothing. I don't know what it is. Apathy?

I think the time has now come when we have to stand up and be counted. And say, "Hey, we've got to right this wrong."

Now there is no amount of money that can compensate a man for the loss of a lung. We know that. But let's help him in his final years.

Mr. JACKSON. I have made a note to state that I believe restitution should be at the very centerpiece of the H.R. 4973. I feel that it should be because the families suffer so much heartache and hardship once a disease has taken hold of the breadwinner. I think that's an absolute necessity.

One other point I may add to what Mr. Gordon has stated about the health examination at the shipyard that it was supposed to give. They have been very neglectful in my opinion and the opinion of some of the workers which I represent in determining whether or not the victims are still being disabled relative to asbestos.

I just recently filed a grievance for Mr. Alton Grimes. He's a shipfitter at the Long Beach Naval Shipyard, on that very same thing the fact that they had neglected to follow through on the annual examinations that they had promised would be done.

Mr. CONYERS. It sounds like there is an undetermined number of people at the naval shipyard who may be walking around with asbestosis right this very moment.

Mr. GORDON. Oh, a great many. The reason, when the plan was instituted, it was only determined to have the computer pick out a certain amount of people at random, whether they work in the office or on the ship. If a certain percentage came up with it, then they would give it to everyone. And it so happened that a large percentage of employees had it. So then they decided to give it to everyone, we have between 7,100 and 7,400 people there. They decided to give all of the employees X-rays. They came up with a larger percentage of the people, I don't know exactly what percentage, but a lot of people.

Mr. JACKSON. Thirty-three.

Mr. DEMEO. It was adding.

Mr. GORDON. So then they decided, "Hey, this is a serious situation so we will do it now ever year."

But that was the last of it. I imagine once they forgot about it, they figured we'd forget about it, you know?

Mr. DEMEO. May I say something, too, in that respect?

I was one of the first of 500 chosen. They picked out 500 and they had them X-rayed.

After these people were notified that they had asbestosis, we went through more examinations and then we had to go to our own

doctor. And then they told us, after we did that and the doctor confirmed it, they said, "No, you've got to go to our doctor that we chose."

Well, I went to five doctors and they all confirmed it. And that's the problem, what I told the doctor at Cedars Sinai down there, "It's a waste of time and money sending all these people to the doctor to confirm what they told us originally. It's a waste of a lot of money because once you have it, there is nothing they can do about it."

Dr. Belchum at USC wanted to examine me and stick some type of apparatus down my lung, and I said, "Well, can you cure me?"

He said, "No." I said, "well, what's the sense of sticking this thing down my throat and into my lung?"

Mr. CONYERS. Was it painful or uncomfortable?

Mr. DEMEO. Well, I refused. So they sent me to another doctor at Cedars Sinai. They ran me through extensive tests. They put a catheter in your vein and run you through these machines. It wasn't exactly a picnic to me because I couldn't hardly take the tests without having anesthetic in my lung. I flunked the test right off the bat as they just choked me and gagged me. That was the reason for anesthesia, so that I could complete the tests.

I argue that it's useless to keep sending us back and forth. The Department of Labor says that they want me to see another doctor after their doctors told me I had it twice, and they are the ones who originally told us we had asbestosis. The naval doctors told us originally we had it, and then we had to go see a doctor of our own, which we had to pay for but would be reimbursed later on.

Mr. CONYERS. Well, that's why you suspect that there is a collusion or maybe I'm using too strong a word, perhaps a conspiracy to keep everybody stalled in this whole procedure.

Mr. DEMEO. That is correct. I mean, I couldn't put it any better than that. From the time we started in 1977, we've seen so many people pass on, young fellows. One of my workers, last summer, passed away. He was just a young fellow. We started about the same time. So it kind of makes you, wonder what kind of country we live in.

I mean, we're the greatest country to everybody else out there. And our own, we don't take care of, it's kind of funny, I don't know what you could call it. It's just ridiculous, that's all, because we're the ones who built this country and fought for this country.

And yet, the Government, like this gentleman said, we're expendable. It doesn't make sense. I think if we follow this policy, we're headed for disaster. Like Mr. Willie Jackson says, we're going to reach the point where we're headed for disaster. There will be nobody left in this country.

I think Congress has to stand up now and take a look at this problem.

Mr. CONYERS. Well, I'm glad you brought this to the attention of our colleague, Mr. Lungren, who is a member of the full Committee on the Judiciary. From time to time, he sits with us on this subcommittee although he's not a member. I am sure your testimony will be brought to his attention.

Mr. DEMEO. I thank you for this opportunity.

Mr. CONYERS. We're very glad that we are here.

Counsel Owen has one question.

Ms. OWEN. Thank you, Mr. Chairman.

This question is for Mr. Jackson. It does not relate specifically to the asbestos industry, but it is about one of the general statements you made about the bill.

You mentioned that, as a general principle, any individual that directly or indirectly aids in a corporate coverup should be subject to criminal sanctions.

Mr. JACKSON. Penalties?

Ms. OWEN. Yes, penalties.

Let us suppose, for instance, that a labor union representative knew about the problem and participated in the coverup with the corporation for one reason or another. Do you think that that person should also be subject to the penalty?

Mr. JACKSON. If he knowingly aided in the coverup of such activity, I certainly do feel that he should be included in the penalty.

Mr. GORDON. We're still dealing with human lives and regardless of whether this fellow is a labor man, I'm a labor man and I've been one all my life.

I don't think that he should be protected just because he says, "I'm a union man and I helped protect this guy."

Even in my local union right now, when things go wrong, I would threaten it with a lawsuit, threaten it with unfair labor practice, anything. I'm in favor of what's right, not just the union. Just to be a union and not performing doesn't mean a hill of beans. I feel that if they are part of the coverup and they are corrupt, they should be getting the same penalty that the manufacturers of the products are getting.

Ms. OWEN. Thank you.

Mr. GREGORY. I just wanted to point out for the record, Mr. Chairman, that so far as I can recollect from the five hearings that we've held to date on this bill, there has been not one scrap of evidence presented that any union official has knowingly been a part of any coverup or knowingly participated in any concealment with regard to any of the scores of cases that have been presented to us. I would just like the record to reflect that.

Mr. CONYERS. Do you know any that have?

Mr. GORDON. No.

Mr. JACKSON. I don't know any at this point.

Mr. GORDON. I thought that was just a general question.

Ms. OWEN. It was just a general question.

Mr. DEMEO. Mr. Chairman, I want to tell you that I talked to Mr. Marks last night and he was the superintendent. I asked him, I said, "Earl, you know, you went way up there in supervision. Did you know how dangerous this stuff is?"

He said, "Jerry, if I had only known, I worked in the paint shop and I made the fellows wear respirators, but didn't know asbestos was such a deadly thing."

Like Willie said, we used to lay on those asbestos sheets, eat our lunch on them, and as far as I know, I don't think anyone knew, I mean, as far as at the time I started to work there, the real dangers involved. There are a lot of people now that don't know the real danger.

That's why we need this bill. I mean, it's that simple. So, let the person that has key knowlege report, and usually that's beyond the scope of the average working man. So we're the last one to get the word down the line. We do the job. We're like the infantrymen.

Mr. GORDON. I'd like to say one more thing. It seems that these different products that are put on the market and take peoples' lives and it's all been because of money.

Maybe if these crimes, these people have committed, if some of them went to jail or large enough fines levied on them, it seemed that if the thing is reversed, if money makes them do these things, enough money would make them correct it. Because if you have to pay a large enough sum, or you have to go to jail, I think that the end would no longer justify the means. I think they will have to reverse their situation.

Mr. CONYERS. Well, that's one of the things we've found, that no one ever goes to jail for environmental crimes and the penalties in the State have been relatively ineffective. We think $5,000 is the most anybody has every had to pay which, obviously, wouldn't even begin to cause any deterrent.

Mr. JACKSON. I think there may be a current situation going on in the welding industry. I've been a welder for a number of years and to this date I don't think the workers are being informed adequately as to what the long-range effects of that exposure is.

Mr. CONYERS. In Federal Government or in the private sector?

Mr. JACKSON. Both. I work for the Federal Government, and I always see the containers that the welding wire and electrodes come in and there is just a general statement on the box saying, "This may be hazardous to your health. Avoid breathing the fumes."

To me, that's a little bit ridiculous because they are over the product and there is no way you can avoid breathing the fumes.

So I'm saying the extent of that hazard is not told to the workers.

I've been writing all over the country. I went to an organization over here in Berkeley a few years ago trying to find out information about this hazard that is associated with welding fumes.

I received some information from them and was very helpful. But to this day, I haven't got anything from the employer.

Mr. CONYERS. Counsel Hayden Gregory points out to me that for this bill to affect Government employees, it will have to be amended. It is now written to cover only the private sector.

Your appearance here has been very important in bringing up the fact that there are tens of thousands of Federal employees who would not be affected by this legislation unless it is specifically stated. One of the quirks of the legislative process is that we always have to specify whether it's going to apply to those who work for the Federal Government, or not. So your appearance here is very valuable, not only to get first-hand reaction, but to make sure that Government employees are informed. You might let your union and organizations know that we were very grateful for your coming and we hope you will continue to to be instructive in this area.

Thanks very much.

Mr. DEMEO. We thank you, too, and we say keep up the good work. We're all behind you out there.

Mr. JACKSON. Thank you very much.

Mr. CONYERS. You are welcome, gentlemen.

[Written statements of Willie B. Gordon and Willie Jackson follow:]

STATEMENT BY WILLIE B. GORDON, PRESIDENT, WHITE LUNG ASSOCIATION

My name is Willie B. Gordon, and I am President of the White Lung Association.

I am also a victim of asbestosis, hence the reason the White Lung Association was organized.

I worked around asbestos openly for almost three years sweeping it up, putting it in trash cans. I have seen asbestos stacked in little piles under a machine that was used to true brake shoes. I worked in this environment, even when the mechanics would take the brake drums off the wheels and shoot air on them to clean them off. No one told me or those other mechanics that asbestos was dangerous at the time.

I started to work at the Long Beach Naval Shipyard in 1965. I started as a laborer. Many is the day that I went on the ships and worked directly with asbestos, tearing it out of the old ships and assisting the other trades to install new asbestos.

Many was the day that I, along with many of my co-workers, have sat down in the hold of a ship and had our lunch on this pretty asbestos that looked so clean. This was because if you worked in the hold of a large ship in dry dock, by the time you came up and out of the dry dock, most of your lunch period was over.

And as I look back, I know this was truly a crime to produce a material like this, knowing what it would do to the human body and not to tell anyone the danger they were in.

If I had to do it all over again, I would truly refuse to work on this job, no matter how hard up I was for work.

Then again, I can almost consider myself lucky I'm still alive, even though in a somewhat sickly state. So many of my co-workers have gone to their rewards with asbestos being the direct cause.

About three weeks ago I talked to and visited a gentleman who is 56 years old, dying because of lung cancer, caused by asbestos. These are facts that I speak, not fiction. Not one word is made-up. This gentleman I visited told me that, at the time we were there in February, he had not had any money coming in since October 1979. The man was in such pain he could not shake hands with us. I looked at him and thought I myself may be this way some day.

When this man dies you can only call it murder, because there were people that knew, when they put this poison on the market, that it would kill him and thousands like him. All I can say is that there is a law against murder in this country; and anyone that kills should pay the price, no matter how he kills.

Thank you.

TESTIMONY BY WILLIE JACKSON, VICE PRESIDENT, WHITE LUNG ASSOCIATION

I am Willie Jackson, Vice President of the White Lung Association. I am grateful for the opportunity to testify in this subcommittee hearing on H.R. 4973.

In the years that I have served as a labor representative, I have known many workers who were suffering from disabilities as a result of health hazards encountered in their work place.

The feeling that I am immediately struck with when I give counsel, is one of helplessness. I feel this way because some of these vitcims are literally wasting away before my eyes.

At times the workers would complain of illnesses that would not go away, and that doctors could not tell them exactly what was wrong with them. Sometimes even when they knew, many of the victims expressed their needs for help financially and emotionally. Their family members also undergo traumatic experiences, and they also experience emotional crisises.

One addition to H.R. 4973, is that it should include: Should any individual aid directly or indirectly the corporation or company in the cover up of a known hazard in the work place, shall be guilty of a criminal act.

Workers have been made the "economic scapegoat" of the corporations. The corporation managers have shown repeatedly that the mighty dollar is more important than a human life, by willfully concealing known health hazards in the work place that could produce diseases like the ones that come from asbestos exposure. Some of which are Asbestosis; Mesathelioma; Lung Cancer; and Gastro Intestinal

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Cancers. Concealment of work hazzards which cause these serious diseases should be considered a crime of the highest order. A general glance in the, not to distant, past will show that diseases have the ability to destroy nations and dynasties.

Because it has been shown that diseases have the ability to destroy thousands or millions of United States citizens, the act of knowingly concealing or covering up a known health hazzard is a detriment to the nation as a whole and can be equated with treason in some instances.

The exact numbers of persons killed or permanantly disabled will never be known because many have changed jobs or are no longer working. Further they will not be known because of inadequate record keeping, and willful neglect.

Because professionals, such as doctors and others, are usually greatly respected and have a certain mystique and large numbers have been compromised by corporate management, H.R. 4973 should make it a criminal offense for any individual to directly or indirectly aid in the concealment of a known health hazard caused by unsafe working conditions.

Deceptions are still on-going. Take the report that appeared in the Oakland Tribune on 29 January 1980, it reported that a U.S. geological survey scientist stated that there is a harmless asbestos and he named Chrysolite as the harmless one. However, he did not mention the fact there are two different Chrysolites, and that the one that is used most predominately is the one that is very harmful.

From the many victims and family members I have talked with, I have discerned a fear that grips them. They express concern that no one cares about their plight.

Seeing companies producing havoc and destroying families, the concept of H.R. 4973 is an idea whose time has come!

Mr. CONYERS. Our next witnesses are Ed Story and George Fuqua.

Mr. Story is financial secretary-treasurer and business agent of Local 16, the Asbestos Workers Union. Mr. Fuqua is a retiree from that same local.

Gentlemen, your prepared statements will be incorporated in the record.

TESTIMONY OF EDDIE H. STORY, BUSINESS AGENT, ASBESTOS WORKERS' UNION LOCAL 16, AND VICE PRESIDENT, WESTERN STATES CONFERENCE ASBESTOS WORKERS, ACCOMPANIED BY GEORGE FUQUA, RETIREE

Mr. STORY. Mr. Chairman and members of the subcommittee, may I introduce the others accompanying me in case you have some questions you might want to ask.

Mr. CONYERS. Yes, give us their names.

Mr. STORY. My name is Ed Story. I am financial-corresponding secretary for local 16 and first vice president of Western States Conference of Asbestos Workers.

On my right is George Fuqua. George Fuqua is a member of local 16 and retired because of disability. On my left here is Fred Padilla who is a member of the Painters Union Local 4 here in San Francisco, also disabled because of asbestosis. And on the far left is Smiley Ostberg. He's a member of local 16, retired because of disability caused by asbestos.

Mr. CONYERS. Welcome, gentlemen, before the subcommittee.

Mr. STORY. Thank you.

Mr. CONYERS. You may proceed, Mr. Story.

Mr. STORY. Well, I thank you for the opportunity to speak before this committee in behalf of this bill because we are very supportive of this type of legislation. Being an asbestos worker and being very closely related to the problems caused by asbestos, I feel that asbestosis is one of the largest instances of industrial type coverup of hazards caused by asbestos.

I've been keeping records on the deaths of members in my local since 1967, and I would like to present some of those facts that I have with me today.

Out of all the recorded deaths, and I record all the deaths of my members that I keep in touch with which is almost all of them since 1967, there have been 110 recorded deaths; and out of those 110, 63 were caused by asbestosis or cancer. Out of 63, 12 were cases of mesothelioma cancer. Of course, mesothelioma cancer predominantly among asbestos workers is found only around people who have been exposed to asbestos.

Now from 1967 to 1970, my information was derived from the death certificates and from individual doctors. But wanting further confirmation of the causes of death, I sent the death certificates to Dr. Irving Selikoff of the Mount Sinai Medical Center in New York requesting his opinion on the cause of death.

Since 1970, he has continued to keep me informed on each individual case and his research confirms the staggering 50 percent figure of deaths due to asbestos.

The above statistics are facts that we live with daily. Asbestos workers have a terrible anxiety which dwells in each of us that sooner or later we may become victims of a fatal disease that have taken so many of our brothers.

Now that's a matter of life, it's a fact that we live with on a daily basis. That is not only the worker and something that he has to live with, but it is also the problem within the family. This is something that's a constant worry among the wives and the children of the workers. Each time that one of us would have a stomach-ache or is out of breath or just for any reason feels unduly tired, wives worry whether that might be a symptom of a greater illness.

If you could see, and I have an example here on my far left, Smiley Ostberg. He has to carry an oxygen tank around with him in order to breathe; and that's an example of the problems of asbestos.

Being personally involved as I was as an asbestos worker for more than 12 years while working in the field before being elected to the position I now hold, I have been concerned about what my exposure was while working in the field. I worked in the field for 12 years and at that time I was not aware of the problems of asbestos and, of course, I was heavily exposed to asbestos at the time.

And now my constant concern and constant fear is that exposure that I brought home on my clothes which was evident even though we wore coveralls, you cannot keep the fine dust of asbestos out of your clothes. I am constantly in fear as to what, perhaps, might happen to my older children.

I have a daughter 21, a son that's 16. They were very small at the time that I was being exposed. You wonder if it will ever take its toll with them as well as my wife.

Mr. CONYERS. At that time you probably had little information and awareness of this disease.

Mr. STORY. Absolutely no information or awareness that asbestos was harmful to my health at the time.

I'm not only a business representative of my organization, but I'm also a minister. And being a minister, I'm oftentimes called in to handle not only weddings, but handle funerals, as well.

When one of my members becomes ill, I try to visit all of them. Oftentimes by the request of family. It is a shocking thing when you are standing along side one of your members and you literally see them suffocating because of asbestos. When I say suffocating, I mean just that, fading away because of cancer caused by asbestos.

It's a terrible price to have to pay for a disease caused by asbestos which was known to people in industry as being harmful to health, a problem with which they were aware, but covered up.

If a person is aware of a harmful effect of asbestos or any other harmful material and goes ahead and exposes himself to it, that's one matter. If industry knowing full well that asbestos or any other material is harmful and goes ahead and exposes the workers to the situation without informing them of the dangers, but makes every effort to cover up that known danger, that's criminal.

The industry or the individual who does that should be penalized.

I would like to give you an example of how I, personally, have been affected by this type of industrial coverup

Prior to 1965, the year that I was first elected to the office which I now hold in my union, I had no knowledge that asbestos was harmful to my health. I had no idea at that time that asbestos was a potential killer.

In 1965, Dr. Irving Tabershaw and Dr. Clark Cooper of the University of California in Berkeley began a study in conjunction with the Asbestos Workers Local 16 under a grant from the U.S. Government to determine the hazards of asbestos to our members.

All the basic examinations and other studies showed that the heavy toll was taken, that the preponderance of illness suffered by asbestos workers was caused by asbestos.

In 1965, I became aware of the hazards of health caused by asbestos. But in 1955, just 2 years after I had entered the trade, 2 years after I had entered the trade, evidence of the harmfulness of asbestos was available. Nowhere were there warnings to me to be aware of this nor were any safeguards for my health offered to me.

It was in 1955, that the connection between asbestos and cancer was confirmed. It is interesting to note what had happened prior to those years and going backward, we see that in 1935, United States and England research had indicated links between the two.

In 1930, relationships between the two was confirmed. In 1918, some American and Canadian insurance companies stopped insuring asbestos workers. In 1900, the first death from asbestosis was medically diagnosed in England.

Eighty years later we are still faced with the problem of asbestos exposure. For those who have been previously exposed, we can do nothing. We cannot take it out of their systems. We cannot make it go away and we cannot change the outcome.

The only thing that we can ever hope to do is make their lives a little bit better with compensation and assuring that their families will be taken care of in the event of their death.

I am not here today to try to change what has already been done because I don't believe that can be done. I feel certain that no one

in the asbestos industry is going to be penalized for the damage, that is criminally penalized for the damage that has already been done. I am here today to see to it that the worker will have protection in the future.

I feel that this legislation now pending before the House Subcommittee on Crime, offers protection for the worker and his family as well as society as a whole. We have to stop this industrial-type coverup of known hazards where industry and executives in that industry are aware of hazards and make no attempt to inform the people that are exposed to those hazards.

That industry or that individual must be held responsible. After all, when you murder an individual, it doesn't really matter whether you shoot him with a gun or whether you poison him. He's jsut as dead.

Anyone who is involved in a murder caused by industrial-type coverup should face criminal action. Killing with asbestos or any other harmful substance is certainly murder.

We are very much in favor of any type of legislation that would make things better in this field.

Thank you.

Mr. CONYERS. You're welcome, Mr. Story. Is there anyone else who woud like to tell his experiences concerning the subject matter of this hearing? Mr. Fuqua?

Mr. FUQUA. I started as an asbestos worker in 1940, and I went on the first shift as a CR-2, and I worked as an asbestos worker for 29 years. During the time that I was working with it, we were never warned, we were never told anything about asbestos that it would hurt us, or not.

Only at one time did I ask one of the Johns-Manville representatives, I said, "Is this stuff, will it hurt you?"

He told me, he said, "Eat it and it won't hurt you." That was an asbestos company agency for Johns-Manville material.

Mr. CONYERS. What year was that?

Mr. FUQUA. Around 1943. During the war I worked in the shipyards and it just blew like dust. You couldn't see each other for it because you thought it was harmless.

If they had only told us, you know, "Watch it," or something to that effect, then we would have handled it a little more carefully. Instead, we sawed it, hit it, banged it on the turbines in the engine room, in the boilers, et cetera.

Now after you get the disease, they just seem to kick you to one side. Most of the men are in the prime of their lives now. Something should be done.

I would not be quite so mad if they had just come out when they knew what it would do to you, and told us to watch it or cool it or handle it carefully, or to take certain precautions.

But deliberately knowing that it would kill you is worse than shooting you in the head right off the bat. When you have to sit in the rocking chair at night with an air machine and you can't lay down or you'd choke just by drowning, things like that.

But to let people continue to use it and apply it—my goodness, it's really something. I guess this is one of my better days. Thank God I was able to come here to try to help these people explain to you what they've really done to us.

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There are thousands of other crafts, too, that were working in these close quarters on the ship where we were working. They all got it. At night we'd blow ourselves off with air hoses and couldn't even see.

If they had only warned us, we could have taken precautions and perhaps would have saved a lot more lives.

Mr. CONYERS. Thank you.

Mr. FUQUA. I want to thank you for what you've been doing on this subject and I hope you can do something to get a little compensation for the people. I did receive a little compensation. Some, I hear, got a year's pay out of it. I've been off now for 10 years that I could have been working every day. Got shot out of the saddle at that early age just because of peoples' neglect and greed, greed to make more money and not warn us. That's the whole thing to it.

They might have had us wear a little more protective clothes or stuff like that, respirators, saved a few lives. We were nothing to them. That's what makes me feel pretty bad about this whole situation.

I want to thank you and I want to thank you for all you're doing in bringing this to light and I hope it helps people out that were affected by asbestos.

Mr. CONYERS. Well, your testimony will be a great help, Mr. Fuqua.

Mr. FUQUA. And I want to thank you again.

Mr. CONYERS. Mr. Fred Padilla, do you want to tell us anything about your experience at this time?

Mr. PADILLA. No, sir.

Mr. CONYERS. Mr. Smiley Ostberg, do you want to talk to us?

Mr. OSTBERG. Gentlemen and ladies, I started my trade in Sioux City, Iowa, in 1935. In fact, my first foreman is still living. He's 80 years old.

I worked in the midwestern area, St. Louis, Chicago, Kansas City, and then the war come along and Uncle Sam said, "Would you give us a hand?"

So luckily I sailed in the U.S. merchant marines and I was in the engine room, still associated with asbestos. In fact, I did a lot of repair work when I was at sea.

Mr. CONYERS. What was the trade you started in?

Mr. OSTBERG. Asbestos worker, 1935, local 57, Sioux City, Iowa. Gordon B. Mason was my first foreman.

After the war I went to Kaiser Shipyard and the first gentleman I worked with was on the midnight shift, Mr. George Fuqua. So we've known each other since 1945. In a way, it's been good. I was able to raise a family of four daughters, and I have six grandsons.

When we built the refinery at Benecia, I was joking and I said to a man, "Don't never get in this trade. I have to sit up nights." Little did I realize that I was going to have to do that many a night.

Mr. CONYERS. You were kidding at the time?

Mr. OSTBERG. Yes, I was kidding at the time.

I used to go up a 100-foot tower like a chimpanzee and the last job I was on, a 100-foot tower at the Shell Oil Refinery, I had to stop four times, 25 foot. And now I can hardly climb at all.

But as Mr. Fuqua said, they had never given us any warning. Get in, get the job done and move on to the next one

And so any way you people can help, we will really appreciate it. I believe 95 percent of the asbestos workers die at the age of 55. I am a rather fortunate man. I have longevity. My father is 90. He is in Berkeley, Calif., right today. I lost my mother last year. She was 83.

This November 5, 1980, I will be 67; so I've been real fortunate.

It's no fun. My best friend, weighed 185 pounds. He has cancer of the colon, it's just a horrible thing. I've seen him go from 185 to 60 pounds, bone with skin on it. Asbestos was oozing out of his side. That really tears you up, Mr. Chairman.

Thank you for your courtesy and your time. Any way that you can help us, will really be appreciated.

Thank you, gentleman and ladies.

Mr. RAIKIN. Mr. Ostberg, I think the record should reflect you're wearing what appears to be a pink rubber glove on your left hand, sir.

Is your wearing that glove in any way related to your treatment for asbestos disease?

Mr. OSTBERG. No, it's caused by a mineral which causes ectotherm poisoning. It's related to cement poison. I don't know whether you people have ever heard of it.

When a man works with cement a lot, it gets in his bloodstream and never leaves; it breaks out every so often. That's the way this does. Ever so often, it comes back and I think you can see just what it looks like. The reason for the rubber glove is that it helps keep the air off of it, and it doesn't itch as much.

Mr. RAIKIN. You also are wearing a device around your head, what is that?

Mr. OSTBERG. This is liquid air and I have a larger container at home.

Mr. RAIKIN. Is that a respirator?

Mr. OSTBERG. It's liquid oxygen.

Mr. RAIKIN. Do you have to carry that with you everywhere you go?

Mr. OSTBERG. Seven days a week.

Mr. RAIKIN. What would happen to you if you took that out of your nose?

Mr. OSTBERG. Well, I might ask Mr. Story to say a little piece for me when they put the dirt on top of me.

Mr. RAIKIN. How long have you had to carry that around?

Mr. OSTBERG. Approximately 1 year.

Mr. RAIKIN. What is that device called again?

Mr. OSTBERG. Well, it's liquid oxygen. Well, nobody's smoking in here, but anytime I go into a building I shut it off because you don't have to worry about the container. It's here [indicating]. However, if you're within 5 feet of a flame, it will explode and burn your face off.

Mr. RAIKIN. Will you have to wear that device, Mr. Ostberg, for the rest of your life? Have your doctors told you as much?

Mr. OSTBERG. Well, I think so, yes. It helps put oxygen in my blood.

Three years ago I came from Shell Oil Refinery on the Cummings Skyway. I don't know whether you people are acquainted with where you kind of turn down into Crockett, Calf.? And if you remember, the big steel light pole there, I took one with the side of my truck. Luckily I didn't get over 6 more inches. But it threw me and I thought I was going clear down over the bank.

Mr. RAIKIN. I take it since you have only had to wear the device in the last year, that your lung disease condition has worsened progressively, is that correct?

Mr. OSTBERG. Well, yes, it's to help counteract the disease.

Mr. RAIKIN. Have your doctors mentioned to any of you whether there is reason to hope that a cure is forthcoming?

Mr. OSTBERG. No.

Mr. FUQUA. No. They just said live with it.

Mr. RAIKIN. One last question.

Mr. Story, you're a union official. Did you or any other officers of your unon local or any officers of any union representing asbestos workers, to the best of your knowledge, ever know that exposure of their members to asbestos and asbestos products would cause various lung diseases until it became general knowledge?

Mr. STORY. When it became general knowledge, I got on the soapbox.

Mr. RAIKIN. But before that, you didn't know?

Mr. STORY. No; I did not.

Mr. RAIKIN. Did anyone else that you know within any labor union representing asbestos workers have such prior knowledge?

Mr. STORY. Not to my knowledge.

Mr. RAIKIN. The three of you were all rank-and-file union members, is that correct?

Mr. STORY. Right.

All three. Right.

Mr. RAIKIN. Do any of you have reason to believe that any of your union representatives had prior knowledge of the dangerous properties of asbestos?

Mr. OSTBERG. Not this gentleman here.

Mr. RAIKIN. Thank you very much.

Mr. CONYERS. Well, we want to thank you for appearing here today. Your testimony has been quite enlightening. Hopefully, a lot of people will read these hearings. I expect that many Members of Congress will study your testimony for you have provided this subcommittee with an in-depth exposé of your experiences which will be an important part of our record.

Mr. OSTBERG. Mr. Conyers, in relation to masks, they have a white painted mask. It itches my face so bad I can't use it. If any of you people can invent a mask that you can get air through easily or a pair of goggles that won't steam up, you will be millionaires.

Thank you very much.

Mr. CONYERS. Well, we appreciate that.

Thank you again for coming.

Mr. STORY. Thank you very much.

[The written statement of Eddie H. Story follows:]

TESTIMONY OF EDDIE H. STORY, FINANCIAL/CORRESPONDING SECRETARY AND BUSINESS AGENT OF ASBESTOS WORKERS' UNION LOCAL 16, AND VICE PRESIDENT OF WESTERN STATES CONFERENCE OF ASBESTOS WORKERS

Mr. Chairman and members of the committee, my name is Eddie H. Story. I represent the Asbestos Workers Local Union 16, and I am also the First Vice President of the Western States Conference of Asbestos Workers.

I thank you for this opportunity to speak on this bill, to let you know that we strongly support its passage into law.

Being an asbestos worker, and being closely related to the problems caused by the hazards of asbestos, and asbestos workers being victims of one of the biggest industry coverups involving the life and health not only of the worker, but of the worker's family, I bring you today statistics about my membership.

I have been keeping records on the death of members in my local union since 1967, and here are the facts:

More than fifty percent of all deaths among the membership, have been job-related, caused by asbestos.

Since 1967, there have been 110 reported deaths, for which I have certificates of death, and out of the 110, sixty-three were caused by asbestosis or cancer.

Out of the sixty-three, twelve were cases of mesothelioma cancer.

From 1967 to 1970, my information was derived from the death certificates and from individual doctors, but wanting further confirmation of the causes of death, I sent the death certificates to Dr. Irving J. Selikoff of the Mount Sinai Medical Center in New York, requesting his opinion on the cause of death.

Since 1970, he has continued to keep me informed on each individual case, and his research confirms the staggering fifty percent figure of deaths due to asbestos.

The above statistics are a fact that we live with daily. Asbestos workers have a terrible anxiety which dwells in each of us, that sooner or later, we may become victims of the fatal diseases that have taken so many of our brothers.

Not only do the workers worry, but so do their families. Each time one of us has a stomach ache, or is out of breath, or feels unduly tired, wives worry whether that might be a symptom of a greater illness.

If you could see some of my members who must keep an oxygen cart with them at all times in order to breathe, you would have a greater understanding of the harmful effects.

Being personally involved, as I was an asbestos worker for more than twelve years while working in the field before being elected to the position I now hold, I have been concerned about what my exposure to asbestos might have done to my children. My two oldest children were very small at the time I was being exposed to asbestos on a day-to-day basis, bringing that asbestos dust home on my clothes and shoes, I am now in constant fear of what that exposure may have done to my children and my wife.

I am not only a business representative of my organization, but I am also a minister, and as such I often become involved in the personal lives of my membership and their families, sometimes performing marriages, and sometimes handling funerals. It is a terrible thing, when called in because a member is dying, dying of a job-related disease caused by asbestos, to see him literally suffocating, dying of suffocation because of asbestosis, watching him fade away with cancer, seeing the pain and agony of the family because this person's life is being taken away at such an early age, an age long before retirement is due in many cases.

It's a terrible price to have to pay for a disease caused by asbestos which was known to people in industry as being harmful to health, a problem of which they were aware but covered up.

If a person is aware of the harmful effects of asbestos or any other harmful material and goes ahead and exposes himself to it, that is one matter, but if industry knowing full well that asbestos or any other material is harmful and goes ahead and exposes the workers to that situation without informing them of the dangers, but makes every effort to cover up the known danger, then that is criminal.

The industry, or the individual who does that, should be penalized.

I would like to give an example of how I personally have been affected by this coverup. Prior to 1965, the year that I was first elected to the office which I now hold in my union, I had no knowledge that asbestos was harmful to my health. I had no idea at that time that asbestos was a potential killer.

In 1965, Dr. Irving R. Tabershaw and Dr. Clark Cooper of the University of California in Berkeley, began a study in conjunction with Asbestos Workers Local 16, under a grant from the United States Government, to determine the hazards of asbestos to our members. Multiphasic examinations and other studies showed that a

heavy toll was taken, that the preponderance of illness suffered by asbestos workers was caused by asbestos.

In 1965, I became aware of the hazard to my health caused by asbestos. In 1955, two years after I had entered the trade, evidence of the harmfulness of asbestos was available, but nowhere were there warnings to me to beware of it, nor were any safeguards for my health offered to me.

It was in 1955 that the connection between asbestos and cancer was confirmed. It is interesting to note that what had happened prior to that year:

Going backward, we see that in 1935, U.S. and England research had indicated links between the two; in 1930, relationship between the two was confirmed; in 1918, some American and Canadian insurance companies stopped insuring asbestos workers; in 1900, the first death from asbestosis was medically diagnosed in England.

Eighty years later, we are still faced with the problems of asbestos exposure.

For those who have been previously exposed, we can do nothing: we cannot pull it out of their systems, we cannot make it go away, we cannot change the outcome to their health.

I'm not here today to try to change what has already been done, because that cannot be done. I feel certain that no one in the asbestos industry is going to be penalized for the damage that has already been done. But I am here today to see to it that the worker will have protection in the future.

I feel that this legislation now pending before the House offers protection for the worker and his family, as well as society as a whole. We have to stop this industrial type coverup of known hazards, where industry and executives in that industry, are aware of hazards and make no attempt to inform the people exposed to those hazards.

That industry or that individual must be held responsible. After all when you murder an individual, it doesn't really matter whether you shoot him with a gun, or whether you poison him. He is just as dead.

Anyone who is involved in a murder should face criminal action. And killing with asbestos or any other harmful substance is murder.

Mr. CONYERS. The next witness is Dr. Phillip Polakoff, director of the Western Institute for Occupational/Environmental Sciences at Berkeley.

He's done a great deal of clinic research and studies on the exposure effects of asbestos on shipyard workers.

We appreciate you taking time out to join us here at the hearing, Dr. Polakoff. We are also grateful for the prepared statement which we will replicate in its entirety in the record.

You may now speak to the subcommittee.

TESTIMONY OF PHILLIP L. POLAKOFF, M.D., M.P.H., DIRECTOR WESTERN INSTITUTE FOR OCCUPATIONAL/ENVIRONMENTAL SCIENCES

Dr. POLAKOFF. Thank you, Mr. Conyers.

Today we have an important mission to talk about. I would like to try to address it from a slightly different point of view. I think there are some gaps in some of the testimony that has been put forth.

I am appearing in two roles: First as a practicing clinician who, each day, sees the individuals affected by occupational hazards. Second, as the director of the Western Institute for Occupational/Environmental Sciences, a not-for-profit service, education and research organization concerned with health in the workplace and its relationship to family health and the outside environment.

In the 2 short years since its inception, this institute has become closely involved in the health problems affecting workers. These problems are by now part of an all too familiar litany, asbestos, pesticides, microwaves, radiation, noise stress and the list goes on and on.

At the same time, as a practicing physician, I've seen that litany translated in a more personal way in the physical and emotional injury of my patients, patients suffering from the insidious chronic effects of asbestos-related disease, namely as fibrogenic lung disease, asbestosis, or as cancer in a variety of different organ sites.

By way of example, let me share two experiences with you: First, I was called upon to evaluate and provide followup care for two workers in the electronics industry who were injured by an explosion of toxic acids.

After the explosion, the workers were brought to a hospital emergency room for treatment. Patients knew nothing about their toxic exposure. Neither did the attending physicians nor, in fact, did they have access to the necessary information to deal with this explosion. Some of the gases might have included arsine, hydrochloric acid, phosphine, silica tetrachloride or several others.

The employer apparently didn't believe that knowledge of these substances was important in case of an accident. When we finally obtained the information we could find no useful references in the medical literature. There were major gaps in the chronic long-term effects of this combination of gases either in solo or in tandem.

I cite this case as an ongoing form of corporate negligence. The use of new substances about which we know very little if anything, and their use without alerting anyone to their potential danger.

Just prior to my arriving at these hearings, I saw a group of persons who had been exposed to a very toxic pesticide, the result of a railroad accident here in the bay area.

Once again, the medical literature yielded no data on the long-term effects of this particular substance. I did not have enough information to provide an objective answer.

Instead, I had to leave these workers wondering if they would become sterile, develop cancer, or suffer some other disease that would appear in the years ahead.

At WIOES or in my clinical practice, we continually find ourselves without sufficient information, largely because the manufacturers and users withhold the information or don't do the necessary research to come up with the necessary data. And, in turn, this impedes the necessary research and evaluation necessary to deal with these individuals in an appropriate manner.

We see the problems of patients exposed to microwaves in the 1950's. These people were scattered around this country, but they came together to create their own network called the Radar Network Victims. These individuals suffer from cataracts and systemic health problems which, to date, no one has looked at except the press.

We see health problems amongst the veterans of atomic testing, suggesting the latency problems associated with asbestos-exposed shipyard workers.

We see Vietnam veterans who were exposed to agent orange. We wonder about today's toxic dumps that are kept from public scrutiny.

The list, once again, goes on, and on, and on, and what we know about asbestos, I am sure, to one extent or another, will be brought forth with agent orange, low-level radiation, and the list of thou-

sands of other potential toxic environments that people exist in today.

Again, these are examples of employers who did not warn their workers or who did not subject new substances to more than a casual review.

Active or retired, abled or disabled, union members or nonunion members, whatever the specific complaint, these workers share a common anxiety outside of the purely medical realm. Anxiety of not knowing who or what to believe.

WIOES activities, whether focusing on education, research, or services, are directed toward protecting the health of the workers, improving the quality of their work environment.

To attain these objectives, it is almost always necessary that we ask the workers to do something: to use a particular piece of equipment, to modify a work process, or to change their personal living habits.

When we ask this of a worker, there is an implied promise that the employer will do his fair share or that the agency in charge of the worker's safety and health will see to it that the promise is kept.

In seeking out the response and cooperation of workers, one cannot help but notice the parallel of trust and cynicism. Trust that what is good for the employers, in the long run, is good for the worker. Trust in the technology of medical care and the promises of space-age research. Trust in the strength of organized labor and the protective power of Government. Trust in the hope that environmental hazards are the exaggerated fancies of the media and of persons far removed from the work scene.

Cynicism makes the worker suspect that the profits come before worker health and safety. That medical diagnosis is influenced by who pays the doctor. That labor leadership is often volatile and at times corrupted by internal politics. That Government is a ponderous and ineffectual bureaucracy. That behind the bland assurances that all is under control, illness and death of so many workers must be more than coincidence or nature taking its normal course.

These ambivalent feelings are not peculiar to the workplace. We are all caught up in the complexities of our exploding technology. We are engaged in the precarious act of balancing health needs against economic needs.

The employer who threatens to close a plant if making it safe costs too much but who hides the cost-and-profit data can cause considerable harm.

Yet we accept the threat as a legitimate tactic, perhaps because the harm is largely economic.

On the other hand, the employer who conceals a dangerous life-threatening hazard can cause irreparable human damage which cannot be balanced by legitimate economic self-interest.

The central fact behind H.R. 4973 is that the lack of cando, the lies of many corporate leaders, has led to the disability and death of thousands of workers needlessly.

Beyond this there are also some important domino affects. The corporate leader's position is such that when they renege on their responsibilities and lose our confidence, they call into question the integrity of those around them.

The tangled web of deception begins to make a mockery of medicine, law, insurance, and Government regulations.

The result is that the worst of the workers' cynicism is justified. And in a poor imitation of corporate greed, the workers view the physician, lawyer, union representative, Government official, all as a part of a system not really designed to help and protect. But to be manipulated as much as possible.

H.R. 4973 will signal the workers that the system can be changed, made to work. That we will not ask them to wear a mask or stop smoking while, at the same time, allowing employers to surround them with unannounced dangers.

There may be little need to enforce the provisions of H.R. 4973 once it is enacted. Let us hope that it will encourage employers to shift their energies from deception to disclosure, from camouflage to cooperation.

Finally, I hope that H.R. 4973 will attract the support of those corporate leaders who recognize the complexity of health in the workplace, but will present those problems to their workers and to their stockholders and who believe that the cost of running a business need not include a cost of human lives.

This concludes my formal testimony. I'd like to share a few more thoughts with the subcommittee.

Over the last couple of years, the people you see here haven't been an exception in my life. They have been a daily occurrence.

There is a need, not just in the congressional arena where people like yourselves are putting forth, but there is a need in almost every segment of our society, whether it be the voluntary agencies or the medical schools or the legal community or my own personal community of medical physicians to start to develop a dialog, to start to interact.

The problems of health touch all of us, either touch us early on in our lives if immediate crises occur, however, generally impact more as life goes on. And it's going to take an integrated approach and a comprehensive approach if we're going to deal with the problems of asbestos, the problems of microwaves and the like.

The victims have an equal amount of knowledge in their fields as the physicians, the Congressman, and the lawyers have in their respective fields. We're all technicians and we're all relating to the technical problems. It's just how we manifest it in our professional lives.

So I think the victims here are real professionals too. When a victim or their representative can come up in front of you and his colleagues and show the passion that they have shown, I believe a major dedication to the problem has been manifested.

I think you have a major responsibility in front of you. I know your track record, Mr. Conyers. And I know what you can do. But it's going to take more than just Mr. Conyers and the Congress of the United States to deal with this issue. It is going to take the committed efforts of our entire citizenry.

I thank you very much.

Mr. CONYERS. Well, you've rendered a very powerful statement, Dr. Polakoff. As a treating physician working clinically with many of the people who are, indeed, the victims of an unnecessary negli-

gence that goes on, I'm grateful that you could fill in the gaps for our witnesses.

I gather from the last part of your comment that there seems to be an unwillingness on the part of too many people in our society at responsible positions to deal with this problem, that it's considered to be marginal, it's someone elses responsibility, or it's something that can be managed by whoever is assigned. What you're seeming to say is that, really, everyone should begin to look at this a lot more carefully than before.

Dr. POLAKOFF. I don't think we have a choice. Begin to look at it, it's a shame that we haven't looked at it. The choice isn't ours. The choice has already been given to us. Either we look at it or the nature of our society is going to be altered from within and not from without very quickly.

These are rather major forces that are disrupting the strength of our Nation, and you think of our Vietnam war veterans who are now at risk from exposures there. People in the test ranges are at risk from what they went through. Our shipyard workers, the backbone of American society, are now crumbling due to these adverse affects. I think it's time that we take a very close look at what we're doing to our structure and what it's going to take to change this.

I think we have the capacity. I think the whole medical profession has to be opened up in the learning areas. I think the legal profession have to be held accountable in how they are dealing with these people and making sure that they are not looked at as just bodies going through a process. But as human beings going through a process to get what their dues are.

I think the responsibility is on all. There is no one who can give up their role in dealing with this problem.

Mr. CONYERS. Jerry DeMeo, the electrician who was here earlier, expressed himself in the very same way. He said it was painful to him as one who believed in and served his country, that there could be such a massive turning away in the Government, especially, from the plight of so many people like himself, for him to be shunted around, literally sent hat in hand from doctor's office to doctor's office, from Government agency to Government agency, all in a runaround kind of situation that he clearly could feel and resent.

I hear you calling for a new awareness and concern at all levels of government, and I can only applaud your very well-stated comments.

Would there be any usefulness served if you attempted to describe, from your experience, the impact of asbestosis and some of the other diseases upon the lives of some of your patients?

Dr. POLAKOFF. It's hard to generalize. I can share some of the feelings they bring to me and where they come from.

One of the things about the asbestos-exposed victims, I've yet to find a malingerer in the bunch. They come and tell me their problems, it's really what's going on. It's the most incredible phenomenon when they tell you exactly how it is. Their stories are all similar. Basically they all work in the shipyards, they all put in their 20 or 30 years, mainly in the Federal sector, some in the private sector.

They come to you, some of them were screened by us 2 years ago. It often takes them 2 to 3 years to develop the courage of their convictions to come forth. They are scared. They don't want to know. Their other problem is, due to the doctors, the media, many people perceive that every one of them is going to come down with the worst.

Not everyone is going to come down with severe asbestosis. Not everyone is going to wear an oxygen tank. But every one of these people think that it's going to be them. When "is it going to hit me?"

Mr. CONYERS. And yet, everyone could be eligible.

Dr. POLAKOFF. That's right, oh sure, that would certainly be the case.

They come and usually it's the wife that comes in with them to discuss their spouse's problems. They come in not knowing what to expect.

They come in also, usually with some data. They come in with a medical X-ray report from the U.S. Navy, dated 1976 or 1977, saying nothing is wrong, and additional data dated 1978 or 1979—after the U.S. Navy had made a concerted effort to improve their radiological interpretation—indicating asbestos-related disease.

So all of a sudden, the same person who read it one year and rereads it the next year when more training is available changes the results. So there is a credibility gap.

They go to their own doctor and the doctor says, "Well, if I put it on Blue Cross-Blue Shield, they won't cover it because it's a work injury." Then there is the problem, who is to pay the bill?

Further, an additional problem arises, this being that the doctor generally doesn't want to get involved in medical/legal activities. It's not something that's a great pleasure to have subpenas arriving at your office on a regular basis. I've probably been subpenaed more than anyone in this country, including some of your colleagues in Washington.

I've had, literally, over 1,000 subpenas at my front door in the last year dealing with the people we have studied. Each subpena is appropriately answered.

Mr. CONYERS. Remember in the old days people used to say Congressmen handed out subpenas and now we're receiving them.

Dr. POLAKOFF. They come and the questions are, basically, "Doc, we've been all around. We're not looking for money. We're looking for someone to tell us something that we can believe is credible. Will I live? Can I support my family?"

You'll find out that there have been many people who worked around asbestos whose widows now reside in mobile home communities. Phenomenal.

Mr. CONYERS. What does that mean?

Dr. POLAKOFF. It means that they lost their house. They've become bankrupt. In addition, people have had to move for medical reasons. For example, they resided in the San Joaquin Valley. And then the doctor tells them that they have to move to the coast because it's better for the lungs. They move to the coast. The price in California for living on the coast is much higher than living in the valleys. This causes them to have monetary problems.

They also suffer from social disruption. When you live in the valley, your family is there, your colleagues, your friends, your workmates are all there. You move to the coast. You're giving up that.

So many of them feel this gloom and doom of despair. Where are they going?

Recently we've been holding a series of rap sessions at our institute, where victims come together. These people have been invited from all over the State. And the amazing fact is on their day off they will drive 200 or 300 miles to share their experience with someone else.

Last year we put on a public seminar in Vallejo. Over a thousand people came on a Saturday, spent 8 hours to listen and question their colleagues and professional people on what the solution to their problems might be.

The solutions are often not forthcoming especially in this year of prop 13 and cutbacks in Federal spending. We've sort of lost the place for social service in our society. And this is what's needed in a population like this. A place to go for appropriate treatment, a place to go for appropriate counseling.

We brought together a group of physicians, about 20 pulmonary physicians in the bay area. They all agreed that the reports were about the same. They all knew how to interpret the same medical data. The only problem was when they got to the conclusion. And the conclusion depended on who was paying their bills, not on the scientific merit of the case.

So if you're hired as an applicant's attorney or plaintiff's attorney, then you put all the accent on asbestos. If you are retained from the other side, the company's side, then everything is cigarette smoking.

Well, the worker gets examined by both sides and this leads to more and more confusion and lack of direction. So I think this bill is a strong statement. Its time has come, as someone else said.

I think it's a start. It's certainly not going to answer all the problems. As I mentioned to counsel before this, there is another issue that you should keep in mind. That's corporate criminality versus corporate irresponsibility. And I don't know where the line stops and starts.

When something is knowingly known and not put forth to the public, that's criminal, say, with asbestos.

What happens when the same company profits to a sizable extent but doesn't put that fair share of profits into the research of the product before it gets on the market? That's a form of criminality or corporate irresponsibility, however you want to look at it.

So I think this bill has a shortcoming in its definition of criminality and I think it could be a little bit more expansive and a little bit more all-comprehensive by trying to make a better definition of criminality.

There is a lot of work to be done.

Mr. CONYERS. What about the trend of balancing budgets at the national level? Is that going to have an impact on your work at the clinic?

Dr. POLAKOFF. I am sure it's going to have an impact. There are many, many different projects that have to be funded that aren't being funded. It's not only our institute. Our institute is a small institute, sort of a prototype. It's a model. We certainly don't have adequate resources. I'm the only physician at the institute, per se. I certainly have limitations on what I can do.

The Government, in many ways, has used the institute. Maybe it's of interest to you that the National Cancer Institute put out a request for demonstration projects last year, to establish resource centers for asbestos and other environmental carcinogens in this country.

We were fortunate to be awarded the contract. But, unfortunately, only several other organizations in the country submitted a bid and we ended up being the only organization awarded a contract.

I think we have to have a heavier emphasis on preventon in the budget of Health and Human Services now. We have to have a better emphasis on the educational process. Not just in its traditional stereotype on how you educate a physician.

One of the problems in the education of a physician is seldom are they put into the community, however one wants to define a community, of dealing with working class people, dealing with minority. It's very easy when the physician is on high, in his office, and some one comes to them.

The issues we're dealing with now, the office is the community. The office is interrelating different aspects of our society to work and listen to each other.

Last week we did a training session for the American Cancer Society, the volunteers. Many of the unions support the American Cancer Society rather heavily. But when an individual who lives in an environment where there is a lot of cancer calls up and asks if it's work-related, to date the American Cancer Society has had very little to say on this issue. So that's another important issue.

The amount of money that's going to prevention in the work environment, at this point, is pittance. Any further cutbacks will almost make it negligible.

So I think, at this point, this is not one area that can be cutback, unlike the defense budget. Congress will have to sponsor the work that such institutes as my own is doing, using the best of biogenetics or bioengineering. Our institute has to be cloned in one way or another throughout the country.

Your own city certainly could have one that could reach out to the needs of the people in the automobile factories as well as the shipyards.

Mr. CONYERS. I was thinking that this prototype could successfully be replicated almost in any number of places. It's an excellent beginning and what I see as, through budget decisions, reducing the possibility of expansion and endangering your existence, probably, just at a point when we're prepared to move forward clinically in a way that we never have.

Dr. POLAKOFF. These issues cannot be solved by individuals. they have to be solved in a team approach. It's very complex, but the solutions aren't impossible. They involve geologists, engineers, biophysicians, social workers, physicians, the political scene. One of the problems is in our education for all of us. It has many, many voids. We have to train our people as they grow up about the complexities of society.

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Some of us in the academic community and the research community often forget that there is another community called working class whose problems need realistic solutions. To find these solutions, we must all seek new coalitions and channels of communication with the victimized populations.

It's going to take many, many people and also will take support. And, unfortunately, the support does mean dollar bills and it's not that easy to come by.

Mr. CONYERS. It seems to me that somewhere along the line we've got a governmental defect, a problem in the sytem where somebody is not hearing somebody or that there are great commercial influences that are inhibiting the Government from moving where it is and these things are all happening and not happening because of certain pressures and pulls. I have often wondered how to best outline these things. The decisions and the public policy determinations made in the Federal Government come because of forces and effects as well as judgments.

Dr. POLAKOFF. Let me share one personal experience that I had and I certainly don't have the daily roleplaying and decisonmaking that you plan in your mind. We have other decisonmaking. Peoples' lives, we decide on an individual basis how we can direct them in appropriate ways.

I sat on the National Cancer Institute asbestos task force, which was giving policy to the late Secretary of HEW, Joseph Califano. It was interesting to note that in the decisionmaking process, there was not one clinician. There was not one person who was treating these people in these hearings.

Now that's not to blame NCI, that's not to blame the clinicians. But there was a gap in the process of bringing different forces to play. There were a lot of asbestos vacuum cleaning manufacturers there, and there were a lot of lobbyists from manufacturers there.

But when it came down to the victims, there was one victim having his say. I don't know if it was appropriate, but they kept on using the same person to state his case over and over again.

This is going to duplicate itself. The universities don't want to get into the controversial areas. When they do, you saw from the testimony on DBCP, where we had that in the early 1960's. We had data on vinyl chloride in the late 1960's, which wasn't made public until the early 1970's.

The list goes on and that's not what the intent of my testimony was to put forth, a rehashing of what everyone has put forth before you. But to show you that there is a hope going forward and we certainly have to learn from our past mistakes, and they really were rather tragic.

Mr. CONYERS. That's why I think this part of our review is very important because if this is not understood, then why the system doesn't function for Mr. DeMeo doesn't make sense to him. It was clear that he was hurt and puzzled why a system which he served and supported and believed in could so clearly fail him.

Dr. POLAKOFF. One last experience that I think sums it up in my life, how I try to relate to the U.S. Government in this particular case.

In 1978, when we started this large screening project, I got a call from the Department of Defense. And when you're a private practi-

tioner and someone calls you from the Department of Defense, you get a little "antsy."

Mr. CONYERS. They handle more money than anybody else in the Government.

Dr. POLAKOFF. At this time, there was the Assistant Secretary for Health and the Human Environment, Assistant Secretary George Marienthal. He said, "I want to come out and see you. I've heard a lot about what you're doing."

I said, "I really don't need to see you. I'm very comfortable in my office and I'm pretty busy. But if you do come out, we're going to talk business and we're going to come up with a joint approach."

He said, "Well, I'm coming out." So he shows up and he brings with him his supporting cast of military men. He comes into the office and I sit him down and said, "Oh, it's nice that you could come out here. I'm looking forward to talking to you. I am sure at the outset that we're going to accomplish something."

Well, to make a long story short, at the end he summarized the conversation by saying, "You know, Phil, I like what you're doing, but it just doesn't fit into our program. Let's take it that we're like a train track. We're two tracks going parallel."

And then I said, "Well, what about some T-junctions, you know, where trains get shuffled off and we can come back on?"

He said, "No, I think it's better that we keep them parallel. So what's that saying," he said, "is in the naval arena you use one form of health-care system and in the outside communities there is another."

And in medicine, to be effective, there have to be good communications. If you go to one physician and you move to another place, you'd like to know that that data is transmittable.

That didn't happen until the last 6 months when the Navy, to their credit, has improved their work environments. It's not the same in the private sector.

Many of those who work in the Federal sector were not protected by OSHA until this year when the President signed an Executive order.

Mr. CONYERS. Unless we amend this bill, it won't apply to Federal employees.

Dr. POLAKOFF. And then it won't apply to all the problems with agent orange, it won't apply with low-level radiation.

Mr. CONYERS. There will be a great deal of resistance of "Why include Federal workers? We've got enough problems with the private sector," and this would be Government people saying, "Let's exclude the people that work for the Federal Government, itself."

We are delighted that you could join us, Dr. Polakoff.

We're very happy to receive your testimony and hear your additional comments and I hope we'll be working as closely together as we can.

[The written statement of Dr. Phil Polakoff follows:]

WIOES

WESTERN INSTITUTE FOR OCCUPATIONAL/ENVIRONMENTAL SCIENCES, INC.
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TESTIMONY ON WHITE COLLAR CRIME (H.R. 4973)

BEFORE THE SUBCOMMITTEE ON CRIME OF THE COMMITTEE ON THE JUDICIARY

MARCH 24, 1980
SAN FRANCISCO, CALIFORNIA

Phillip L. Polakoff, M.D., M.P.H.
Director, Western Institute for Occupational/Environmental Sciences
Berkeley, California

TESTIMONY OF PHILLIP L. POLAKOFF, M.D., BEFORE THE HOUSE CRIME SUBCOMMITTEE HEARING ON H.R. 4973; SAN FRANCISCO, CALIFORNIA, MARCH 24, 1980.

Gentlemen:

I wish to thank you for the opportunity to appear before you today, and to make some rather brief comments on my own reaction to HR 4973, and my view of its significance.

I am appearing in two roles: first, as a practicing clinician who each day sees the individual effects of occupational hazards; and secondly, as the Director of the Western Institute for Occupational/Environmental Sciences, a not-for-profit service, education, and research organization concerned with health in the workplace and its relationship to family health and the outside environment.

In the two short years since its inception, this Institute, WIOES, has become closely involved in the health problems affecting workers. These problems are by now part of an all too familiar litany: asbestos, pesticides, microwaves, noise, stress, - the list goes on and on.

At the same time, as a practicing physician, I have seen that litany translated in a most personal way - in the physical and emotional injury of my patients; patients suffering from the insidious chronic effects of asbestos related disease - mainly as fibrotic lung disease (asbestosis), but also as cancer in a variety of different organ sites. By way of example, let me share two experiences with you.

1. I was called upon to evaluate and provide follow-up care for two workers in the electronics industry who were injured by an explosion of toxic gases. After the explosion, the workers were brought to a hospital emergency room for treatment. The patients knew nothing about their toxic exposure. Neither did the attending physicians - nor in fact did they have access to the necessary information. The composition of the gases might have included arsine, hydrochloric acid, phosphine, silica tetrachloride, or several others. The employer apparently didn't believe that knowledge of these substances was important. When we finally obtained the information, we could find no useful references in the medical literature.

I cite this case as an on-going form of corporate negligence - the use of new substances about which we know very little, if anything, and their use without

alerting anyone to their potential danger.

2. Just prior to my arriving at this hearing, I saw a group of persons who had been exposed to a very toxic pesticide as the result of a railroad accident. Once again, the medical literature yielded no data on the long-tern effects of this particular substance, and I did not have enough information to provide an objective answer. Instead, I had to leave these workers wondering if they would become sterile, develop cancer, or suffer some other disease that would appear in the years ahead.

At WIOES or in my clinical practice, we continually find ourselves without sufficient information, largely because the manufacturers or the users withold that information, and in turn impede the necessary research and evaluation.

We see the problem of patients exposed to microwaves in the '50s - radar network victims - suffering from cataracts and pulmonary and systemic problems which no one has looked at carefully.

We see the veterans of atomic testing, suggesting the latency problems associated with asbestos-exposed shipyard workers.

We see Viet Nam veterans who were exposed to Agent Orange. And we wonder about today's toxic dumps that are kept from public scutiny.

Again, these are all examples of employers who didn't warn their workers, or who didn't subject new substances to more than a casual review.

Active or retired, abled or disabled, union members or non-union, and whatever the specific complaint, these workers share a common anxiety outside the purely medical realm - the anxiety of not knowing who or what to believe.

WIOES activities, whether focusing on education, research, or services, are directed towards protecting the health of workers and improving the quality of their work environment. To attain these objectives, it is almost always necessary that we ask the worker to do something: to use a particular piece of equipment, to modify a work process, or to change a personal living habit. And when we ask this of a worker, there is an implied promise that the employer will do his fair share, or that the agencies charged with worker safety and health will see to it that the promise is kept.

In seeking out the response and cooperation of workers one cannot help but notice a parallel of trust and cynicism. Trust that what is good for the employer is in the long run good for the worker; trust in the technology of medical care and the promises of space-age research; trust in the strength of organized labor and in the protective power of government; and trust in the hope that environmental hazards are the exaggerated fancies of the media and of persons far removed from the work scene.

But cynicism makes the worker suspect that profits come before worker health and safety; that medical diagnosis is influenced by who pays the doctor; that labor leadership is too often volatile or corrupted by internal politics; that government is a ponderous and ineffectual bureaucracy; and that behind the bland assurances that all is under control, the illness and death of so many workers must be more than coincidence or nature taking its course.

These ambivalent feelings are not peculiar to the workplace. We are all caught up in the complexities of our exploding technology. We are engaged in the precarious act of balancing health needs against economic needs. The employer who threatens to close a plant if making it safe costs too much, but who hides the cost and profit data, can cause considerable harm. Yet we accept the threat as a legitimate

tactic, perhaps because the harm is largely economic. On the other hand, the employer who conceals a dangerous, life-threatening hazard can cause irreparable human damage which cannot be balanced by legitimate economic self-interest.

The central fact behind HR 4973 is that the lack of candor - the lies - of many corporate leaders has led to the disability and death of thousands of workers.

Beyond this, there are also some important domino effects. The corporate leaders' position is such that when they renege on their responsibilities and lose our confidence, they call into question the integrity of those around them. The tangled web of deception begins to make a mockery of medicine, law, insurance, and government regulation. The result is that the worst of the worker's cynicism is justified; and in a poor imitation of corporate greed, the worker views the physician, lawyer, union representative, government official, all as part of a system not really designed to help and protect, but to be manipulated as much as possible.

HR 4973 will signal the workers that the system can be changed and made to work; that we will not ask them to wear masks or stop smoking, while at the same time allowing the employer to surround them with unannounced dangers.

There may be little need to enforce the provisions of HR 4973 once it is enacted. Let us hope that it will encourage employers to shift their energies from deception to disclosure, from camouflage to cooperation.

Finally, I hope that HR 4973 will attract the support of those corporate leaders who recognize the complexity of health in the workplace, but who will present those problems to their workers and to their stockholders, and who believe that the cost of running a business need not include a cost in human lives.

I thank you.

Mr. CONYERS. Our next witness is the executive secretary-treasurer of the California Labor Federation, AFL-CIO, Mr. John F. Henning, whose statement we have.

We welcome you, Mr. Henning. I know you've been here quite awhile.

We'd like to incorporate fully your prepared statement in the record at this time and acknowledge your long concern about this very sensitive issue in the labor movement and invite you to proceed in your own way.

Welcome before the subcommittee.

TESTIMONY OF JOHN F. HENNING, EXECUTIVE SECRETARY-TREASURER, CALIFORNIA LABOR FEDERATION, AFL-CIO

Mr. HENNING. Thank you, Mr. Chairman, members of the committee. My name is John F. Henning. I am the executive secretary-treasurer of the California Labor Federation.

Our organization represents 1,700,000 members in this State. I have submitted the formal document and in the interest of time I will refer only to certain passages.

Our basic view is that the penalties should be imposed upon business wherever the nondisclosure of serious dangers inherent either in the production, or the use of what they merchandise, has been in effect. And we are convinced that that has often been the case historically and is the case today.

Actually our organization has not been interested in this as long as you would think, Mr. Chairman, and we appreciate your compli-

ment. But I must say that we've been deeply interested in this, really, since 1978, when it was brought to our attention by the asbestos workers union and the metal trades council, the Pacific Coast Metal Trades Council, that numerous deaths of one might say, senior workers, workers in their late fifties and sixties, who had been employed in the Mare Island Shipyards were dying by reason of asbestosis.

And so in company with Dr. Polakoff who testified here and who is certainly the prevailing authority in this part of the country on the subject of industrial disease, particularly asbestosis, together with Dr. Irving Selikoff of New York, I would say one of the two outstanding national medical figures, in company with Dr. Polakoff, we conducted a series of surveys of those who had been employed in our shipyards and in longshore work during the period of the Second World War.

And so we had clinics established in San Francisco, in Oakland and in Richmond. And we advertised that all workers who had been employed in the shipyards or in asbestos-related work could come for the free testings.

And on page 2, there is a brief summary of that. The survey was conducted by the Western Institute for Occupational/Environmental Sciences, of which Dr. Selikoff spoke. And the clinic analyses involved the screening of more than 2,200 workers. And the analyses, then, of more than 6,000 X-rays.

We financed the study together with the asbestos workers union and the Pacific Coast Metal Trades Council, other individual unions assisted.

The study found that 45 percent of the workers surveyed had significant abnormalities consistent with asbestos-related diseases. Another 30 percent showed minimal abnormalities consistent with that asbestos-related disease.

I am sure Eddie Story has told the story of what it meant for the members. And then he had two witnesses here. And I believe Mr. Van Bourg also had witnesses testifying to the personal experiences.

We became deeply involved with the revealed deaths in Vallejo and the Mare Island Shipyard jurisdiction.

And a month and a half ago we sponsored, in company with the Western Institute, a conference on health and work that drew not only workers from the Western States, immediate Western States, but medical authorities from New York, Illinois, Pennsylvania, University of Michigan, all concentrating on the insidious nature of so many industrial diseases that do not become apparent until late in the worker's life. And we are concentrating, of course, in all of this, not only in cure and prevention but, certainly, on the workers' right to know.

And in the present session of our State legislature, we have sponsored a bill which has enjoyed bipartisan support, passing the lower house of our legislature, 73 votes to none, which establishes a $2,000,000 fund for the immediate treatment of the victims of asbestosis, a disease, again manifesting itself, usually, 20 to 30 years after contact.

And the difficulties workers have in receiving compensation or medical treatment under law is the proving of the record. Many of

the shipyards in which these workers were employed no longer exist.

That's true of Barrett & Hilt Shipyard which built concrete ships in this area in the second war. It's true of Western Pipe & Steel Co., which built C–3 freighters.

The very obtaining of records and, certainly, the proof that the worker was, in truth, exposed to asbestos in his work employment is difficult to prove a quarter of a century after the fact.

So our legislation provides for what is in effect an emergency fund to provide immediate care under the law for such workers.

Mr. CONYERS. Is it adequate?

Mr. HENNING. Well, it's to be a State-financed fund in the first instance and subsequently to be financed by employers. It's one small step forward but the principle is, perhaps, more important than the amount.

Mr. CONYERS. Has it been done in any other State?

Mr. HENNING. I can't testify to that. I don't know, Mr. Conyers.

But it does indicate the growing realization of this problem in the legislature and in the total community.

Next I would direct your attention to page 5, where we cite the testimony submitted. I am sure you're familiar with it already. There's no need to go into detail on it. There is the testimony submitted by Congressman Miller about the Johns-Manville Corp. as far back as 1933, settling 11 asbestosis cases for $30,000, with the assurances that the workers involved would not take separate legal action.

In our bill in the legislature we have a specific provision that allows the workers to sue, regardless of this rather minimal treatment they will receive under the provisions of the legislation we are endorsing.

Johns-Manville, by the very nature of its work, has a rather despairing experience not only with asbestosis but with diatomaceous Earth issue.

I remember about 1954, when we were holding our State AFL–CIO, AFL at that time, convention at Santa Barbara. There was a strike at the Lompoc plant and a corps of workers came down. The strike was over safety provisions and the chairman was a man who had the same name as I, Jack Henning.

I served as director of industrial relations for the State of California under Governor Brown, that's the elder Brown, from 1958, to 1962.

We had more complaints about Johns-Manville so at that time I directed the chief of the division of industrial safety to make a very exacting survey. I told him to look up my namesake at Johns-Manville.

He found him, all right. He was in the cemetery, along with scores of other workers, who, through the years, have died in the Johns-Manville operation. So this problem is not a new one but it's becoming a more revealed one, I believe, at the present time.

The testimony of corporate evasion is found on page 5. There is, again, no particular need for me to read out the exact language of evasion by the employers.

There is a reference made on page 3, to a kind of related white-collar crime. We sometimes forget the penetrating and permanent nature of white-collar crime.

I cite here the NBC news report of last week that scores of doctors, members, certainly, of a profession of nobility, have been implicated in an FBI investigation of medicare and medicaid fraud involving thousands of dollars in kickbacks from doctors for medical laboratory services.

The NBC correspondent, Bill Sternoff, reported that the manager of one medical laboratory said that a doctor at one particular clinic wanted $5,000 in cash to begin with and then $3,000 a month in cash payments.

Now we know that frailty is common to all men and women and to all occupations. But we do think that not enough attention has been given, historically, to this kind of crime.

So I would commend the full document to you. I believe you made a reference to the fact that you were going to ask me the question of why we have been unable to solve these problems in the past.

I have a theory on that, Mr. Chairman, members of the committee.

Mr. CONYERS. I'd be delighted to hear it.

Mr. HENNING. Aside from the general lack of knowledge in the trade union movement and in the community and among working people, whether union or nonunion, there is something else involved here.

In 1870, Bismarck, Germany, had the world's first workers compensation law and we like to think we're an advanced people in the social sense. But it wasn't until the progressive era in or own country's history under the LaFollettes in Wisconsin, 1912–14, that we had our first law enacted. Here in California, it was 1914. And we all appreciate the law but it had certain failings from within that we encounter whenever we move toward reform or extension of protection under the workers compensation law. It is an adversary system, politically an adversary system, economically an adversary system.

The employer is obliged to carry insurance. Well and good, we're asking now for more employer responsibility. But since he's obliged to pay for that insurance, he becomes a force in any kind of legislation that will be enacted on workers compensation.

The insurance carriers are involved. It has been said because they favor liberal compensation benefits, for example, because it makes for higher payments. Whether that's true, or not, I'm not so sure. But this I know, whenever we propose in Sacramento any expansion of workers compensation benefits, any protections that should be added to the present law, we face the fierce opposition of two very powerful forces in American political life, the employer lobby, and the insurance lobby.

And I can tell you that in Sacramento, they are among the dominant forces. So always there are these adversary positions and I can understand their position. I can understand their wish not to be responsible for increased benefits which means higher insurance costs.

But it's a basic limitation to any kind of reasonable progress in this law. And this is sometimes forgotten and sometimes ignored.

But if you're seeking, if it's your destiny to be involved in seeking for greater protection, for example, of workers under the law to cover asbestosis victims, when you think of the retroactive aspects involved, you're talking cash, you're talking money and it's not general fund money. So you might persuade the legislators of both parties that a civilized country would care for its people.

You're talking about fighting insurance lobby and you're talking of fighting employer's lobby.

That's the basic reason why we've made such slow progress.

Mr. CONYERS. Well, I'm very glad that you spelled this out because if we're really not candid about it, many people won't understand why the Congress can't get its act together any better to do something that is perfectly rational, would be perfectly beneficial to the national interests, and would support many decent working people who are otherwise without a remedy.

Many of those same interests strongly influence the campaigns and the elections of the very people that make the decisions. And they influence it in a very major and direct way.

And for us not to think that that's going to have an impact on otherwise good judgment is not to understand, then, why we are just getting around to this matter in 1980, as opposed to a decade or two ago, when the issue may have been appropriately raised.

So it seems to me that understanding the political and the governmental system of, as you say, the adversary role that many of the powers play, has a great deal to do in this country on what public policy and, ultimately, what legislation is enacted.

Mr. HENNING. If I may say so, President Nixon appointed a national commission on workers compensation to consider national standards. This was 1971. And actually the commission findings were good, except for one area. But it does show how controlling the money aspect is. Liberalization was recommended in virtually all areas.

This was a joint management public labor commission. I would say it was fairly appointed. But the one area in which this commission would make no recommendation despite the labor movement protest was in the area of permanent partial disability. That's where the money is.

In other words, where total permanent disability was involved, there are so few in that category, the commission was liberal.

But not when it came down to the permanent partial disabilities, partial loss, loss of a hand, loss of an arm.

Mr. CONYERS. What was the recommendation that would have been more reasonable, then? Was it to increase those benefits?

Mr. HENNING. Oh, yes, yes.

Mr. CONYERS. Are they very small?

Mr. HENNING. Yes. They are small in our State.

Now in 1976, under the present administration, we were able to liberalize the law but not in permanent partial disability.

Mr. CONYERS. At the State level?

Mr. HENNING. Yes.

Mr. CONYERS. Workmen's compensation law?

Mr. HENNING. Yes.

But I only give that as an example, to show what the issue is. It's money. It's employer money that's the issue and the insurance carrier. But that isn't the sole reason, though, for the difficulties here.

I think all of us were at fault, through lack of medical knowledge. Perhaps the medical powers of the country, themselves, are to blame, I'm not certain of that. But actually we didn't know the inherent dangers of asbestosis until the death toll began. And it comes late because it is an insidious disease. It's not easily apparent as is the broken arm or the split head. Twenty-five years after the contact, the victim begins to die.

So I don't wish to place all of it on the commercial aspects of it so far as asbestosis is concerned. But when it comes to the reform, when it comes to the dimension, when it comes to the retroactive payments of past guilt, you're against economic realities of the system under which we live which is a good system but which has certain positive failings.

Mr. CONYERS. Well, nobody would know better than you because you're usually in there fighting against these other economic and political forces in the attempt to balance the equation.

Mr. JACKSON. It's a cost item. The employers' representatives tell me they believe the permanent partial benefit should be increased.

But they say very candidly, "Do you know how much that costs? We'll go with you on temporary disability. We'll go for a 20-percent increase, we'll go for a 30-percent increase but we cannot." Because, after all, the entire cost of the whole system represented only 2 percent of the total payroll of the State. So it isn't all that forbidding.

But they fear the cost and they are realistic enough to tell you it's a money problem. They would like to see better benefits and permanent partial payments. This, again, is only one illustration but it tells the story of where we are as far as the workers' right to know.

And certainly the question is becoming a national one through such debates as those that have centered about the *Pinto* case, forgetting who's guilty or who's innocent, the product's liability.

Certainly the recalling of millions, literally millions of automobiles over the last 10 years tells a story, too. There is a problem. and I think we're on the road to a solution.

Mr. CONYERS. Thank you very much for joining us, Mr. Henning. We appreciate your testimony and we hope that you will follow our attempt to enact this legislation.

Mr. HENNING. Well, that's right. We hope so because in some States, you know, you have absolutely no safeguards. I trust there is no one here from Texas but I can remember 10 years ago when the chief of the division of industrial safety in Texas was also the boxing commissioner.

Mr. CONYERS. Thank you again.

[The written statement of John F. Henning follows:]

CALIFORNIA LABOR FEDERATION, AFL-CIO

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Executive Secretary-Treasurer

ALBIN J. GRUHN
President

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STATEMENT ON WHITE COLLAR CRIME (H.R. 4973)

Presented to

House Judiciary Sub-Committee on Crime

at

Ceremonial Court Room, Federal Bldg., 450 Golden Gate Ave.,

San Francisco

March 24, 1980

by John F. Henning,

Executive Secretary-Treasurer,

California Labor Federation, AFL-CIO

69-943 O - 81 - 31

Mr. Chairman: My name is John F. Henning. I am Executive Secretary-Treasurer of the California Labor Federation, AFL-CIO, which represents California's 1.7 million AFL-CIO union members.

Before addressing myself to the urgent need for effective legislation to bring about a far greater degree of corporate responsibility to the public on issues of public safety, I would like to thank you, Mr. Conyers in behalf of the AFL-CIO members of this State for the major contribution you have made in sharpening the public focus on the extent of corporate white collar crime abroad in our nation through the investigations you have conducted during the past few years. Those investigations have clearly heightened public awareness of the nation's need to curb the erosion that has occurred in the ethics that guided the thinking of our nation's founders and to restore those values to the fabric of our laws -- laws which too often today appear to mete out much harsher punishments for the poor and powerless than for the rich and powerful.

The coverups, the deadly deceptions, the careful omission of vital information in reports to governmental agencies that have already been documented by earlier witnesses before this Committee in connection with decisions made by corporate managers in the asbestos industry and in other chemical concerns manufacturing kepone, DBCP and benzidene clearly demonstrate the inadequacy of our existing punishments for business crimes for profit against humanity.

Less than two years ago the California AFL-CIO launched what we believe is the nation's first broad public survey seeking to locate and help thousands of workers exposed to asbestos fibers as a result of working in San Francisco Bay Area shipyards or other installations during and since World War II.

This survey, conducted by the Western Institute for Occupational and Environmental Sciences, Inc., of Berkeley under the direction of Dr. Philip Polakoff, required the creation of a toll-free hotline number to permit potentially exposed workers to contact the study and subsequently involved the screening of more than 2,200 workers and the analysis of more than 6,000 X-rays. The study, which was financed by the California AFL-CIO, the Asbestos Workers Union, the Pacific Coast Metal Trades Council and other union organizations, found that 45 percent of the workers surveyed had significant abnormalities consistent with asbestos related diseases. Another 30 percent showed minimal abnormalities consistent with asbestos-related disease. About 24 percent of the X-rays were normal.

Last year a series of follow-up seminars were held on this study to inform workers who may be suffering from asbestosis or related diseases, what it is and what to do about it.

I mention this only to underscore the fact that for years American workers have assumed that state and federal agencies were providing adequate protection for them from invisible

hazards on the job and have, only in recent years, discovered how wrong they were. Our study, which was also supported by the National Insitute for Occupational Safety and Health, points up the need for the legislation being considered today by this Committee because it provides an inkling of the extent of public poisoning that has already been perpetrated on thousands of workers due to our failure as a nation to require adequate safety protections from the invisible dangers inherent in scores of products being worked with and sold for profit throughout our nation.

Just last week NBC News reported that scores of doctors -- members of a profession that has always ranked at or near the top of any study of the relative wage and salary earnings of various trades and professions -- have been implicated in an FBI investigation of Medicare and Medicaid fraud involving thousands of dollars in kickbacks to the doctors for medical laboratory services.

NBC correspondent Bill Sternoff reported that the manager of one medical laboratory said that a doctor at one particular clinic wanted $5,000 in cash to begin with and then $3,000 a month in cash payments.

These laboratories reportedly ran more tests than were medically necessary, charged five to ten times their actual cost and sometimes billed for tests that were never performed.

And Sternoff reported that authorities are certain that hundreds of millions of dollars are being skimmed off just through similar laboratory kickback schemes throughout the nation.

Now this report is, I believe, just one example of the inadequacy of our legal machinery for dealing with corporate crime. Fundamentally, this type of crime involves the theft of millions of dollars from all U.S. taxpayers. It also amounts to a statement by the doctors involved, who spent years going through medical schools to get into one of the nation's richest professions, that the laws on white collar crime are so lax and so inadequately enforced that they are willing to risk their entire careers because they are confident they can get away with it or -- even if caught -- squirm out of it with a slap on the wrist.

Perhaps one might say that in the wake of Watergate and the contempt of the concept of public trust displayed by such persons as Richard Nixon and John Mitchell this should be expected. But it cannot and must not be condoned. And it can and must be corrected.

Congressman Miller's bill, H.R. 4973, which would make business managers subject to fines and imprisonment for failure to disclose serious dangers associated with their products, is clearly a step in the right direction.

The need for such legislation has, I believe, already been amply demonstrated to this Committee in the testimony it has received from Congressman George Miller and others on the asbestos industry, on the Occidental Chemical Company's pollution of the ground water supplies with poisonous wastes at its plant at Lathrop, California, the Firestone radial

tires, and the Ford Motor Company's Pinto.

Let me briefly review some of the damning facts in each of these cases:

According to Miller's testimony, the asbestos industry knew of the hazards of asbestos dust in the early thirties. In fact, in 1933 the Johns-Manville Corporation settled 11 asbestosis cases for $30,000, provided written assurances were obtained from the attorney for the various plaintiffs that he would not directly or indirectly

On October 1, 1935, the President of Raybestos-Manhattan Company wrote to the President of Johns-Manville, saying:

"I think the less said about asbestosis, the better off we are."

And the response of the Johns-Manville President was:

"I quite agree with you that our interests are best served by having asbestosis receive the minimum of publicity."

Just last year, Wilbur Ruff, who served as the manager of the Johns-Manville plant in Pittsburg, California, barely 40 miles from here, for years, stated in a deposition that there was a company policy not to tell workers about irregularities on chest X-rays because "the company did not want to . . . get employees upset, until such time as we knew our ground." He also said that company policy prevented the company physician from recommending an outside doctor or treatment for affected workers, Miller's testimony stated.

Yet as recently as two years ago, industry officials attending an Asbestos International Association meeting discussed ways to conceal the product hazards of asbestos. Minutes of the meeting showed that members objected to placing a warning on European-bound products "because of a possible negative influence on sales," Miller's statement says.

At Lathrop, an unincorporated area in San Joaquin County, internal company memos disclosed that the company misled the State Water Resources Control Board regarding the company's polluting activities and destroyed the usability of several wells in the area. One memo, dated June 25, 1977, stated: "Fortunately for the management of this company, no pesticide has yet been detected" in a neighboring well but added "I personally would not drink from his well," Miller's statement says.

Another internal memo cited in Miller's statement said:

"If anyone should complain, we could be the party named in an action by the Water Quality Control Board . . . the basic decision is this: Do we correct the situation before we have a problem, or do we hold off until action is taken against us."

In the Firestone Tire case, according to an article carried in the Washington Post on October 10, 1979, an internal company memo acknowledged that "we are making an inferior quality radial . . . subject . . . to belt-edge separation at high mileage." But the firm continued to sell millions of the potentially lethal tires to unsuspecting consumers, the story said.

In the case involving the Ford Motor Company's Pinto, a 1971 internal memo reportedly warned that the car's design made it susceptible to fuel leakage and explosion in the event of rear-end collisions and suggested that a $6 to $8 additional part could solve the problem. But the company delayed any changes until 1976 in the expectation that the delay could save the company about $20 million, Miller's testimony says.

In a 1973 memo outlining the severity of the risk, the company balanced the "value" of the deaths and injuries to be anticipated against the cost of retrofitting the cars with safety devices -- $50 million vs. $137 million or about $11 per vehicle and concluded that the cost of permitting the anticipated deaths and injuries would be considerably less than fixing the cars, the testimony already presented to this Committee by Congressman Miller shows.

Now these four particular cases all involve potential threats to the lives of California workers and consumers but as the Committee knows there are many other such cases. For example, the Allied Chemical Corporation's pollution of the James River in Virginia with kepone wastes, a potential cancer-causing chemical, or the Hooker Chemical Company's dumpsite near the Love Canal which children used as a playground while company officials were afraid to warn local residents because, according another company memo, "we did

not feel we could do it without incurring a substantial legal liability for current owners of the property."

Corporate America must ask itself:

Do we place the value of human life above the value of additional profits?

The breadwinners and other loved ones in thousands of families throughout our land have been destroyed because we haven't in recent years been bright enough or wise enough or cared enough or been outraged enough to demand that our government enact laws that put business and corporate leaders on notice that if they gamble people's lives against profits and lose, they're going to prison.

Just within the past month our state legislature has enacted a law requiring a prison term for anyone who commits a nightime burglary. The typical burglary, according to some studies, involves about $350.

But just a few years ago, Senator Philip Hart's sub-committee on anti-trust and monopoly estimated that corporate crime -- not including injuries to workers or damage to the environment -- cost U.S. taxpayers and consumers between $174 billion and $231 billion each year. That's an enormous sum. That's more than $1,000 for every man, woman and child in the

country -- each year. We cannot afford it in terms of our commitment to human life. We cannot afford it economically, socially or morally.

Yet you can be sure that the business community will protest. They will say they can police themselves. They will say that you cannot dictate morality. They will say that this will mean a massive increase in government investigators and lawyers and greater governmental intrusion in private business affairs.

But the record of the oil industry, the chemical industry, the medical industry and others doesn't back them up and the people of this nation know it.

Now Congressman Miller's bill would provide criminal sanctions only in those situations where evidence of a defect posing a serious danger associated with a product or business practice is knowingly concealed or covered up.

I understand that there is some consideration being given by the Committee to changing the definition of "serious danger" to "serious concealed danger." In this regard I believe it might be more prudent to change the definition to read "serious danger, whether concealed or not," since the purpose of the legislation is to provide more adequate penalties for the non-disclosure of serious dangers rather than to promote lengthy litigation over whether a serious danger was in fact concealed.

H. R. 4973 also needs to include a provision to protect those employees with sufficient courage to call the attention of the appropriate public authorities to company practices or policies that appear to involve serious dangers to the company's employees and/or the public -- which would make it a misdemeanor for the company to fire, discipline or othrwise discriminate against anyone making a report under the provisions of the bill.

The penalty provisions of the bill also need substantial strengthening. The existing proposal of a fine of not less than $50,000 or imprisonment for not less than two years, or both, with the additional proviso that if the convicted defendant is a corporation the fine should be not less than $100,000 is clearly inadequate. It would have no deterring effect on the profit considerations of multi-million dollar corporations that daily spend many times that amount just to polish their public image or promote their products in the media.

For the law to be effective and have any real impact on corporate decision makers it must provide a sure and certain penalty that is realistically related to the severity of the crime and, perhaps, directly related to the profits the firm might reasonably have been expected to reap if the non-disclosed serious danger had gone unreported and undiscovered for a year or more. The fact is that the inadequate penalties that have applied in the past have only served to prove the fact that

they become a license to violate the law.

The law must be drafted in such a way as to assure that the proportion of violations discovered and the number of convictions obtained under it will be great enough to assure protection of workers.

Until prison terms are imposed on those who seek to profit at the expense of the health and lives of their fellow citizens there is little likelihood that this type of crime will be contained.

Thank you very much.

Mr. CONYERS. We now welcome Counsel George Kilbourne, Steven Kazan, and Mr. Elie Bouvert.

Attorney Kilbourne is specializing in asbestos civil litigation and has been active in all the appropriate trials, lawyers, and bar associations, both State and local.

Attorney Kazan presently heads the Alameda-Contra Costa Trial Lawyers Association, and is chairman of the California Trial Lawyers Association.

We recognize your deep concern and expertise in this area, gentlemen, and we will incorporate your prepared statements into the record in their entirety.

We thank you for your patience and invite you to proceed in your own way.

[The written statements of George Kilbourne, Esq., and Steven Kazan, Esq., follow:]

STATEMENT OF GEORGE W. KILBOURNE

Before The

SUBCOMMITTEE OF CRIME, HOUSE JUDICIARY COMMITTEE

H. R. 4973

March 24, 1980

Thank you for the opportunity to comment on H.R 4973. I come from Martinez, Contra Costa County, California, the home of Congressman George Miller, the author of H.R. 4973. We in Contra Costa County heartily endorse Congressman Miller's interest and authorship because of our experience, particularly with asbestos. With Mr. Kazan, I represent over 300 individuals who have been the victims of what we feel is the type of conduct proscribed by H.R. 4973. We represent people suffering from asbestos-related disease, many of whom contracted it at the Johns-Manville Pittsburg, California plant.

I had an opportunity to testify before the Subcommittee on Compensation Health and Safety of the Committee on Education and Labor on Asbestos Related Occupational Diseases on October 23, 1979. My comments are a matter of record. Following my testimony, certain members of the asbestos industry also testified. They claimed that they should be praised for being at the forefront when it came to looking into the dangers of asbestos. This was partly because they started this work so long ago. Francis H. May, Executive Vice-President of Johns-Manville Corporation referred to testimony in San Francisco as "categorically false" (his words). He then says after 1930

> "Johns-Manville undertook immediate and concerted efforts to implement dust control procedures at its mines, mills and manufacturing facilities . . . ." (p. 640)

I hope to have with me some of our clients, former employees of Johns-Manville, who will not agree with the J-M executives and who will, I think, tell the Committee that they were never advised that asbestos inhalation was hazardous or that when Johns-Manville found out they had X-Ray changes in their lungs, they were not told.

Barry Castleman, who testified before this Committee on November 15, 1979, correctly pointed out the history of the knowledge of asbestos-dangers. J-M and Raybestos-Manhattan paid for a report in 1929 which they received in 1930. The conclusions and recommendations of that report, received by Johns-Manville and Raybestos-Manhattan a half century ago are attached (Exhibit D). Mr. Castleman details the correspondence between executives of J-M and Raybestos concerning this report.

Unfortunately, several problems are highlighted: This information didn't come to light until about three years ago. The Executive Committee of the Board of Directors of Johns-Manville discussed an "asbestosis" case on June 11,1931 (see Exhibit E). This fact didn't come to light until I forced the production of those Minutes a year or so ago. I had discovered that on April 24, 1933 the Board of Directors authorized their president to settle eleven asbestosis cases (see Exhibit F). When I testified previously on October 23, 1979, I noted then that J-M had not produced the Executive Committee Minutes. As I suspected the Minutes showed knowledge of "asbestosis" before the Board of Directors discussed it. I'm still waiting for the Minutes after January, 1934, to see what surprises they have. They have been demanded, but so far, Johns-Manville has not produced them.

The problems I'm concerned about are: (1) The knowledge of violation of the provisions of this bill may be locked in the archives of the offending party; (2) It may be years before the knowledge reaches the light of day; (3) Only the persistent efforts of someone with sufficient interest may turn it up; (4) After it comes to light, how do you prove it?

Johns-Manville has had to admit its own Minutes. However, they deny the authorship by their own corporate executives of much of the material which persistent effort by many attorneys has located. Other companies have taken this same "stonewalling" attitude. The son of Sumner Simpson, former president of Raybestos has testified in August, 1979 that the letters referred to above were kept by his father in a safe in his corporate office. So far, Raybestos denies their authenticity.

Another example illustrates the evidentiary problem. We have a report to Philip-Carey Corporation (now Celotex) by Dr. Thomas Mancuso, dated September 23, 1963. Dr. Mancuso is a well known member of the faculty of the University of Pittsburgh and knowledgeable in the field of environmental medicine.

In the report, Dr. Mancuso states:

> "Unfortunately, the Philip-Carey Manufacturing Company is now confronted with seeing the consequences of a lack of a program of medical supervision of its employees' health over the years; lack of dust control; lack of awareness of the injurious nature of the various chemicals utilized in the working environment, as well as the community, in terns of air pollution. This build-up is now apparent."

I have made eight trips to court and spent innumerable hours trying to get Celotex attorneys to admit or deny the authenticity of that report. This included bringing to their attention a report of the Knoxville Police Department, stating that a memorandum which was denied was typed on the same typewriter as one which was admitted (Exhibit G). Their last response, which on March 17, 1980 they were ordered to make further response to, was

> "Based upon the testimony at Dr. Mancuso's deposition, Celotex Corporation is informed and believes that Dr. Thomas Mancuso was the author of pages 2 through 11 . . . of the subject document. However, Celotex does not, by its answer, admit receipt of this report by any present or former employee of its Predecessor-in-Interest Philip Carey Manufacturing Company, as it has made reasonable inquiry of its current and its predecessor's former employees who may have had reason to be aware of this document. None of those employers [sic] can recall having seen this document prior to the institution of the recent litigation. We are informed and believe that a copy of the subject document was found in the files of John T. Cantlon, but that Mr. Cantlon could not identify the document, and had no recollection of how, why, when or by whom it was prepared, how it came to be in his files, or to whom it may have been distributed. The document is unsigned and its contents are hearsay. Except for what is specifically admitted by this answer the request is denied."

California law requires that upon request a party "fairly admit or deny" the genuineness of a document.

I'm concerned because in a criminal case, guilt must be proved "beyond a reasonable doubt". If the trial courts allow the type of evasiveness typified by the conduct I have mentioned, it will be extremely difficult to get convictions. The Statute of Limitations must be extremely long to allow documents time to come to light. Anyone "aiding and abetting" should be dealt with in some way.

In a recent case in which my office was involved, the plant manager claimed to know nothing of a policy of the foremen to put pressure on the men to increase production. My client lost his right arm when he became entangled in a machine while trying to keep it running. This results in what I term the "Nuremberg defense". The person responsible claims that his supervisor made him do it; the supervisors claim no knowledge of the practice.

In yet another case, my client told me that men who complained about working conditions were routinely fired. This client was working with pesticides in a dusty room and had no idea that the particular chemicals he was working with were dangerous neurological poisons. When I tried to sue th employer, the case was thrown out of court (see Wright v. F.M.C. (1978) 81 C.A. 3d 777). The decision of the Appellate Court was originally "unpublished" which meant that it couldn't be cited as precedent. Johns-Manville's attorneys found out about it and used their influence to get it "published." They then proceeded to use it against me in my efforts in Rudkin v. Johns-Manville, et al, (Contra Costa Superior Court #159524 which was argued before the Supreme Court of California on March 4, 1980. (J-M v. Superior Court). We're still waiting for a decision in that case.

These cases point up an additional problem: Restitution to the victim. I understand that this is being met in proposed amendments. Dr. Samuel Epstein addressed this point in his statement to the Committee. I heartily endorse his comments as well as the comments of Professor Sethi who testified on December 13, 1999.

In the future, we can expect more of these cases. I am informed by an insurance agent that compensation insurance carriers are declining coverage as to fiberglass fabricators. One of the early signs in the asbestos industry was refusal to cover noted in 1918 in a governmental publication. Ironically, documents recently discovered indicate that in the early '40's, one of the leading fiberglass manufacturers threatened to "blow the whistle" on the asbestos industry because of its tough competition. Are we facing another asbestos-like crisis with fiberglass?

Preparatory to coming here, I spoke with the District Attorney in my county. He has been one of the leaders in the State in pushing enforcement of consumer-fraud statutes. His view, as I understand it, is that civil penalties are as important as criminal penalties. From my own experience I know some of the evidentiary problems. Since a different burden of proof applies, I would recommend the inclusion of civil penalties and right to damages. Such provisions must be clearly in addition to any other benefits available under State or Federal law. If we are not successful before the Supreme Court in Rudkin v. J-M, mentioned before, in my opinion it will be possible for an employer to buy a policy of Workers' Compensation insurance and thereby fulfill his legal responsibility. He will then be able to knowingly injure or kill workmen secure in the knowledge that his legal and financial responsibility is limited, defined and provided for by the workers "exclusive remedy" of workers' compensation. We need something to impress upon him his social and moral responsibility. We need both the speedy remedy - which, incidentally, sometimes isn't all that speedy, particularly in the occupational disease field - of workers compensation and the right to damages in a civil action. The widows of the 26 workers who have died since hiring Mr. Kazan and myself to represent them certainly don't feel that they have been adequately compensated.

I have attached additional documents to my statement as exhibits. They illustrate some of the matters referred to. They point up the areas of concern I feel need further consideration:

(1) A long Statute of Limitations;

(2) Inclusion of penalties against subordinates and others participating in any cover-up;

(3) Civil penalties and remedies including non-exclusivity of workers' compensation.

While we cannot legislate morality, provision can be made for those injured to be compensated. I feel that only when an employer has to respond in damages will his conduct reflect the standard of social and moral responsibility which we aspire to. This cost must be included in the cost of production in a truly free society. If responsibility will not be accepted, then it must be legislatively imposed.

69-943 O - 81 - 32

LIST OF EXHIBITS

A - Photocopy of page 9, Report of the Physical Examinations of Asbestos Workers in Asbestos and Thetford Mines, Quebec. Report of work done in 1929 and 1930 on examinations of 141 employees of Canadian Johns-Manville and 54 employees of Asbestos Corporation, Keasby-Mattison Co. and Johnson's Mine of Thetford Mines, Quebec.

B - Three pages from "A Study of Dust Conditions" addressed to Raybestos-Manhattan, March, 1930. (Note familiarity in Table 3 with the term "asbestosis").

C - Same as B for another Raybestos-Manhattan plant. (Note the middle paragraph, p 16).

D - Copy of pages 10 and 11, Public Health Reports January 4, 1935, being part of the article by Lanza, et al, "Effects of the Inhalation of Asbestos Dust on the Lungs of Asbestos Workers". (This report was paid for and received by Johns-Manville and Raybestos-Manhattan in 1930).

E - Copy of first page of Johns-Manville Executive Committee Minutes of June 11, 1931 showing that the Committee discussed an "asbestosis" case.

F - Copy of Minutes of the Board of Directors of Johns-Manville of April 24, 1933 showing authorization to the president to settle eleven "asbestosis" cases.

G - Copy of Report of Criminology Department, Knoxville Police Department.

H - Page 49 of U. S. Dept. of Commerce, "American Standard Safety Code for the Protection of Heads, Eyes and Respiratory Organs", Natn'l.Bur.Std's. Handbook H 24 Issued November 1, 1938.

I - Minutes, Health Review Committee, Manville, N. J. on three employees, 3/5/58.

J - Pages 29,30 and 31 of Deposition of Wilbur Ruff, taken Feb. 14, 1976, (Browner v. J-M, et al., Supr.Ct.#162127) (Former Vice President Industrial Relations J-M Corp., and plant manager, Manville, N.J.)

K - Saranac Program on the Investigation of Asbestosis and Pulmonary Cancer, 5-7-52.

L - Letter dated October 3, 1935 from Vandiver Brown, J-M attorney to Sumner Simpson,President of Raybestos-Manhattan, Inc.

9

L U N G S

Of the 101 men examined by me at Asbestos only 4 suffered from definite first stage pneumoconiosis. These will not be considered on account of the doubtful diagnosis.

Of the 40 men examined by Drs. Stevenson and Wyatt 14 were diagnosed as first stage pneumoconiosis (asbestosis 1) (I am including the 17 men examined by Drs. Stevenson and Wyatt and subsequently re-examined by me in my group of 101). The much lesser incidence of pneumoconiosis in my group of men may seem surprising, but it must be remembered that the X-ray negatives were not read by the same men. In my group the X-ray diagnoses were made by Dr. Meriwether of Pitcher Oklahoma, and in the other group the interpretations were by Drs. Wyatt and ~~Sinnott~~ Meriwether. Further the group examined by Drs. Stevenson and Wyatt were, in general, older than those in my group.

Of the 54 men examined at Thetford Mines 24 were diagnosed by X-ray as suffering from pneumoconiosis (asbestosis), of these 4 were diagnosed as probably first stage asbestosis, 8 as early stage, 9 as definite first stage and 3 as second stage.

The pertinent facts regarding the definite cases of asbestosis are given in tables V and VI.

EXHIBIT A

The following report is a study of dust conditions in the Bridgeport and Stratford, Connecticut plants of the Raybestos Division of the Raybestos-Manhattan, Inc. This study was carried on during February and March of 1930, by the Industrial Health Service of the Metropolitan Life Insurance Company.

It is the fourth unit in a series of studies of the asbestos industry of the United States and Canada for the purpose of determining the extent and nature of atmospheric pollution to which asbestos workers are exposed and whether there can be demonstrated any harmful effects to such workers.

This study includes a limited number of physical examinations, the nature of the evidence derived from which is similar to that obtained from the third unit study (United States Asbestos Division at Manheim, Pennsylvania.)

PHYSICAL EXAMINATIONS

Physical examinations were made on ninety-one employees. This group included all those who had been engaged in the asbestos industry for a period of three years or longer, and included employees from both the Bridgeport and Stratford plants.

All signs and symptoms, usually associated with what English authorities te m "asbestosis", were listed when found. These include anorexia, lead-hued complexion, emaciation, dyspnoea, cyanosis, cough, expectoration, "asbestos corns", decrease in chest expansion, clubbing of fingers, swelling of skin at the nails, and history of chest troubles. The chests of thes employees were then examined for friction rubs, râles, dullness, diminish breath sounds, and increased voice sounds.

The action of inorganic dust upon the lung tissue is to cause the development of fibrous tissue - fibrosis. Such dust fibroses are classified under the general term pneumoconiosis. The various types of pneumoconioses are differentiated by more specific titles which define themselves, such as silicosis, anthracosis, and asbestosis. These conditions can be satisfactorily demonstrated only by X-ray.

Twelve employees were selected for X-ray examination. The films of three of these were unsatisfactory. The following table analyses the occupational history and X-ray diagnosis of the remaining nine.

TABLE #5.

No.	Sex	Age	Occupational History	Diagnosis
1	M	58	Weaver – 9 years	Early first degree asbestosis
2	M	27	Weaver – 6 years	Negative
3	M	41	Weaver – 8 years	Early asbestosis
4	M	45	Weaver – 9 years	Negative -recent pleurisy
5	M	44	Foreman – 16 years	First degree asbestosis with aneurism of the arch of the aorta.
6	M	45	Weaver – 10 years	Negative
7	M	30	Weaver – 8 years	Negative
8	M	55	Weaver – 12 years	Well advanced first degree asbestosis.
9	M	68	Elevator operator – 9 years	First degree asbestosis

The following report is a study of dust conditions in the Manheim plant of the United States Asbestos & Fiber Division of the Raybestos-Manhattan, Inc. This study was carried on during February, 1930, by the Industrial Health Service of the Metropolitan Life Insurance Company.

It is the third unit in a series of studies of the asbestos industry in the United States and Canada for the purpose of determining the extent and nature of atmospheric pollution to which asbestos workers are exposed and whether there can be demonstrated any harmful effect to such workers.

This study differs from the two preceding ones in that there were included physical examinations of employees, hence it is more complete and informative.

* * * * *

EXHIBIT C

PLANT HOUSEKEEPING:

The floors are dry swept almost continuously throughout the working period. Each Friday the dust is removed from the ceilings, walls, and machines by means of an air hose during the working period. The dust counts during this period of cleaning would be increased considerably. It is recommended that cleaning be accomplished by means of a vacuum system. There are portable units on the market designed for this kind of work.

PHYSICAL EXAMINATIONS:

Physical examinations were made on fifty-four employees. All who worked in an asbestos industry three years or longer were included in this group. These employees were examined for symptoms usually associated with what English authorities term "asbestosis". These include anaemia, leaden hued complexion, emaciation, dyspnoea, cyanosis, cough, expectoration, "asbestos corns", decrease in chest expansion, clubbing of fingers, swelling of skin at the nails, and history of chest trouble. The chests of these employees were then examined for friction rubs, râles, dullness, diminished breath sounds, increased voice sounds, and where the symptoms and findings suggested further examination, X-ray pictures of the lungs were taken.

X-ray examinations were made of 20 employees; of these 10 showed definite evidence of asbestos dust injury to the lungs; one showed tuberculosis without dust injury, and nine were negative.

The action of inorganic dust upon the lung tissue is such as to cause the development of fibrous tissue – fibrosis. Such dust fibroses are classified under the general term pneumoconiosis. The various types of pneumoconiosis are further differentiated by more specific titles which define themselves, such as silicosis, anthracosis, and asbestosis.

On page 2 of the first unit report of this series of studies it was stated, in relation to the action of asbestos dust on the lungs, "We are confronted with three alternatives:

(1) Asbestos dust does not cause pulmonary damage.

(2) Asbestos dust does cause pulmonary damage akin to silicosis, but of a milder nature.

(3) Asbestos dust itself does cause pulmonary damage, but in a manner and of a type entirely distinct from silicosis."

The X-ray films of this study definitely inform us that individuals exposed to the inhalation of asbestos will in time show structural changes in their lungs – pneumoconiosis. Our studies have not progressed sufficiently for us to construe this type of pneumoconiosis in term of disability or of increased susceptibility to tuberculosis. This type of pneumoconiosis, to which the term asbestosis may properly be applied, is quite distinct in its X-ray film appearance from true silicosis and an experienced technician would have no difficulty in distinguishing the two conditions. The evidence so far would indicate that the action of asbestos dust is in accord with the second alternative quoted above.

Four films showing definite asbestosis also showed old tuberculous lesions, apparently inactive, 3 of the films negative for asbestosis also showed such lesions; this would lend support to the contention that asbestosis does not tend to activate quiescent tuberculous lesions which is in accord with the meagre evidence so far available from animal experimentation and with the limited clinical experience.

4. Colored male, age 34; worked in asbestos plant 2 years and 6 months. His physician believes this was a case of uncomplicated tuberculosis. Was not inmate of hospital or sanatorium. No information could be obtained on the other two cases.

Total and permanent disability claims:

1. Male, employed in asbestos plant 3 years. His physician states that he first came under his observation with an old established case of tuberculosis about 2 years after asbestos employment started. Also had tuberculosis of the kidney and cervical glands.

2. Male, employed in asbestos plant 8 months. His physician states finding of old fibroid tuberculosis with tubercle bacilli in sputum. No X-ray available; but according to physician, asbestos bodies were found in sputum.

3. Male, 10 years' employment. Two physicians who treated him at different times are now inclined to believe this man is not tuberculous, but has asbestosis.

4. White male, was reexamined at time of investigation. His physician reports well nourished, husky looking, good color, no cyanosis; no clubbing of fingers; diminished expansion; incessant cough; X-ray shows fine mottling disseminated through both lungs. No evidence of tuberculosis. Probably a second stage asbestosis.

5. White male, 13 years in asbestos plant. Is now in sanatorium. An interesting case. His physician states that he has extensive asbestosis and pulmonary tuberculosis; cavity in right lung; sputum loaded with tubercle bacilli and asbestos bodies; believes tuberculosis long antedated asbestosis. This patient is progressing in a satisfactory manner.

It was not possible to locate the other three cases of total and permanent disability who had been diagnosed as having pulmonary tuberculosis. On the basis of the information obtained, the deaths in death-claims cases appear to be due to uncomplicated tuberculosis; three of them were Negroes, who were probably tuberculous at the time their employment in the asbestos plant commenced.

Of the 8 disability claim cases, 1 was uncomplicated tuberculosis and 2 were uncomplicated asbestosis who were put on disability because of a mistaken diagnosis of tuberculosis. In this same community we know of one death due to uncomplicated asbestosis in an individual with many years' employment in the industry.[3]

CONCLUSIONS

1. Prolonged exposure to asbestos dust caused a pulmonary fibrosis of a type different from silicosis and demonstrable on X-ray films. Clinically, from this study, it appears to be of a type milder than silicosis.

2. Cases of definite cardiac enlargement were frequently found to be associated with asbestosis.

[3] Deceased December 6.

3. A predisposition to tuberculosis due to asbestos dust was not indicated in this study.

4. Asbestosis as observed in this series of cases had not resulted in marked disability in any case.

5. It is not known how much asbestosis may add to the mortality of pneumonia and acute nontuberculous pulmonary infections.

6. It is not practicable as yet to establish standards for the asbestos dust content of air.

7. The amount of dust in the air in the asbestos plants studied can be substantially reduced.

RECOMMENDATIONS

It is recommended—

1. That the industry seriously face the problem of dust control in asbestos plants.

2. That new employees be examined physically, including X-ray examination of the chest, and rejected for employment if they show tuberculosis or pneumoconiosis.

3. That employees be examined physically, preferably every year, but at least every 2 years, this examination to include an X-ray examination of the chest.

4. That the industry sponsor studies on known cases of asbestosis, as well as studies on effects of asbestosis on the heart and circulation.

EXHIBIT D 500

Conclusions and recommendations of the Lanza report received by Johns-Manville and Raybestos-Manhattan in 1930.

A MEETING OF THE EXECUTIVE COMMITTEE OF THE BOARD OF DIRECTORS OF JOHNS-MANVILLE CORPORATION was held at No. 23 Wall Street, New York, N. Y. on June 11, 1931 at 3:00 P. M.

The following members of the Executive Committee were present:

Mr. Francis D. Bartow
Mr. Lewis H. Brown
Mr. H. E. Manville
Mr. W. R. Seigle
Mr. George Whitney.

Mr. H. E. Manville, Chairman of the Executive Committee, was Chairman of the meeting and Mr Lewis H. Brown, President, acted as Secretary of the meeting in the absence of Mr. E. M. Voorhees, Secretary of the Corporation.

The President referred to the case of Mr. J. C. Younglove, who has been with the Company since 1903, and for a number of years in the Railroad and Government Department of the Western Division, and explained the difficulties that have existed with Mr. Younglove for five years, including that which arose in 1928. The President stated that in 1930 Mr. Younglove was given additional commercial accounts to handle so as to afford him an opportunity to justify his salary; that this plan has not been successful and that the officers of the Corporation, upon the written recommendation of the Vice-President in charge of the Railroad and Government Section of Johns-Manville Sales Corporation and of the President of Johns-Manville Sales Corporation, have decided to release Mr. Younglove, paying him a termination salary of four months beginning July 1, 1931 and ending October 31, 1931. Upon motion duly made, seconded and unanimously carried, the action of the officers of the Corporation in the case of Mr. Younglove was approved and confirmed.

Statements were submitted to the meeting covering sales, net profits, cash position and the current building situation. The President announced the appointment of a Manager of the Research Department of the Corporation at Manville, New Jersey, and discussed the June sales trend, the sales contest for the summer months, method of paying salesmen, the item of "Factory Variation" in the earnings statement, and the trial of the pending so-called asbestosis case.

EXHIBIT E

A MEETING OF THE BOARD OF DIRECTORS OF JOHNS-MANVILLE CORPORATION was held at the offices of the Corporation, No. 292 Madison Avenue, New York, N. Y. on Monday, the 24th day of April, 1933 at 4:30 P. M.

The following Directors were present:

Messrs. Walter H. Aldridge
Lewis H. Brown
H. E. Manville
W. R. Seigle
Clarence M. Woolley.

Mr. W. R. Seigle, Chairman of the Board, acted as Chairman of the meeting and presided thereat and, in the absence of the Secretary of the Corporation Mr. Lewis H. Brown acted as Secretary of the meeting and kept the minutes thereof.

A notice of the meeting and affidavit of mailing of the same to all the Directors of the Corporation was presented and on motion, duly made, seconded and unanimously carried, said notice and affidavit were ordered filed with the minutes of the meeting.

The minutes of the meeting of the Board of Directors held on March 27, 1933 were read to the meeting and on motion, duly made, seconded and unanimously carried, were ratified and approved as recorded.

Reports were submitted to the meeting covering cash position and cash forecast, major projects, the earning statement for the first quarter and the results of operations during the month of April to the latest date figures were available.

The President explained in detail the reorganization that had become effective with the beginning of the second quarter, the purpose of which reorganization was to bring expenses more in line with the current volume of sales. Taking into consideration the additional economies effected by this reorganization, the President gave the Board an approximate estimate as to results of operations for the calendar year 1933.

The meeting discussed the advisability of effecting further economies by a general salary and wage reduction and it was the opinion that no action should be taken at this time until the effect of the present inflationary tendencies could be more accurately gauged.

The Chairman then reported to the meeting upon the results of his European trip.

The President advised the Board that the Corporation had been approached by various banks which were in process of reorganization with the proposition that it subscribe to common or preferred stock and that in each such case the Corporation had stated that it was not interested. It was the consensus of the Board that this was the correct policy to pursue.

Various matters of business were discussed including the lifting of the embargo on Russian asbestos by President Roosevelt and the tax situation in the Dominion of Canada. The President advised that he anticipated an early settlement of the tax dispute.

The President advised the meeting that Messrs. Hobart & Minard of Newark had been approached by the attorney for the plaintiffs in the eleven pending "asbestosis" cases with an offer to settle all the cases upon a much lower basis than had ever been previously discussed. He further stated that our general counsel, Messrs. Davis Polk Wardwell Gardiner & Reed, as well as Messrs. Hobart & Minard had recommended that we settle for approximately $30,000 provided written assurance were obtained from the attorney for the various plaintiffs that he would not directly or indirectly participate in the bringing of new actions against the Corporation.

After discussion, on motion, duly made and seconded, the following resolution was unanimously adopted:

RESOLVED that the President of the Corporation be, and he hereby is, authorized and empowered to enter into negotiations for the settlement of all the eleven asbestosis actions that have been brought against the Corporation by former employees and which are now pending in the Federal District Court of New Jersey and, in his discretion, to settle all said cases, provided the President shall, after further investigation, be of the opinion that such settlement is for the best interests of the Corporation.

There being no further business to come before the meeting, it was, on motion, duly made and seconded, unanimously adjourned.

Lewis H. Brown
Secretary of the Meeting

March 15, 1979

To: Paul Gillenwater, Atty.

From: William Smith - K. Mays

Subject: Examination of Documents

Sir,

Kenneth Mays and I examined the documents received from you labeled Ex 22, dated 11-9-62 and Ex 23 dated 9-24-63.

It is our opinion that Ex 22 & Ex 23, was typed by the same typewriter with the exception of the last paragraph on Ex 22 which appears to have been typed by an electric typewriter.

Our conclusion is based on points of comparison which was found to be consistent on both documents.

Attached is photograph and points of comparison marked off.

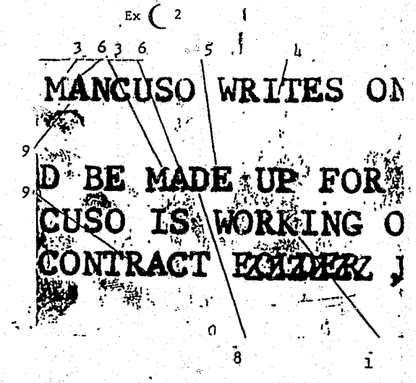
Respectfully submitted,

Wm Smith Kenneth Mays

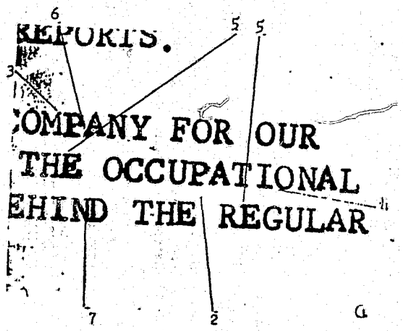
William Smith - Kenneth Mays

Exhibit G

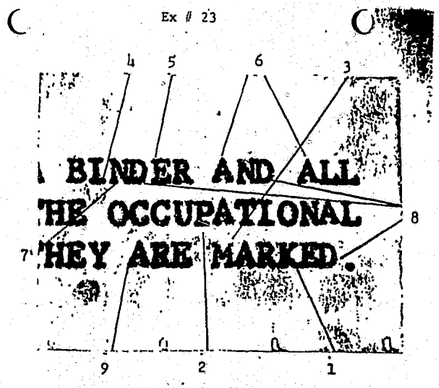
Ex # 2



Ex # 22



Ex # 23



"Points of Comparison"

1. "K" No club at bottom right.
2. "P" sets low.
3. "M" fades at top right.
4. "I" long at right bottom.
5. "E" light on top, heavy on bottom.
6. "A" sets high.
7. "N & D" touch.
8. "D" off center & to the left.
9. "A" No club on bottom left outside.

MEMO

FROM OCCUPATIONAL HEALTH PROGRAM DATE 11/9/62

Ex 22
CANTLON
5-1477

INSTRUCTIONS FOR COPIES OF CORRES. SENT TO THE COMPANIES
DR. MANCUSO IS HANDLING ON THEIR OCCUPATIONAL HEALTH PROGRAM

~~A COPY OF DR. MANCUSO'S REPORT SHOULD BE PUT IN THE OCCUPATIONAL HEALTH PROGRAM FILE WHICH IS IN THE AC. VE CLAIM FILE CABINET, FOR EACH COMPANY.~~

~~ALSO, A COPY OF DR. MANCUSO'S REPORT SHOULD BE PUT WITH THE CLAIM IN QUESTION.~~

ALSO, A COPY SHOULD BE MADE FOR DR. MANCUSO.

USE THE COMPANY STATIONERY WHEN DR. MANCUSO WRITES ON HIS REPORTS.

ALSO, A CONTRACT FOLDER (BLUE) SHOULD BE MADE UP FOR EACH COMPANY FOR OUR INFORMATION ON THE COMPANIES DR. MANCUSO IS WORKING ON, ON THE OCCUPATIONAL HEALTH PROGRAM. THIS SHOULD BE PUT IN THE CONTRACT ~~FOLDER~~ FILE BEHIND THE REGULAR CONTRACT FOLDERS.

MAKE UP THE FOLDER AS FOLLOWS:
NAME OF COMPANY
OCCUPATIONAL HEALTH PROGRAM
CONTRACT BETWEEN DR. MANCUSO & OUR OFFICD

DO NOT SHOW ON COMPANY LETTERS THAT A COPY IS BEING SENT TO DR. MANCUSO WHEN WE WRITE DIRECT ON A CLAIM. (MAKE IT A BLIND COPY TO HIM) A COPY SHOULD BE SENT TO DR. MANCUSO ONLY WHEN WE WRITE TO THE CL...

Ex 23
CANTLON
5-1477

MEMO

TO JTC, CHL and KB DATE 9/24/63

FROM JTC

Philip Carey Mfg. Co.
Occupational Health Program

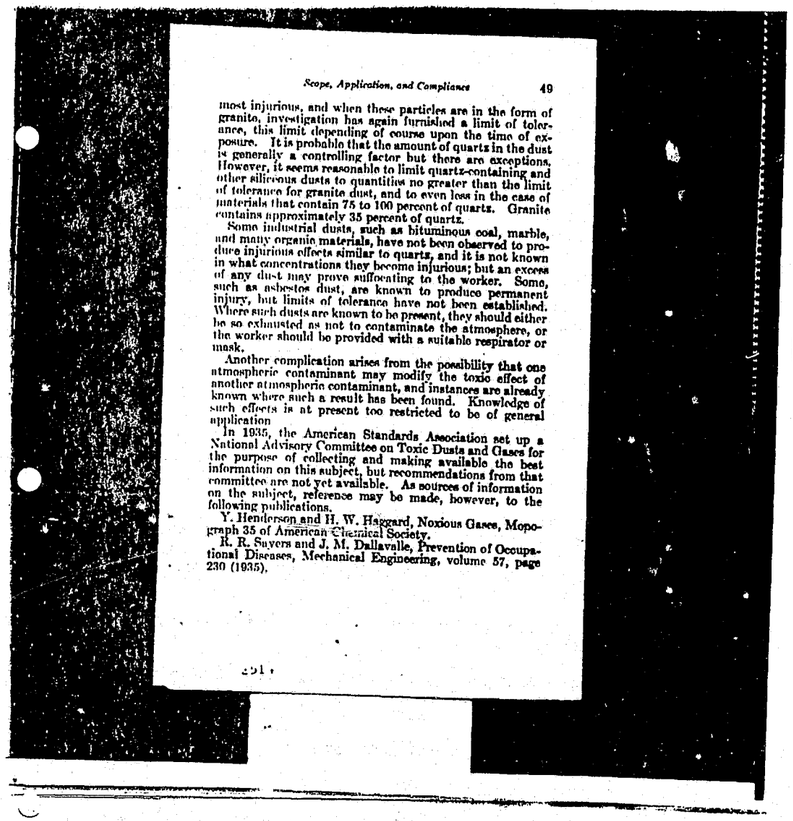
On 9/23/63 Dr. Mancuso and I spent from 10:00 a.m. to 3:00 p.m. and submitted the report dated 9/23/63 and had lunch with and conferred with Mr. E. C. Meisner, Lou Pechstein and Louis Knippa about the health program.

They made no decision, but Mr. Meisner wanted to study the matter and the material we gave him and to think out our conference, and we are to hear further from them.

CHL should send out the bill for September at the end of the month and then if we have not heard by 10/14/63 return the file to JTC to get in touch with Lou Pechstein.

JTC

(NOTE: ALL THE EXTRA COPIES OF THE MEDICAL LITERATURE WHICH ARE IN A FINDER AND ALL THE EXTRA COPIES OF OUR REPORT OF 9/23/63, EXCEPT ONE WHICH IS IN THE OCCUPATIONAL HEALTH FOLDER, ARE IN A BOX IN ONE OF BILL RYLE'S FILE CABINETS. THEY ARE MARKED. KB)



Scope, Application, and Compliance 49

most injurious, and when these particles are in the form of granite, investigation has again furnished a limit of tolerance, this limit depending of course upon the time of exposure. It is probable that the amount of quartz in the dust is generally a controlling factor but there are exceptions. However, it seems reasonable to limit quartz-containing and other siliceous dusts to quantities no greater than the limit of tolerance for granite dust, and to even less in the case of materials that contain 75 to 100 percent of quartz. Granite contains approximately 35 percent of quartz.

Some industrial dusts, such as bituminous coal, marble, and many organic materials, have not been observed to produce injurious effects similar to quartz, and it is not known in what concentrations they become injurious; but an excess of any dust may prove suffocating to the worker. Some, such as asbestos dust, are known to produce permanent injury, but limits of tolerance have not been established. Where such dusts are known to be present, they should either be so exhausted as not to contaminate the atmosphere, or the worker should be provided with a suitable respirator or mask.

Another complication arises from the possibility that one atmospheric contaminant may modify the toxic effect of another atmospheric contaminant, and instances are already known where such a result has been found. Knowledge of such effects is at present too restricted to be of general application.

In 1935, the American Standards Association set up a National Advisory Committee on Toxic Dusts and Gases for the purpose of collecting and making available the best information on this subject, but recommendations from that committee are not yet available. As sources of information on the subject, reference may be made, however, to the following publications.

Y. Henderson and H. W. Haggard, Noxious Gases, Monograph 35 of American Chemical Society.

R. R. Sayers and J. M. Dallavalle, Prevention of Occupational Diseases, Mechanical Engineering, volume 57, page 230 (1935).

Exhibit H: Page 49 of U. S. Dept. of Commerce, "American Standard Safety Code for the Protection of Heads, Eyes and Respiratory Organs:, National Bureau of Standards Handbook H 24 issued November 1, 1938.

3/5/58 - Present: Dr DuBow, Merrill, and Smith; C. Sheckler, N. Hahn, and A. Letter.

IKULSKI, FRANK - #1592 - Dept. 443 -(bring-up)

Sheckler - He is working now. Was at Glen Gardner in 1950 for about 1½ years.

DuBow - No change basically. SCTBA is watching him and X-rayed him in February. They informed him through his family doctor that he has to go to the Sanatorium. He said we took X-rays in December and did not tell him anything and now he was told by SCBA that he has to go back. I think there are more changes in 2/25/58. Dr. Douglass agreed on this. The employee was upset and implied that we are trying to hide things from him. He came in this Monday and gave us a form letter requesting all our X-rays of him. I requested he give us authorization and that we would then be happy to send the X-rays. We have to send these films to Glen Gardner but I wanted them for conference.

Sheckler - I think there will be litigation. His brother has been talking litigation for a while. His brother was involved in a box car accident and there is a 3 party action.

Smith - Was this man working about any other people?

Sheckler - No, he has been working mostly by himself. He would separate rejects for those that could be sold and those that could be sold for scrap.

DuBow - I wonder if procedure-wise we could be criticized about our handling of this case, he knew we took X-rays and he was not told of changes. Should we not change our procedure when TB is involved. We could tell the man that we are sending these X-rays to SCTBA and let them follow through.

Smith - They should follow up. They do sputums. We do not. It is their responsibility.

DuBow - Dr. Douglass called and discussed this with us. This man, according to Dr. Douglass, did not go to his family doctor and did not go to SCTBA and had a bad virus infection - everybody is a little involved.

Smith - Saranac is worried about continued medication because of resistance.

DuBow - Then you shift, change the drug.

Smith - In selected cases continued therapy is indicated. He will be in Glen Gardner for a time and when he comes out, there will be litigation and he will have to find another way of living.

Sheckler - 28 years employment and he is 52 years of age. What is the answer - Disability Retirement? He is getting VA benefits on the basis of TB. S-54 has been prepared. I foresee 100% total disability. They have us over a barrel. There is a new case law, you must make a bonafide offer prior to the filing of the formal. If not made before, the offer has no meaning. That means we do or we do not do it. We have to outguess these people at this point, we do not know when or if they will file.

(Minutes, Health Review Committee, Manville N.J. on three employees, 3/5/58)

EXHIBIT I

00030

Hahn - I do not think it is too wild a guess. His brother said "I told him never to go ba(to H Bldg. with his chest, it ll kill him."

Smith - Even if he gets through this one , he will break down before he is 65 years old.

Sheckler - What about procedure?

DuBow - I think we should go back to our old system. Medically, as a doctor. I am responsible. SCTBA would carry on from there.

Sheckler - I don't think we raised any objection to SCTBA but only after conference.

DuBow - But prior to that, we would send films to Dr. Douglass on a routine basis. This is procedure around here. Two doctors - Douglass and Stolow - are on state salary. They go to various institutions.

Sheckler - If that is their function, should industry have to assume these responsibilities. Would they not be Dr. Douglass' functions?

Smith - We take the X-rays for our own protection, not for social obligation. There is no problem sending them out, but after conference.

Sheckler - I do not see anything wrong how David handled this. I think that Dr. Douglass fell down.

DuBow - He did not fall down on this. Prior to this, we would send Dr. Douglass films whether there were changes or not. Two months in a case like this could be vital.

Smith - If you took 50 men, half would see TB changes and half would not. Sputums are the final and gastric are the final. There is no difficulty in procedure, after conference, send to Dr. Douglass, if only for his information, not to have too much radiation.

Sheckler - It is all right as long as I know they will be sending them. I can tab the records. Dr. Douglass has been very cooperative. I can see Dave's point. Dr. Stolow has been very good about this too.

X-ray - Multiple large densities in rt. upper and midlung field and also in the left infraclavicular area. Diffuse fine nodular densities scattered throughout both lung fields. Obliteration of rt. costophrenic angle and evidence of increasing lateral wall thickening at rt. base. Otherwise no change.

RADONICH, GEORGE - #4711 - Dept. 070 - (bring-up)

DuBow - George is going downhill. He is getting 40% dicability. He ventilates at rest - 40 per minute.

Sheckler - He is 62 years old. 21 years exposure to silica and asbestos in Transite pipe. In 1953, I settled 40% disability. Dave, you mentioned the other day, you thought retirement is in order.

DuPow - I am afraid something will happen.

Smith - We will pay, our liability is there.

00031

Hahn - He says he d s not work, he sits mostly in he men's room. There is an economic situation. He has to think about money.

Sheckler - I think we should start the ball rolling about retirement.

DuBow - Gould usually requests this. I should talk this over with Radonich.

Sheckler - Get your letter started if you think there is 75% disability and we will review this with him. We will change the disability to 100%. We will review the financial angle with him, it is something that worries him.

SKRZESNSKI, SIGMUND - #02193 (salary) - Dept. 072 - age 52.

Sheckler - Hired in 1933. 23 years potential exposure to Silica, Cement, and Asbestos - Transite Pipe. Is presently shift foreman.

Getter - Worked as truck driver 1921 - 1933. Mention of Pneumoconiosis in 1952. Was H.C. in 12/54. PA3 were neg.

Smith - Advanced Pneumoconiosis.

Sheckler - Should we change him?

Smith - Won't make any difference.

DuBow - If he hits 65 I will be surprised.

Sheckler - He is to be watched carefully and retire on disability, if necessary.
1. Tab
2. Notify plant manager
3. Do not transfer
4. Watch carefully
5. Retire if necessary

X-ray - Diffuse discrete nodular and coalescent densities throughout both lungs. Enlargement of the hilar shadows. Some blunting of both costophrenic angles. Left cardiac border poorly defined. There is a suggestion of highlights in the rt. second anterior interspace. There has been some progression since the film of 1/21/57 and marked progression compared to the film of 12/12/55. Excursion of diaphragms appears to be limited to ½ in.

WACHNICKI, CHARLES - #3215 - Dept. 290 - age 51.

Sheckler - Hired in 1924. 5 years potential exposure to Asbestos in Textile plant. 23 years minimal exposure to Diatomaceous earth in Asbestos and Magnesia.

Getter - No record of previous employment. N.D. in 1952. Pneumoconiosis mentioned in 1950.

DIAGNOSIS: Pneumoconiosis, moderate.

took your statement, you referred to the policy that existed until it was changed in 1970 to 1972 as a "hush-hush" policy, did you not?

MR. MOORE: Objection, leading and suggestive.

THE WITNESS: Yes.

MR. CRADDICK: Q. Didn't you? A. Yes.

MR. MOORE: Same objection, leading and suggestive.

MR. CRADDICK: Q. And when that policy was changed, how were you made aware of the change in policy?

A. By visitation of Dr. Kenneth Smith and other executives of the corporation. They visited several locations to discuss the problem and had visited the plant manager and his industrial relations manager and from that date on said we were going to inform the employees involved and tell them of their condition. And that would be done through the industrial relations manager. And that was in the presence of either Dr. Smith or Cliff Scheckler.

MR. CRADDICK: Q. Okay. Well now how are you personally made aware of this, someone came to visit you?

A. Yes, that was while I was back at the Manville plant. It was after the dismissal of Dr. Smith and this was one by Dr. George Wright and Mr. Scheckler.

Q. Was Dr. George Wright the new medical directo after Dr. Smith?

A. He was a consultant and I have found out sinc that he was not a Johns-Manville employee, he was hired on a tempo ary basis as a consultant after Dr. Smith had been released from he company.

Q. Well now what you are telling me is since I t k your statemen last month n January you have learned more detail about the

capacity in which Dr. Wright served the company?
A. That's right.
Q. And he served as a consultant rather than an employee?
A. That's correct.
Q. Would you tell us now how it was that you personally were made aware of the company change in policy of discussing abnormal chest findings with the employee which had not been done prior to that time?
A. By a visit by Dr. Wright and Chris Scheckler to the Manville plant location, a meeting was held with those two individuals and myself and the other three plant managers there to visit us that in the future these type cases would be discussed with the employee involved.
Q. That these type cases referred to what?
A. These type cases referring to these with lung problems determined by x-ray.
Q. Specifically did the discussion that you had relate to abnormal chest x-ray findings suggesting asbestosis, pneumoconiosis, and mesothelioma and the like? A. That's correct.

MR. MOORE: Objection, leading and suggestive.

MR. CRADDICK: Q. And what was the change in the policy to be, how was it to be conducted in the future?

MR. MOORE: Asked and answered, I will object to it as being --

MR. CRADDICK: Go ahead.

THE WITNESS: The information would be conveyed to the employee through the industrial relations manager, at the Manville plant the plant doctor where other locations were involved it would

be the plant manager. The industrial relations manager and either or Dr. Wright or Cliff Scheckler.
Q. Now Cliff Scheckler was an employee of the company at that time? A. That's correct.
Q. All right. Now so was the policy, did the policy of the company prior to the change that you were told about by Dr. Wright and others did the policy go in 1970 to 1972 include a prohibition against members of the industrial relations department discussing x-ray findings suggesting asbestosis and pneumoconiosis and mesothelioma with the employee?

MR. MOORE: Leading and suggestive, I will object to the question as leading and suggestive.

THE WITNESS: No.

MR. CRADDICK: Q. And they were not supposed to tell the employee either up to that time that the policy changed, is that right? A. That is right.

MR. MOORE: Same objection, leading and suggestive.

THE WITNESS: That's right.

MR. CRADDICK: Q. Is that correct?
A. That is correct.
Q. Well in view of the objection let me ask you this: was it the policy of the company, to your knowledge, will you tell us whether to your knowledge it was the policy of the company prior to this meeting with Dr. Wright was for members of the industrial relations department to discuss with employees abnormal chest x-ray findings which suggested that the employee yes, had asbestosis pneumoconiosis and mesotheslioma?

MR. MOORE: Before you answer let me object, I will objec

Ex. 26
Woodard

PLAINTIFF'S EXHIBIT 1114

SARANAC PROGRAM
ON THE
INVESTIGATION OF
ASBESTOSIS AND PULMONARY CANCER

J. P. Woodard

JM (ct) &c
3/15/77

EXHIBIT K

Thus a difference up to 5.5 per cent is likely to occur by chance. The observed difference of 4 per cent (9.5 - 5.5 = 4.0) may therefore have occurred simply by chance distribution of animals and is not statistically significant.

V. COMMENT

It will be apparent from a review of table 1 that the experiment is now in its most important phase. The incidence of pulmonary tumors has begun to rise for animals killed at the 14-month period, both for the control animals and for the animals exposed to asbestos dust. The increased incidence is more pronounced for the group exposed to dust, but the rise has occurred at about the same time in both groups. The differences between the two groups, however, as has been noted, are not statistically significant.

The impression is gained from an inspection of table 1 that the large numbers of animals killed early in the experiment are weighting the final figures and detracting from the magnitude of the incidence of tumor. It must be noted that this study has been an experimental one and that it has been necessary to make observations by killing animals for study at regular intervals. It appears that by means of a rather involved statistical procedure the disproportionate weighting of the values by the data of the early observations can be eliminated. This procedure will be carried out after final observations have been made, since it is too laborious an undertaking to be performed at the present stage when the values obtained would be only of academic interest.

Quebec Asbestos Mining Assoc.
1st Interim Report 5-?-52

It may be noted in passing that if the over-all incidence of tumor among the exposed animals had been only slightly greater—11 per cent rather than 9.5 per cent—the difference between the incidence for the exposed group and for the control group would have been statistically significant.

VI. SUMMARY

An experiment concerning the influence of inhaled asbestos dust upon the incidence of pulmonary tumors in mice has been in progress for 14 months. Analysis of the results of this experiment reveals that thus far (after the animals have been exposed to asbestos dust for 14 months), the dust has not exerted an influence of a degree sufficient to cause statistically significant alterations in the incidence of pulmonary tumors. The final phases of this experiment will be of great importance, since at the most recent period when animals were killed for study the incidence of tumors had increased and the increase seems to be more pronounced among the animals exposed to asbestos dust than among the non-exposed control animals.

AJV:jc

Johns-Manville
TWENTY-TWO EAST FORTIETH STREET
NEW YORK, N.Y.

October 3, 1935

Mr. S. Simpson, President,
Raybestos-Manhattan, Inc.,
Bridgeport, Conn.

My dear Mr. Simpson:

I wish to acknowledge receipt of yours of October 1st enclosing copy of the September 25th letter from the editor of the magazine "ASBESTOS". I quite agree with you that our interests are best served by having asbestosis receive the minimum of publicity. Even if we should eventually decide to raise no objection to the publication of an article on asbestosis in the magazine in question, I think we should warn the editors to use American data on the subject rather than English. Dr. Lanza has frequently remarked, to me personally and in some of his papers, that the clinical picture presented in North American localities where there is an asbestos dust hazard is considerably milder than that reported in England and South Africa.

I believe the question raised by Miss Rossiter might well be considered at the committee meeting scheduled for next Tuesday, at which I understand both you and Mr. Judd will be present.

Very truly yours,

Vandiver Brown
Vandiver Brown
Attorney

VB:T

Mr Hegle will see Stover & tell him we do not want any publicity
SS 10/8/35

000176

EXHIBIT L

RM 124-A
4-29-77

INSERT #12

STATEMENT OF STEVEN KAZAN
Before the
SUBCOMMITTEE ON CRIME OF THE HOUSE COMMITTEE
ON THE JUDICIARY
H.R. 4973
March 24, 1980

Thank you for the opportunity to testify before this Subcommittee on H.R. 4973. I reside in Alameda County, California, at the hub of the San Francisco Bay Area Shipbuilding industry and the site of numerous asbestos manufacturing facilities since before World War II. I am here to offer my assistance to the Committee.

I represent,with Mr Kilbourne, in excess of three-hundred asbestos workers and their widows. Most of our clients were connected with the asbestos industry via employment in manufacturing plants owned by Johns-Manville in Pittsburg, Lompoc, Stockton, Redwood City, Carson and Long Beach, California and also at the Fibreboard (Plant Rubber and Asbestos Company, the Parrafine Companies, Pabco) plant in Emeryville, California. Other clients were employed at the various Kaiser Shipyards in the East Bay, the Federal shipyards at Mare Island and Hunters Point and other shipyards in San Francisco and Alameda Counties. We also have clients who worked as insulation applicators in the various Bay Area refineries and utilities including Pacific Gas and Electric, water departments and other industrial concerns, as well as clients with significant lung diseases having had no exposure beyond that incident to cleaning and laundering the working clothes of their husbands.

The history of the asbestos industry presents perhaps the clearest example of the overriding necessity for legislation such as that proposed in H.R. 4973. Mr. Kilbourne and I have a particular interest in cases involving plant workers, that is, workers involved in the mining, milling and manufacturing of raw asbestos into asbestos containing materials and products for use in other industrial and residential settings. It is clear that by 1933, the Johns-Manville companies knew their own factory workers were developing asbestos-related lung disease.

For evidence thereof, one needs to look no further than the Minutes of the Board of Directors of Johns-Manville Corporation previously supplied to the Committee with Mr. Kilbourne's statement. A curious note, and one full of profoundly disturbing implications, is the provision by the Johns-Manville Board of Directors that cases be settled providing the worker's attorney agree to remain silent from that time forward. As the attorney

members of the Committee are no doubt aware, such provision is virtually unheard of in the settlement of civil litigation. The inference seems inescapable that the Johns-Manville Board of Directors knew that the handful of cases being settled in 1933 were but the tip of the ice berg. In retrospect, one must say that its imposition of silence was as clever as it was unscrupulous since asbestos litigation did not begin to flourish in this country for another forty to forty-five years.

Indeed, John McKinney, President of Johns-Manville, admitted this before the Subcommittee on Compensation Health and Safety of the Committee on Education and Labor on Asbestos-related Occupational Diseases last year. In addition, Johns-Manville has admitted this fact to its own shareholders as indicated in the document attached hereto as Exhibit One. Further, in the case of Karjala v. Johns-Manville, 523 F2d 155 (1975), a portion of which is attached as Exhibit Two, the court instructed the jury that Johns-Manville had made a binding admission of that fact. The defense utilized by Johns-Manville in the bulk of "applicator" litigation is that it had no basis to extrapolate the information it admittedly had with respect to its plant workers and apply that information in other contexts until Dr. Selikoff's landmark research was published in the mid-1960's.

However, it is equally clear that Johns-Manville shipped and sold asbestos to other companies for use in manufacturing plants, exactly like its own plants, including the Fibreboard complex of factories here in Alameda County. Yet, although Johns-Manville knew of the risks to the Fibreboard plantworkers, it took no steps at all to warn them or their employer. It would have been a simple matter to affix a brief warning label to the bags of raw asbestos fiber in 1933. Such warning label would have benefitted not only other plantworkers, but all those coming in contact with raw asbestos, and would have alerted other companies to place appropriate warnings on their asbestos containing products. Nonetheless, Johns-Manville never used warning labels on asbestos raw or manufactured, until the late 1960's.

The corporate policy of concealment is well explained in Mr. Kilbourne's statement and documentation attached thereto and does not require my reiteration. Suffice it to say that the concealment policy is still in effect in our pending litigation against the asbestos industry. Other asbestos companies hide behind legislation in their home jurisdictions. For example, we requested the production of documents from Bell Asbestos Mines, Ltd., of Canada, which shipped and supplied asbestos for use at the Johns-Manville plant in Lompoc, California. Bell refused to produce any documentation, claiming that to do so would place it in violation of Chapter 278 of the 1964 revised Statutes of Quebec, Business Concerns Records Act, which is the law in the Province of

Quebec, Canada, wherein is domiciled Bell Asbestos Mines, Limited. It is my understanding that South African mining companies hide behind similar legislation and refuse to make documentation available.

The primary hiding place of the asbestos industry in plant worker litigation is the Workers' Compensation legal system which ordinarily provides that Workers' Compensation is the exclusive remedy available to workers in claims against their employers. See, for example, California Labor Code Section 3601. There is similar legislation in many other states and such is the Federal rule as well with respect to federal employees.

We have spent the past four years litigating and arguing the proposition that Workers' Compensation should not be the exclusive remedy under California law given the conduct of Johns-Manville. This matter is currently under submission in the California Supreme Court in the case of Rudkin v. Superior Court. While we cannot predict with certainty the outcome of that case, we are at least hopeful that the court will recognize the appropriateness of exempting from the exclusive remedy concept cases as aggravated and outrageous as those involving Johns-Manville's treatment of its own plantworkers. However, regardless of the outcome of Rudkin, it would be of immense importance to workers and their families nationwide to make available an appropriate vehicle for imposing civil liability upon the asbestos industry. This leads me to the specific proposals I have for modifying, and hopefully improving, H.R. 4973.

First and most important, I believe an amendment should be considered clarifying the intention of Congress that this criminal statute not be interpreted as precluding the imposition of civil liability. Rather, a specific provision should be added establishing that violation of 18 USC 1822 is the basis for the imposition of civil liability as well. In the landmark California case of Royal Globe Insurance Company v. Superior Court, 23 Cal.3d 880 (1979), Mr. Justice Mosk, writing for a majority of the California Supreme Court, held that an insurance company could be held civilly liable for its noncompliance with California Insurance Code Section 790.03 (an Unfair Practices Act).

Previously, the Unfair Practices Act had been thought to apply solely to regulatory actions brought by the Insurance Commissioner against insurance companies. The significance of Royal Globe is that an injured plaintiff has a civil action against the defendant's insurance carrier for, among other things, failure to negotiate settlement in good faith. In the spirit of Royal Globe, I respectfully suggest that H.R. 4973 be amended to make explicit that "affected employees" or their heirs be permitted a cause of action in Federal District Court for any civil damages resulting from violation of 18 USC Section 1822. In order to avoid the "exclusive remedy" problem, such amendment should also make explicit that this civil cause of action exists notwithstanding the provisions of any State Workers' Compensation Statute to the contrary.

There are certain other areas where I believe the Bill could be somewhat clarified. In subsection (b)(2), the definition of "product" should be amplified to include the raw materials and other components that are processed into the ultimate product produced by the business entity in question. For example, in the manufacture of asbestos containing insulation, the risks to the workers arise not from the finished material but from the use of raw asbestos in fabricating the finished material. The risks of the product itself to the downstream users and consumers should be disclosed as well, but perhaps this could best be done by appropriate warning labels and instructions affixed to the product itself.

Similarly, subsection (b)(6) should be clarified to make explicit that "serious bodily injury" includes diseases. One of the problems with asbestos disease is that it is slow to develop with a long latency period and is often insidious in its onset.

There is no specific provision regarding the statute of limitations for violation of this section. However, a very long statute of limitations should be enacted, and it should be tolled by ongoing concealment of the risks. Otherwise, this legislation would put an additional premium on successful concealment.

Another area of potential corporate abuse deals with the whole question of civil discovery. It would be most unfortunate if enactment of this legislation would provide an excuse for corporations to refuse to produce documents in ordinary civil litigation on the grounds of Fifth Amendment self-incrimination. Perhaps some clarification could be made to the effect that this statute in no way interferes with normal civil discovery, so that a corporation would be required to comply therewith even if doing so would expose it or its employees to potential prosecution.

In the 1930's both the American and German asbestos industries recognized that asbestos workers were subject to serious diseases, permanent disability and often death from their industrial exposure to asbestos. In Germany, lung cancer was recognized as an industrial disease among asbestos workers and was so compensated. It is a sad commentary on the level of morality of American industry that Nazi Germany treated its workers more fairly and more honestly than did Johns-Manville and its colleagues in corporate crime. On behalf of my clients, my colleagues and the public, I urge the enactment of H.R. 4973.

Steven Kazan

STEVEN KAZAN

EXHIBIT ONE

JOHNS-MANVILLE CORPORATION - 1978 ANNUAL REPORT

evidence. No one in the media has had the courage to admit that the review of this 1935 paper resulted in no substantive changes as published by the United States Public Health Service *except to accentuate one possible hazard.* This can hardly be called a cover-up. There can be but one motive for such a callous disregard of the truth—to distort, mislead, sensationalize and thereby profit from the adversity of others.

Another charge is that the industry sought to control and suppress the development and publication of medical information concerning asbestos through its research programs at Saranac Laboratories. Some elementary reasoning reveals this argument for what it is—a myth. If suppression were a motive, why would J-M lead an effort to sponsor and fund research at a leading institution? Additionally, if data were suppressed, then how does one explain the published reports of the Director of the Saranac Laboratories which annually reviewed the ongoing research projects and listed the yearly publications in leading medical journals? How does one explain the attendance of the chief medical officer of the United States Public Health Service at the Saranac Symposia to discuss ongoing research? How does one explain the efforts of J-M and others to speed up, complete and publish research even after the death of the director of the laboratory in 1946?

Some allege that J-M's settlement years ago of asbestos disease-related lawsuits meant that we knew of possible hazards to applicators or users of asbestos insulation products long before the medical acknowledgment of such a hazard in the mid 1960's. The fact is that such cases involved neither insulation applicators nor insulation products. They were cases arising out of factory operations in New Jersey, where, due in large part to J-M sponsored research, a possible hazard of continual exposure to raw asbestos fiber in a factory environment had been identified. Neither the product which contained less than 15 percent asbestos nor the work environment were comparable. The workers' claims took the form of lawsuits because in the 1930's asbestos-related illness was not covered by New Jersey workers' compensation laws.

These are facts—unglamorous facts withheld by reporters, public figures and lawyers who must rely on unsupported accusations in an effort to alter perceptions. Perceptions based upon fact are useful in moving the involved parties to a resolution of the problem. But, perceptions based upon untruthful, misleading, inaccurate and unfounded accusations can only delay a much needed consensus on this pressing societal concern.

J-M stands ready to join with responsible parties to seek adequate and uniform compensation for asbestos-related illnesses.

While the incidence of disease is diminishing and will eventually disappear, the tragic fact remains: asbestos-related disease does exist, and people have been disabled.

There are two options for dealing with this reality. J-M can continue to litigate claims in the courts, or we can seek an equitable, uniform compensation system.

Litigation is based upon a finding of fault, and with respect to asbestos-related disease, there simply is no fault on the part of J-M, a fact increasingly recognized by juries throughout the nation. Litigation is, of course, favored and fostered by lawyers in search of lucrative fees and by "media personalities" in search of sensational stories. Litigation carries with it personal hardship for everyone—delay, extraordinary expense, and uneven and uncertain results. Fortunately, there is a choice.

Forward-thinking members of Congress have concluded that the time for dwelling on fault is past, and the time has arrived to address the issue of compensation for asbestos-related disease. They have proposed a system of speedy, equitable and uniform compensation, and have called upon industry and government to share the responsibility of providing the funds necessary to provide compensation. While such a program will be costly, perhaps more costly to J-M than continuing to litigate claims, J-M has endorsed the concept, as has the International Association of Heat and Frost Insulators & Asbestos Workers, whose members are perhaps the

JOHNS-MANVILLE CORPORATION - Presentation before the New York Society of Security Analysts - May 21, 1979

The Asbestos Issue

John A. McKinney

If there is anyone here who has never heard of asbestos, I'd like them to introduce themselves to me after the meeting because I'd like to know how anyone could have accomplished such a remarkable feat.

In our annual report, we devoted a number of pages to the asbestos issue. And in that write-up you will see that we address, very specifically, the manner in which the media has handled the reporting of the asbestos and health issue. This is of particular significance to you because we will make substantially the same remarks to you today as we have made to the media all along. Yet if you read the recent *Fortune* article on asbestos, you might be persuaded to think that there is a dark cloud of uncertainty hanging over Johns-Manville because of the litigation regarding asbestos and health.

This simply is not true. And, while it is a complicated subject, I'll try to quickly tell you why it's not true.

You have been given a number of materials on this subject today, and I would like to preface your reading with a few things that will help you more fully understand the issue. There are three points that cause major confusion with media people, and even with most people unfamiliar with the subject. Most confuse the various diseases, the different populations that have been exposed to asbestos or asbestos-containing products and therefore have been exposed to asbestos fiber, and the time frames that are involved.

The Diseases

Taking the first point, I'd like to clarify the differences between the diseases associated with exposure to asbestos. There are three. The first disease is asbestosis. Dr. Selikoff of Mt. Sinai, by the way, describes that disease in this way: "Asbestosis, properly treated, is not a life-shortening experience. The second disease is lung cancer, which is the most prevalent cause of death among persons exposed to asbestos. And the third is mesothelioma, the most recent disease identified as having any relationship to asbestos exposure. Mesthelioma is a rare disease, even so, and thus most of the talk you hear has to do with either asbestosis or lung cancer.

Now let me set the record straight on the time frames we're dealing with and help you decipher who knew what and when — a very critical point as far as the litigation is concerned.

There is no question that everybody knew that there was a disease called asbestosis in the 1930's. "Everybody" includes people from the medical profession, the insurance companies, the industries involved, and the workers themselves. In fact, we were paying workmen's compensation claims for asbestosis in our factories as far back as the 1930's and everybody — including the union — knew about it then. So if you ever read in the newspapers that the workers in our plants didn't know about asbestosis at that time, that's pure hokum.

Additionally, with regard to insulation workers, it was not until 1964 that the association between exposure to asbestos and asbestosis was finally confirmed.

One of the distressing problems with the disease is that it takes years and years for the symptoms to surface. Most factory workers back in the 30's knew fellow employees who had worked with asbestos for 50 years and never had any disease. As a result, it was very difficult to convince them that the material they were working with was dangerous. (Much easier to convince somebody that nitroglycerin is dangerous because, if it kills you, it will do so immediately.)

The point is these workers knew that the disease existed and that there were claims being made. That's asbestosis.

Now, lung cancer.

The media has a tendency to say that we admit we knew asbestos caused lung cancer in the 1930's. That simply is not true. It was finally confirmed that there was an association between exposure to asbestos and lung cancer among insulation workers around 1964. And in those 1964 studies there appeared a definite correlation between *cigarette smoking*, asbestos exposure and lung cancer. That is, if you classified those people in 1964 as smokers or non-smokers (even throwing the pipe and cigar smokers into the non-smoker category), that raw data would indicate that 97.5 percent of the people who died of lung cancer would not have died of that disease had it not been for cigarette smoking. This relationship has been further confirmed in studies made since 1964, but remains to be one of the most difficult statements we've tried to make to the public through the media.

Besides being a confused issue, asbestos-related disease gets sensationalized beyond reason. The media tends to pick up the plaintiff's lawyer's statements, printing them as if they were facts. Then, when quoting our statements, they say either Johns-Manville or the industry "claims. . ."

Now let me go over the sequence of events just as we have repeatedly explained them to the media.

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JOHNS-MANVILLE CORPORATION - Presentation before the New York Society of Security Analysts - May 21, 1979

The Time Frames

In the early 1930's Johns-Manville — along with other people in the industry and our insurance carriers — underwrote medical studies on asbestos-related disease. It has been alleged that industry exercised control over those studies to the point where the guts of the studies were not printed or published. But what they have called "exercising control" was simply the normal practice (which still applies today) of letting those who underwrite studies reserve the right to see the reports before publication.

We did this. And if you compare the drafts of the reports submitted to industry with what was later published, you'll see that the only changes made were disadvantageous to industry, if there was any significance to them at all.

Further, the seminars held during these studies were attended by the chief medical officer of the U.S. Public Health Service and his counterpart in Canada. There were periodic publications over a number of years regarding these studies, and, once the studies were completed, a final report was published.

If we were trying to cover up, we chose a very peculiar way of doing it, since significant research was being published, and the U.S. Public Health Service was well aware of this research.

In 1938 the U.S. Public Health Service published the results of its first study. This study was made specifically to define what was the safe level of exposure to asbestos, below which one would not get asbestosis. From the study, recommended standards were established. Nobody at that time had any idea that there was any disease problem beyond asbestosis.

Now what happened after that time?

During the war and up to the 1960's, there was overexposure to asbestos. You can identify perhaps 250,000 people who could have been overexposed in industrial settings in the U.S. and another 30,000 or so who were members of the Insulation Workers Union. Additionally, and by the government's own figures, there were over four million people who could have been overexposed to asbestos fiber in environments it controlled, particularly in government-operated shipyards.

Johns-Manville and others in the industry regularly paid worker's compensation for those disabled from the factory working population. And, at least on our part, those payments have all been covered by reserves.

There are some enlightening facts about what happened in the shipyards, however.

- The government specifically *required* that asbestos fiber be used during wartime. You could not use any other products, particularly for insulation, because the other products did not give the fire-resistance required in warships.
- The government *followed* the U.S. Public Health Service recommended standard for exposure set in 1938.
- The government *was responsible for* the work practices in the shipyards. (And it's the work practices which determine how much dust is created.)
- In essence, the government *totally controlled* the environment in which the product was used.

So if any overexposure took place, it took place because of what the government itself did. And what happened in those shipyards has nothing to do with what a producer like Johns-Manville may or may not have done in its plants with respect to its own employees.

Further, *in 1946*, the government published another study which indicated that insulation work in the shipyards was not a hazardous occupation.

It wasn't until 1964 that the particular risk to insulation workers was clearly identified by Dr. Irvin J. Selikoff of Mt. Sinai Hospital.

The Litigation

Today, we are faced with the matter of litigation, which has disturbed many security analysts, although there have been recent research reports issued which have very good analyses of this whole situation.

The majority of the suits against Johns-Manville are being filed by insulation and shipyard workers, almost all of whom worked in government-controlled environments. With respect to this litigation, we are fully insured up through 1976 for any compensatory damages which we may have to pay to the population of people who were overexposed before 1976. We are self-insured after that time (that is, for injuries which arise after 1976), and obviously it takes 20 to 30 years for those suits to surface, if there will be any at all. We have seen none to date.

You should know that six of the last eight cases which went to a jury on the issue of liability resulted in verdicts for Johns-Manville. These juries determined that Johns-Manville was neither negligent nor at fault for any injuries suffered by the plaintiffs.

Also, it is clear from the cases which are now being filed that there appears to be less evidence of significant disease. In some cases, such as the class action suit filed on behalf of the Long Beach shipyard workers, it is obvious that there are many individuals who appear to have no occupational disease. And where there is disease today, the degree of disability is much less than it has been in earlier cases.

EXHIBIT ONE

Karjala v. Johns-Manville

the jury (1) held appellant to an erroneous standard or duty and (2) misstated the law on the applicable statute of limitations.[4]

II.

Appellant contends that the instruction given by the District Court on strict liability misstates the law by requiring a manufacturer to advance the state of medical knowledge and to warn of unforeseeable risks.

Judge Lord instructed the jury that:

> A manufacturer has a duty to test and inspect his products, and the extent of such research and experiment must be commensurate with the dangers involved. A product must not be made available to the public without disclosure of those dangers that the application of reasonable foresight would reveal. A manufacturer is held to the knowledge and skill of an expert in determining whether or not his product is defective or otherwise dangerous. It is admitted that Johns-Manville knew as early as 1942 that asbestos would cause asbestosis when inhaled by factory workers. Mr. Karjala, however, is not a factory worker. He is an insulation installer. It is for you to decide whether or not Johns-Manville knew in fact of the danger to Mr. Karjala of contracting asbestosis. And that just goes to the question of the warning, whether or not they should have warned him, if you conclude that that might be an additional laxity on their part as to impose liability.
>
> In reaching your decision you may consider the knowledge which Johns-Manville had relative to factory workers and whether or not this knowledge would put Johns-Manville on notice of the danger to Mr. Karjala as an installation worker.

Well, of course, the damages must have been directly caused by the use of the product. I mentioned that a little bit earlier. A direct cause is a cause which had a substantial part in bringing about the harm.

Now, the defendant claims that they didn't know that installation workers could be harmed by this material in 1964, when Dr. Selikoff put out his report.

[4] Under Minnesota law, a manufacturer has a duty to warn users of its products of all dangers associated with those products of which it has actual or constructive knowledge. Failure to provide such warnings will render the product unreasonably dangerous and will subject the manufacturer to liability for damages under strict liability in tort. *Magnuson v. Rupp Manufacturing, Inc.*, 285 Minn. 32, 38, 171 N.W.2d 201, 205 (1969). *Cf. Land O'Lakes Creameries, Inc. v. Hungerholt*, 319 F.2d 352, 359–60 (8th Cir. 1963); *McCormack v. Hankscraft Co.*, 278 Minn. 322, 332, 154 N.W.2d 488, 496 (1967). *See also Sterling Drug, Inc. v. Yarrow*, 408 F.2d 978, 992–93 (8th Cir. 1969). *See generally* Restatement (Second) of Torts §§ 388, 394, 402A (1965);[5] 2 R. Hursh & H. Bailey, American Law of Products Liability § 8:3 (2d ed. 1974). Asbestos insulation is a product that has been held to be susceptible to this standard. *See Borel v. Fibreboard Paper Products Corp.*, 493 F.2d 1076 (5th Cir. 1973), *cert. denied*, 419 U.S. 869, 95 S.Ct. 127, 42 L.Ed.2d 107 (1974).

[5, 6] As Judge Wisdom pointed out in *Borel*, "a product is unreasonably dangerous only when it is 'dangerous to an extent beyond that contemplated by the ordinary consumer who purchases it.'" 493 F.2d at 1088 (Quoting Restatement (Second) of Torts § 402A, Comment i).

4. Since this is a diversity case, we apply the substantive law of Minnesota, the forum state. *Erie R. R. v. Tompkins*, 304 U.S. 64, 58 S.Ct. 817, 82 L.Ed. 1188 (1938).

5. Comment j to Section 402A states:

> In order to prevent the product from being unreasonably dangerous, the seller may be required to give directions or warning, on the container, as to its use.

EXHIBIT TWO

March 21, 1980

Dear Pamela

The enclosed copy of a letter sent from Dr. Polakoff to Dr. Kieran "further verifies the fact that I have asbestosis"

Thank you for considering me to answer the committee's questions. I was really looking forward to it. My son was going to take a day off and carry my life support junk (Bennett machine, oxygen holder, vodka, etc.) I had planned to start out with a "soft shoe" dance, then work into a disco". Too bad, a star might have been born, but then that's show biz, never can depend on it.

I've been going down hill again and Dr. Kieran says I'm too weak to appear at the hearing. If my condition doesn't improve in the next 24 hours, I'll probably have to be hospitalized.

Sincerely yours,

Ed. Stone

WIOES

WESTERN INSTITUTE FOR OCCUPATIONAL/ENVIRONMENTAL SCIENCES, INC.
2001 DWIGHT WAY BERKELEY, CALIFORNIA 94704 (415) 845-6476

February 28, 1979

0018

Dr. James Kieran
2340 Ward St.
Berkeley, CA 94705

Study Number

B300018

Dear Doctor:

The individual whose name and address appear below obtained a chest x-ray examination for asbestos-related disease during the Bay Area Asbestos Surveillance Project which was conducted July and August, 1978. This person designated you as the physician to whom any results should be reported.

One or more of the government certified "B" readers who interpreted the x-rays gave us the following report of his findings:
Interstitial disease noted, moderate severity. Small irregular opacities present. Pleural thickening present bilaterally in costophrenic angle and along left and right chest wall. Furthermore, calcification is present in both diaphragms and along left chest wall. In addition, bullae are present as well as plaques. These findings are consistent with asbestosis. Further, it should be mentioned that the oblique films on this individual are underexposed and it suggested that they be repeated.
Unfortunately, the original x-rays are not available for dispersal. However, if deemed necessary, they certainly can be reviewed at WIOES. Further I would be most willing to discuss their significance.

Sincerely yours,

P. L. Polakoff MD

Phillip L. Polakoff, M.D.
Director
WIOES

0018

Edward Stone
1405 Flora St.
Crockett, Ca. 94525

TESTIMONY OF GEORGE W. KILBOURNE, ASBESTOS CIVIL LITIGATION SPECIALIST, AND STEVEN KAZAN, CHAIRMAN, ALAMEDA-CONTRA COSTA AND CALIFORNIA TRIAL LAWYERS ASSOCIATIONS, ACCOMPANIED BY ELIE BOUVERT

Mr. KILBOURNE. Thank you, Mr. Chairman.

I will not go back through the detailed statement. I want to thank you for accepting it and the opportunity to speak about this.

As you indicated, my name is George Kilbourne. I would just note for the record that my hometown is the hometown of Congressman George Miller and they like very much and admire the work that he has done in this particular area.

It was my privilege the last time that there was a bill presented by Congressman Miller to address the committee at that time. I note that appearance in the prepared statement which I submitted. I went back and read that statement and then read the responses that were given by the representatives of Johns-Manville who were not present at that time.

They chose to appear in Hawaii, I believe, after the committee had moved on, although Mr. Autry, who, at that time, was public relations man for Johns-Manville was present in the courtroom down the hall where those hearings were held.

He did not choose to speak, however, in the presence of those of us who were there so that we could respond to him.

It was our intention to bring three of our clients with us today. Mr. Kazan and I are jointly concerned in approximately 350 cases. And we did have some representative clients.

Just by chance, Mr. Fuqua, who appeared here before, is one of our clients, also, although we had not contacted him.

Sitting between us is Mr. Elie Bouvert. Mr. Bouvert joined the Johns-Manville Pittsburg plant in 1948. He retired in 1975. He has asbestosis. He has had one lung removed for lung cancer. I will ask him in a few moments to tell you what his retirement benefits are at this time and to subject himself to any questions which you may have.

It was also our intention to have Mr. Harold Larson here. I believe he was here this morning and is not here at this time.

Mr. Larson was a superintendent of the roofing department at the Pittsburg plant and he did testify the last time there were hearings. His present wife is the widow of another one of the workers. They, I am certain, were here this morning.

Mr. Larson testified at that time and his testimony is a matter of record that he, as a superintendent, was not advised of the dangers of asbestos. He is suffering from asbestosis at the present time, and probably pneumoconiosis. We're attempting to get him some compensation for his illness.

The third man that we were going to have here was Mr. Edward Stone. But Mr. Edward Stone contacted us at the last minute and was unable to be here because he is just too ill.

He did write a letter and Mr. Kazan has that which he would want to read into the record.

So we have before us, then, several things that we would really like to comment on.

I sat here with mixed emotions listening to the other witnesses and several things came to mind.

Mr. Henning, for instance, speaks of Lompoc. It just happens that Mr. Kazan and I have some 67 plaintiffs we represent in Lompoc at the present time, filed in 18 separate complaints.

These people were subjected to diatomaceous earth and asbestos, he's referred only to diatomaceous earth.

We find that Johns-Manville did not disclose the amount of asbestos used at Lompoc. We have copies of those orders which, over the years, they obtained fiber from the Canadian asbestos suppliers in our files at the office.

But they used a large amount of asbestos along with the diatomaceous earth.

In addition to that, he mentioned another thing that I would like to comment on. Money from business, industry and insurance companies have a great deal to do with what is done in this area and in the laws which will be enacted.

At the present time one of our cases is pending before the Supreme Court of California: *Johns-Manville* v. *Superior Court,* Reba Rudkin, real party in interest.

In that case, and we've had reference to it here before, the attempts in that case, and I started working out and formulating the theory trying to get it to stick almost 7 years ago. We've beeen working on its that long in Rudkin's case. It was filed in December of 1975. He died about 2 months ago of lung cancer. He did not live to see the result that we hope we're going to get from the supreme court.

We're still hopeful that where an employer has been guilty of the conduct which this bill is aimed at, that in addition to criminal sanctions, we feel there should be the right to sue the employer and make them respond over and above the workers compensation laws where, at the present time, under our section 3601 of the labor code, they are exempt from suit.

Mr. CONYERS. In other words, the recovery is limited to the amounts recoverable under the State workmen's compensation law?

Mr. KILBOURNE. Under the present law.

Mr. CONYERS. Even if it is not stipulated between the parties?

Mr. KILBOURNE. It is limited to the workmen's compensation, the so-called exclusive remedy, available to the worker.

Those benefits which are available under the Workers' Compensation Act. Now they do include the so-called serious and willful provisions of the code which allow an increase of up to 50 percent, not to exceed $10,000, under the present law, of an additional serious and willful benefit or serious and willful violation.

We are maintaining in the Rudkin action that where the employer has intentionally covered up the dangers we think that we can also prove that they intentionally covered up the fact of injuries—that they should be liable in a separate civil action. That is the thrust of our present action and what we're hopeful of getting in the decision from the supreme court in the next few weeks.

An interesting thing happened when we filed that brief. There was immediately a petition—I believe Mr. Peter Weiner, who appeared here as a witness this morning—Mr. Weiner called us and he asked if he could appear amicus curiae for the State of California.

Of course, we were very happy to have him along. His department wrote a very fine brief and he argued before the supreme court in our behalf. And we hope it was helpful in what we hope will be the outcome.

On the other side of the coin, the insurance group, I can't tell you the exact name of it, but they represented that they represented 92 percent of the workers compensation carriers in the State of California, asked to be heard on the other side.

I was unaware until I read their brief that they also represented the California Manufacturers Association. They appeared on the other side against our position.

It's come to my attention within the last week that the weekly newsletter of the agents association in this State was indicating that this is a serious threat, they believe, to workers compensation.

We believe it is not. We believe that this only assists the worker in that area where there has been an intentional abbrogation of his rights by the coverup which took place, we feel, by Johns-Manville and which, again, this bill is designed to direct itself to.

Mr. CONYERS. Did you imply in your theory that had you known of the information materials in the coverup, that you would have proceeded to civil suit and not have filed for workmen's compensation?

Mr. KILBOURNE. We feel that the man should be entitled to both. We feel that they should be cumulative because ordinarily and it's not always clear in the application of disease, but ordinarily, of course, workers compensation benefits are very fast in coming when a man is injured on the job and where he loses a hand or something such as that, it's obvious that he's injured on the job.

With occupational disease, it is not. The result is that there is usually a great deal of delay in getting their benefits. But we feel that they are cumulative or should be pronounced to be cumulative so that if the employer does pay those benefits, he should receive a credit against any civil action. We think that that's only fair, that he would be required to pay at some time in the future.

Interestingly enough, one other comment, an aside of one of the questions which was asked by, I believe, Mr. Raikin, related to whether or not there was knowledge on the part of the union to whether there was any indication, and what their participation was in this matter.

I wish I had more of the documents here, but I do have a document that I would like to refer to very briefly at this time along that line.

What I have are the minutes of the industrial relations managers meetings, those that we've been able to get and have not had the company produce all of them. They maintain that they don't have them.

But where we show them that we have them, then they will produce them. This has happened to us repeatedly and I can show you this time and again.

They first said there was no such thing as industrial relations managers conference. Well, fortunately, we have the minutes and it's a long and somewhat funny story about how we got them that I won't go into.

Mr. CONYERS. It's probably best that you don't. [Laughter.]

Mr. KILBOURNE. But anyway, February 7 through 12, 1965, there was a meeting held at the Edgewater Gulf Hotel of the industrial relations managers of Johns-Manville.

Now each of the plants has a manager that's designated industrial relations manager. And at that time, they had an industrial relations manager over the entire company and the medical director at that time was Dr. Kenneth Smith. His name has probably come up other places.

I have Dr. Smith's statement that he made to that meeting that was formalized and this illustrates the attitude of Johns-Manville at that time with respect to their position and the union position.

I will just read a few sentences about what occurred. I am reading from page 1-H-2 of those minutes:

> Now in the fall of 1961, the real crux of our asbestos and cancer publicity problem appeared on the scene, with Dr. Irving J. Selikoff, who practices in Paterson, New Jersey, and the Mount Sinai Hospital in New York.

And then dropping on down to the next paragraph:

> Irving Selikoff came to my office in 1961, as I have said, and asked if he could have employees from our Manville plant visit his Paterson, New Jersey clinic for special tests. He had heard that asbestos causes a problem when inhaled and never had seen any case of asbestosis.
>
> We politely declined to have any of our people examined but did invite him to spend some time with our doctors at Jeffrey Mine.
>
> Dr. Selikoff went up there and spend a week looking over all our X-rays. He saw our files of well over 100,000 films of men who have been working for many years in the asbestosis exposures. This was the first time that he had ever seen an X-ray of an asbestos worker and after four days of looking at films and looking at our operations, he told our Dr. Granger that he didn't know what he was doing. That he, Selikoff, could easily identify much more asbestosis in our films than Granger was reporting even though Dr. Granger spent his whole life in chest diseases.

It goes on detailing his other comments about Dr. Selikoff that he considered to be the crux of the problem.

But I'd like to go back to the statement and point out some things that I didn't go into in any great detail.

When Frances May, the executive vice president of Johns-Manville had his testimony recorded in the asbestos-related diseases bulletin, he called the comments of the witnesses, "categorically false." This first came to light for Johns-Manville was in the so-called Lanza report where Raybestos-Manhattan and Johns-Manville got together in 1929. I think the committee has already heard this in other testimony.

I have included the recommendations of the Lanza report in my prepared statement. I can't argue with most of those recommendations, what is said, and whether or not they were implemented at that time. I would invite your attention, though, to the fact that in 1930, when this report was in the hands of Johns-Manville, the second recommendation was that new employees be examined physically, including X-ray examination of the chest and rejected for employment if they show tuberculosis or pneumoconiosis.

This was not implemented at that time and was not implemented until the 1950's. The interesting thing about this is that even though they had this knowledge, obviously, in 1930, it was not disseminated to the men, themselves, and this was why I wanted to have Mr. Larsen here, who is a superintendent, to tell you himself that he was never told during the time that he was employed at Johns-Manville.

Mr. Bouvert is here and can be asked in that regard.

Mr. CONYERS. You might want to submit a statement from him to that effect.

Mr. KILBOURNE. All right, we will do that. Mr. Larsen had a prepared statement that was included in the record before that I think included that specific testimony and we will do that. We will see that that is done.

I've included in the exhibits other information that we know that they had at that time. Exhibit A, for instance, is a report of 101 men examined in the asbestos mine in Asbestos, Quebec, and it details the number of men who had asbestosis. This is noted from their own records.

I have two reports that went to Raybestos-Manhattan on the Bridgeport and Stratford, Conn., plants in March of 1930, by the Industrial Health Service of Metropolitan Life Insurance Co. It details the asbestosis that was present in those plants so that Raybestos-Manhattan also knew.

The statistics are included mentioning and using the word "asbestosis" in table No. 3.

We have, in addition to that, the minutes of 1933 of Johns-Manville, where they referred to the 11 cases.

And in reading those minutes, I, personally, read all of the minutes that we could get our hands on from start to finish. They mentioned, the executive committee at Johns-Manville. I asked for those minutes and I had been told, first of all, that they didn't exist. And then they said they weren't available.

We finally got them, and, sure enough, on June 11, 1931, the minutes of the executive committee disclosed that they discussed the "trial of the pending so-called asbestosis case."

They had a case in 1931, it was discussed by the executive committee of the Johns-Manville Corp. and in 1933, again. Those minutes are included in my exhibits. And we have in detail in the report, the problems we're having at Celotex; the report of the Knoxville Police Department is included, and their refusal to admit the authenticity of a report that they have.

This is one of our biggest problems at the present time.

I have exhibit H, which shows that in 1938, the American Standard Safety Code for the Protection of Heads, Eyes, and Respiratory Organs refers to asbestos dust which is "known to produce permanent injuries, but limits of tolerance have not been established."

This is in the National Bureau of Standards handbook of November 1, 1938.

And then the next exhibit, exhibit I, is an interesting exhibit because these are photocopies of the minutes of the health review committee of Manville, N.J., dated March 5, 1958. They denied, when I asked them about these, whether or not they had such a committee and they said they did not.

We had the minutes at the time and I was able to actually confront them and they admitted it. On the second page of those minutes, I will just read the comments of Dr. Kenneth Smith, medical director, who said, "We take the X-rays for our own protection, not for social obligation. There is no problem sending them out, but after conference."

Note the other comments in there that relate to what we feel was an intentional coverup with knowledge that we feel again to be addressed by this bill.

The next document is three pages out of a deposition. Mr. Kazan was present when this deposition was taken. I was not. It was taken in one of our cases, however, where Mr. Wilbur Ruff, who had been the plant manager of Manville, N.J., and was later vice president of Johns-Manville Corp. testified and referred to the so-called hush-hush policy of not advising the workers that they had actually been injured. Dr. Smith has said what their policy was, as I indicated, and this is confirmed by Mr. Wilbur Ruff.

You will note on page 30, how he found out when the policy changed in 1970 to 1972, "By a visit by Dr. Wright and Chris [sic] Scheckler to the Manville plant location, a meeting was held with those two individuals and myself and the other three plant managers there to visit [sic] us that in the future these type cases would be discussed with the employee involved."

Johns-Manville has since characterized this testimony as not being entirely accurate in spite of what we have with respect to the record.

The next to the last exhibit is a very interesting one that I would like to comment on. There is a gentleman who is the oldest that we've found who was in the Johns-Manville organization who is still alive. His name is John Page Woodard. He lives above the Pebble Beach Golf Course down in Monterey County. This exhibit is entitled "Saranac Program of the Investigation of Asbestosis and Pulmonary Cancer." By reference to the next page, it will be seen that it is a report of the Quebec Asbestos Mining Association, dated May 7, 1952.

Johns-Manville has contended publicly that the first time that they knew that cancer could be caused by asbestos was after they received the Selikoff report in the mid-1960's. This is a report that shows that they were investigating this matter. And we have copies of correspondence. I believe it goes back to 1948, where Mr. Woodard has what's entitled "pulmonary malignancy," that is, cancer.

In the comments he notes, "The increased incidence is more pronounced for the group exposed to dust, but the rise has occurred at about the same time in both groups."

This is the animal experiments which did confirm, of course, the connection, just several years before the publicity which was given to it by Dr. Selikoff.

The last exhibit, again, signed by Mr. Vandiver Brown, a copy of a letter directed to Mr. Sumner Simpson, who, at that time, was president of Raybestos-Manhattan, indicates that, "I quite agree with you but our interests are best served by having asbestosis receive the minimum publicity."

I think that these documents and the information which we have spells out very well the depth of this problem and the extent to which parties will go. I, personally, feel that this type of activity is of the type that should be addressed by the committee.

I feel very strongly that action should be taken. There are individual problems that we feel exist in the bill and Mr. Kazan will address himself to those.

Thank you.

Mr. CONYERS. We appreciate your research and recommendations in this matter.

We now turn to Steven Kazan. We welcome you before the subcommittee and you may proceed. We also incorporate your prepared testimony in its entirety.

Mr. KAZAN. Thank you very much, Congressman. It's a pleasure and privilege to be invited to address the subcommittee this afternoon.

The first thing I would like to do and offer for your record is a letter that we received at the office this morning from Mr. Ed Stone, who was, hopefully, going to be here.

It's addressed to Pamela Harrington, our associate. Pamela is sitting in the back. She works full time for us doing nothing but fighting what we in California call "law and motion" battles, dealing with the technical adequacy of pleadings before the court.

There are 15 or so asbestos manufacturers, all of whom had multiple groups of attorneys, all of whom get paid handsomely by the hour and their sole responsibility, I think, is to drive Pamela crazy and chase her around from courthouse to courthouse. And so far, she's more than holding her own. We hope in her second year with us she is going to go on to do some more things and we've got this battle won.

But Mr. Stone wrote to her and, if I may, just read his brief letter and ask the committee to understand that his letter is written somewhat with tongue in cheek, as Dr. Polakoff explained. By and large the asbestos workers are very sincere, well-meaning and injured people. Fortunately a lot of them are able to maintain a sense of human about what is, after all, not at all funny.

But the letter is dated March 21:

> Dear Pamela, the enclosed copy of a letter sent from Dr. Polakoff to Dr. Kierin further verifies the fact that I have asbestosis.
>
> Thank you for considering me to answer the committee's questions. I was really looking forward to it. My son was going to take a day off and carry my life-support junk, Bennett Machine, oxygen holder, vodka, et cetera.
>
> I had planned to start out with a soft-shoe dance, then work into a disco. Too bad, a star might have been born, but then that's show biz. You never can depend on it.
>
> I've been going downhill again and Dr. Kierin says I'm too weak to appear at the hearing. If my condition doesn't improve in the next 24 hours, I will probably have to be hospitalized. Sincerely yours, Ed Stone.

He's one of hundreds of people that we do represent. And I'd like to address myself to some of the areas that I've heard mentioned here this afternoon while I was sitting in the back of the room and amplifying some of the aspects of the statement that I have submitted, although I don't want to rehash it.

The central fact that's important to understand in connection with the asbestos coverup and how that serves as a paragon for the need for this legislation is that, as you've already heard from a lot of people, by the early 1930's, Johns-Manville knew, at the very least, that its own workers in the mines, mills, and manufacturing plants were getting sick and they were dying.

And they didn't do anything about it. There's been some question about whether the union people knew. We represent the workers at the Lompoc plant and workers at another six or seven Johns-Manville plants.

We have never heard from any of our clients any suggestion that union people were any better informed than the rank and the file and the average working man in the plant.

You have to recall that different plants have different unions. Some are oil, chemical, and atomic workers, some are international chemical workers union, and the people who are active in the union in the plant are men who come up through the ranks. And, in fact, they stay in the ranks. They have no greater claim to wisdom than the average working man.

They certainly don't have the benefit of the kind of centralized professional staff that the big corporations have. And you've heard a lot from different people about how, "Well, we didn't know it was dangerous," in the shipyards and that's where most of the people were exposed. And that exposure is so different. And it wasn't until Dr. Selikoff pointed this all out that we had any basis to know you could extrapolate this different experience.

Well, there are several things to bear in mind: first of all, the exposure of people who mined asbestoes wasn't too 100 percent asbestos. If you look at the statistics, they take out tons of asbestos-contining rock, break it up to get pounds of raw asbestos.

Compare the exposure that a worker has working with asbestos-containing materials that are being cut and pounded and broken up in the hold of a ship or a submarine, with that of somebody would have in a large factory.

There is, obviously, very intense exposure in the shipyard. And in depositions, Johns-Manville executives have admitted that they knew about that.

But let's take them at their word. OK, let's assume that they really didn't know that anybody but factory workers were exposed.

Well, Johns-Manville shipped its raw asbestos not only to their own factories around the world, but to other factories, other companies that manufactured asbestos-containing products in plants that were exactly the same as Johns-Manville plants.

In Redwood City, Calif., Johns-Manville had a plant on one side of the railroad tracks and Fibreboard or its predecessors had a plant on the other side of the tracks.

Johns-Manville had a big plant in Pittsburg, Calif. Fibreboard Co. had a whole complex of plants in Emeryville, Calif., 10 miles away, 20 miles away.

There is no question that Johns-Manville was shipping bags of raw asbestos to Fibreboard to use in those plants. They know that factory workers were at risk. They never put a warning on those bags. They never did anything to warn the Fibreboard factory workers and we know that they didn't know, that the Fibreboard people didn't know. Because one of our clients, a gentleman by the name of Rubin Lewon who, unfortunately, passed away last November about 3 weeks before his case was set to go to trial in our superior court in Oakland, Mr. Lewon was a graduate chemist, a chemical engineer, was director of research, was plant manager and was an inventor employed by Fibreboard. Mr. Lewon held 11 or 12 patients. He was one of the principal inventors of the process by which pipe covering for shipyards to shipboard use was manufactured.

In the old days it was a very wasteful process. He invented a new precision molding technique that virtually eliminated waste from the manufacturing process. They built a prototype plant in Emeryville, Calif., and that plant finished its shakedown in mid-November 1941 and it was only going to manufacture pipe covering.

Well, 2 weeks later the war started and that plant went round the clock for about 4 or 5 years. Mr. Lewon was the plant manager, he ran that place, he had people coming from other asbestos companies to talk about licensing the technology, to talk about what they were doing in their own plants.

He never knew, he never knew that there was any health hazard to asbestos. He quit the industry in 1948, because at that point he was making $6,000 a year, and figured there had to be a better way to make a living.

He died last year of mesothelioma. Here is a professional man who had a whole range of career choice. It stands to reason that if he had ever thought that the work was dangerous, he would have found something else to do.

The ironic part, the tragedy is that he turned down a job at C. & H. Sugar Refinery up here in the Pittsburg area in 1933, because he figured that, he'd heard that that kind of stuff might be dangerous.

And, instead, he went to work with this asbestos which was "perfectly safe." And he never knew, he never understood that there was any risk involved.

And what's particularly important is if you look at the studies and if you look at Dr. Selikoff's latest book where he lays out the volume of asbestos mined and used in manufacture by decade, I don't recall the exact figures, but you'll find that, certainly, 80 or 90 percent of the asbestos currently floating around in the world was mined and processed after 1940.

If Johns-Manville had ever put a warning label on its bags in the 1930's when they knew it was dangerous, if Raybestos had done it, other companies would have been better able to be aware of what was going on, to intensify the search for alternatives. In Germany they found substitutes for asbestos in the war.

Mr. Lewon and his company were working on substitutes for asbestos in high-temperature insulation material for economic reasons. There were alternatives and if anybody had blown the whistle in the early 1930's, think of the millions of American shipyard workers and workers since the war who might never have been exposed.

We'd be talking about an academic curiosity. There would be a few cases of cancer related to asbestos and it would be just like thalidomide in the United States. Everybody would be wiping his brow and saying, "Boy, we're lucky. We really missed that one."

It didn't happen. And it didn't happen because the asbestos industry concealed the risks, concealed the risks that they knew of.

Mr. CONYERS. Are you suggesting that in Germany they have improved the product and it has become somewhat safer?

Mr. KAZAN. Well, yes, in Germany, my understanding is that during the war, they were somewhat cut off from their sources of raw asbestos and found cellulose-type substitutes for asbestos.

You know, if you think back, they built an awful lot of submarines over there, as well, and they found substitutes. When you talk about the German experience and their workers compensation system. And you focus on what you've already heard testimony about, that the German medical literature showed it, that the German workers compensation system recognized that lung cancer in asbestos workers was an occupational disease.

And we're still fighting that battle in 1980, in the workers compensation appeals board in California with Johns-Manville, as an aside.

But when you recognize the fact that the Germans recognized it, it's an awful thing to say that a shipyard worker or insulation worker would have been better off being a member of the Nazi party in Germany than working for Johns-Manville in California.

But the fact is that that's the truth. He would have been.

Johns-Manville, today, still argues about asbestos causing cancer.

In Mr. Lewon's case, one of their defenses was that Canadian Chrysatile fiber, which is what they imported, doesn't cause mesathelioma.

After we convinced them and after their own medical director looked at the slides and decided, "Well, yes, it looks like this really is mesathelioma," the next line of their defense was, "Well, our asbestos doesn't cause it." Even though the research they sponsored themselves showed mesathelioma in Canadian mineworkers.

They will do anything to defeat claims and I say anything. They will lie, cheat, steal, destroy documents, suborn perjury, or whatever they have to do to win, they will do.

Our lead case from Lompoc, Calif., was a gentleman by the name of Glen Harder. He had a workers compensation case in the early 1970's. He was turned down because the Workers Comp Appeals Board accepted medical testimony that diatomaceous earth doesn't cause lung cancer. And that's more or less accurate. He went to another doctor and said that, you know, "Isn't there some basis that this is industrial?"

The doctor said, "Well, you have lung cancer. Did you ever work around asbestos?" And Glen, who was a mechanic working on machinery throughout the plant, said, "Gee, I don't know. I never heard of asbestos. Let me go ask around." He came back to the doctor a couple of weeks later with a big plastic sack. It said "casi-R-asbestos" on it.

And he said, "Doc, is this the stuff you're talking about?"

Well, they reopened the workers compensation case, presented electron microscope evidence that there were asbestos fibers in his cancer cells and the judge said, "Well, you know, one fiber, what does that prove?" Refused to consider that industrial.

Well, Glen died last year, of lung cancer. His case has still not gone to trial. But we think we've got a way now to prove his compensation case. Because, you see, his doctor says, "Well, the cancer they operated on in 1973 was cured. What happened in 1978 and 1979, is a new cancer and I'm positive that's asbestos-related."

So we're going to go around again on Glen Harder and we're going to see if we can finally convince some people that his lung cancer was industrial.

The problem, you know, the evidence of the Johns-Manville concealment, is staggering.

Mr. Henning talked about Lompoc in the 1950's. We can't even get Johns-Manville to concede that the big strike in Lompoc was over health and safety.

Their position in our litigation is, is that was over salary. And everybody knows it wasn't.

In Lompoc, they were using over 50 tons of asbestos a month in fabricating insulation materials. Very few people knew about it. And nobody recognized the importance of it. The company doctor, the man who was in the plant from 1954 to 1972, testified that he's been told that no more than one or two men at any one time period would have any asbestos exposure and that he didn't have to worry about that, that that was no risk.

The J-M consultant in chest medicine in Santa Barbara County, the man they sent all their problems to, the man who ran the county TB program, and that was a big health hazard with diatamaceous earth, that the doctor never knew that they even used asbestos in that plant. He didn't know it until 1972, when he found out in Glen Harder's workers compensation case.

So not only did they conceal the hazards from their company doctor, from their workers. They didn't even tell the doctors to whom they are sending workers for an evaluation what the men were exposed to.

And naturally the doctors write reports that it's not industrial because they don't even know that the man has industrial exposure.

This leads me to the basic point that I would like to make to the committee. We think that people ought to go to jail. If there was only a constitutional way you could make this retroactive to 1935, we'd give you a list of 100 corporate crime executives that ought to do at least 20 years, because of what they've done to our clients.

There are some constitutional problems with that. I think this would be a deterrent, that this kind of legislation, even if nobody ever went to jail for it, the fact that it was on the books would have a profound impact.

If you look at somebody like Wilbur Ruff, who was a plant manager and who's got no motive to come in and make up testimony, who's telling the truth in his depositions no matter how much the company tried to shake his testimony. Assume a man like Wilbur Ruff who, obviously, is basically honest but he's been coerced into kind of going along with the program, there have got to be Wilbur Ruff's out there today in management or low-level management positions in a lot of American industry.

If there was a law like this on the books and he could say to himself, "You know, it's one thing to go along with the corporate executives. They tell me I have to do it and I'm concerned about my future. But, my God, I can go to jail for this," I think that this kind of legislation would be enough impetus for people him to come forward and to blow the whistle now, when it's going to do some good. Instead of waiting until some lawyers find him 20 years later and saying, "Yes, I would have said this but nobody ever asked me. And, of course, we knew it was dangerous. Of course, we knew people were getting sick, but we were told not to say anything."

I think, if this legislation makes one Wilbur Ruff come forward in the 1980's, it's worth every penny and it's worth every hour that you've spent on these hearings.

I think it's critically important that the bill, first of all, permit independent civil cause of action for violation of the statute.

Make it actionable. Let a worker come in and say, not only to the plant manager or the corporation could be fined and go to jail, but, "If they had ever told me and I had ever known, I would have gone to work elsewhere. I would have gone to work for that sugar company," or somebody else.

And, "I'm sick and I'm dying now because of what was concealed from me. Sure, I get my workers compensation." If a man dies today in California leaving six dependent children and a widow, the family gets $55,000 maximum.

But let that worker go to civil court and let him prove, let him try to prove what went on and then let him collect his damages. Let him be compensated. I think that is very important.

Mr. CONYERS. You think we need to spell out the whole method of providing a clear remedy in a civil suit so that you will be protected against any fifth amendment claims?

Mr. KAZAN. Well, yes, I think so, and that's a problem that I'm not sure I know how to resolve. Whether the way you resolve it is by making the corporate officers and executives and managers criminally liable for fines and jail sentences so that we can still sue the corporation, that may be a solution.

But I think that the bill should contain a very simple provision that says, "Violation of section 1822 shall confer an independent right to civil damages upon any affected worker injured as a result of said violation."

And I would ask that such an amendment be further clarified by adding a simple clause that will solve a lot of the problems that we have in the factory worker context. Just add the provision or the clause, "No provision of any State workers compensation statute respecting exclusive remedies to the contrary not withstanding."

In other words, make it explicit that regardless of what a State compensation statute says, worker whose employer treats him the way our clients have been treated has a right to go to court and get civil damages.

You will see American industry clean up its act. Because if anybody had told those directors at Johns-Manville in 1933, that "Fellows, if somebody blows the whistle on us 30 years from now, not only are we going to have to pay workers compensation but we're going to be liable for civil damages and punitive damages," then I think that Johns-Manville would have done the right thing.

It's very clear that they will never do the right thing for the right reason. But it's within the power of this committee to help force them to do the right things for the wrong reasons. And that's a lot better than letting them do the wrong thing.

Mr. CONYERS. Well, we will keep this in mind. This is a very difficult area but I think you've raised some good questions about it. I am particularly supportive of the notion that we expand the definition of product so that it includes fabricated materials and other things going into it, as well as making it very clear that

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bodily injury would include disease which is a difficult area in workmen-type claims.

The statute of limitations, itself, should be one of sufficient length so that you don't end up putting a premium, as you put it, on successful concealment.

Those are all important and some of them a little bit difficult areas to handle. We are going to research those carefully.

If any other members of the trial bar have anything else to submit we'd be anxious to receive additional comments, as well.

Mr. KILBOURNE. Is there a method to submit matters such as this to the committee? I am not aware of it but I am sure there is.

Mr. CONYERS. Just send them to me and we will examine them as we go along.

Do either of you have any other concluding comments that you would like to make before we hear from Mr. Bouvert?

Mr. KAZAN. George.

Mr. KILBOURNE. There is one matter. Mr. Bouvert, at our request, has gotten a letter which after Johns-Manville became aware that men were suffering from lung disabilities, they changed the doctor that they had, the original doctor, a defendant, incidentally, in some of our lawsuits, and started sending the men then to the Redwood Medical Clinic in Redwood City.

And Mr. Bouvert has just handed me the letter that he was given by Dr. Donald W. Smith, dated November 15, 1974, and I ask that you keep in mind that this man is suffering from asbestosis and has had one lung removed because of lung cancer.

It reads as follows:

Dear Mr. Bouvert, you recently underwent a medical examination at Johns-Manville Products Corporation in compliance with the Federal and State OSHA regulations concerning all persons who work with asbestos and/or other industrial pollutants and wear respirators in their work.

The medical history indicated a known arterial insufficiency in your right leg and medication for diabetes and high blood pressure.

The physical examination indicated a significant decrease in vision since last examination. The pulses in the right foot were absent. The screening laboratory tests were within normal limits.

The chest X-ray showed an emphysematous appearance. There is a left pericardial scar, present since 1965, which is unchanged since 1973.

The lung function test indicated a moderately severe problem with mechanical air flow in your lungs. This may be related to smoking and you are urged to make every effort to stop smoking.

Because of remodeling in the medical department, the hearing test was deferred until the near future, at which time we will notify you of the results.

I suggest that you consult your personal physician regarding the significant decrease in vision and continue followup with him regarding the arterial insufficiency in the right leg and medications for diabetes and high blood pressure.

Sincerely yours,

DONALD W. SMITH, M.D.

At no place does it mention, even at that time, that the man had asbestosis and certainly not cancer. I have his permission to read this and I think it's indicative of part of the policy that was followed by Johns-Manville.

Mr. CONYERS. Did you want to add anything, Mr. Bouvert?

Mr. BOUVERT. I don't have much more to add on that. I know the place where I work, the pavement department, is a very dusty place. And I was working the beaters at the time. And I opened up sacks and cut the strings off the top, dumped sacks, one right after another in beaters. Say about 10 sacks per pallet.

Then, later on, they started using the big pallet with 30 or 40 sacks at a time.

Mr. CONYERS. These are sacks of what?

Mr. BOUVERT. Of loose fiber. So we were dumping one sack at a time of that stuff. I was doing that for quite a long time. We had been sweeping the floors around there and the air was all full of that dust, asbestos dust.

So every so often, we had to go to the fountain and get a drink of water. Throat gets awful dry and in order to get that stuff down, you have to get some water to push it down.

When I worked in the bag room it was the same thing. That is, all full of dust. At times when we used to work in the bagroom, the machines were down a little bit but when they started up, we were right back again on the job day after day of that.

Then going home, my clothes were just a mess. I took my clothes in two or three times a week for my wife to wash them in the machine, and cough all day and all night.

Mr. CONYERS. How long did you work there?

Mr. BOUVERT. Twenty-eight years at Johns-Manville.

Mr. CONYERS. Twenty-eight years, and when was the last date that you worked at Johns-Manville?

Mr. BOUVERT. 1974.

Mr. CONYERS. 1974.

Well, I think we've done what we could do to develop this portion of the hearings in terms of asbestos and the important role that both of you have played in this matter.

I think you've raised some very important concerns. We'll be waiting the outcome of the Supreme Court decision, just as you will.

I suppose it will be given before this term ends.

Mr. KAZAN. We hope so.

Mr. CONYERS. In the meantime, if there are further discussions among others in the bar about the question of the statute of limitations and other questions of discovery that could be very important in trying to create the most accurate legislation, we would be very happy to hear from you still.

Are there any questions from any of the staff?

Mr. RAIKIN. Mr. Kilbourne and Mr. Kazan, should the statute of limitations be lengthened for Miller-type violations in view of the fact that you and others pointed out today that some of these diseases like asbestosis and mesathelioma have a 20-year lagtime before symptoms manifest themselves? Would you favor an amendment to the bill specifically creating, say, a 25-year statute of limitations?

Mr. KAZAN. Yes, I think that that would be helpful. The latency period for asbestos-related cancer is often as high as 30 or 35 years, and it can be longer. If you used the bell-shaped curve, you'd probably find it keeping between 20 and 30 years.

So certainly a long statute of limitations would be helpful. Certainly a provision tolling the statute of limitations during continued concealment would be helpful.

And, well, I think that that pretty much says it, on the statute of limitations.

Mr. CONYERS. That would be the longest statute of limitations period we have on the record, wouldn't it?

Mr. KILBOURNE. There is another way of approaching this.

I know that Mr. Ken Lynch is in the hearing room and he was instrumental, I believe, in a case before the California Appellate Court and very active in legislation in California, on the special asbestos bill.

The statute doesn't start to run until you have an informed diagnosis, for instance, or until there is a disability. There are other tests and other elements which should be considered, and would delay when the statute starts to run.

Certainly lengthens it but I think it's mandatory that you have something like that in order to protect the worker and to make it meaningul at all. Otherwise legislation has no meaning.

Mr. CONYERS. What about the kinds of problems where we don't know how long it takes the symptom to develop?

Mr. KAZAN. Well, that is a problem. I don't do any criminal work. I have never much understood criminal law in law school. And I've managed to avoid it ever since.

But I think we have to bear in mind that what we're really talking about is an organized form of corporate murder, if you want to call it that, intentional concealment, that leads inexorably to the death of a large number of workers. It may be that this would be an extreme departure from ordinary criminal time limitations, but I think it certainly could be indicated appropriate in this context.

You can never foreclose all the possibilities but I think a substantial statute of limitations would have an impact and just as, as I understand it, in a conspiracy, the statute of limitations runs from the last act of the coconspirators. I think something like that should apply in this context.

Mr. RAIKIN. The fact that there is sometimes a decade or two decade lagtime before the symptoms show up, that argues very forcefully, does it not, for why we need a newer type bill which creates a criminal offense at the moment of the coverup and that we don't need dead bodies lying around all over the place 20 years later before the deterrent effect of the bill and the threat of prosecution would come into play?

Mr. KAZAN. Well, I think that's true. For example, in the context of asbestos, it was long ago established that it was hazardous and if you had, for example, a factory manager today concealing from his workers that they are working with asbestos, although that's, I suppose, hard to conceive, I think that should be actionable right now and it should not be a part of the prosecutor's burden of proof to bring in three victims who actually are sick from that defendant's criminal misconduct.

One of the medical facts that I think you need to bear in mind and I wish Dr. Polakoff were still here because he can probably tell you this better than I can, but in terms of asbestosis and particularly cancer, you see virtually none beyond the ordinary incidence in the general population until you're 10 years down the road from the workers' first exposure.

So at least the cancer, you're not going to see any within the first 10 years of the violation at a particular factory. And that's another reason why you do need a longtime period.

Mr. CONYERS. Well, we will be wrestling with this important comment.

Thank you very much again for your time and your testimony.

Mr. KILBOURNE. Certainly.

Mr. KAZAN. Thank you for inviting us.

[A copy of letter of Elie G. Bouvert follows:]

DERMATOLOGY
ANDREW S. BURGOYNE, M. D.
GENERAL SURGERY
FRANCIS E. HOWARD, M. D.
GENERAL AND THORACIC SURGERY
ELDON E. ELLIS, M. D.
CONRAD D. THURSTONE, M. D.
INTERNAL MEDICINE
G. W. MINERS, M. D.
LLOYD W. ESPEN, M. D.
HAROLD P. JOHNSON, M. D.
BALLARD HAYWORTH, M. D.
DONALD W. SMITH, M. D.
JOHN N. SALZER, M. D.
VINCENT S. YUEN, M. D.
JOHN J. PRENDERGAST, M. D.
NEUROSURGERY
GEORGE H. KOENIG, M. D.
CONSULTANT
OBSTETRICS AND GYNECOLOGY
JOHN C. CROUSE, M. D.
CHARLES W. MANFORD, M. D.
GENE A. MANZER, M. D.

REDWOOD MEDICAL CLINIC
2900 WHIPPLE AVE., REDWOOD CITY, CALIF. 94062
TELEPHONE 369-5561 DAY AND NIGHT

OPHTHALMOLOGY
HOWARD D. ROBINSON, M. D.
ORTHOPEDIC SURGERY
WILLIAM C. BARRETTE, M. D.
EDWARD H. KATZ, M. D.
PAUL J. STUCKER, M. D.
OTOLARYNGOLOGY
MELVIN J. GUNSBERG, M. D.
PEDIATRICS
PAUL R. FREEMAN, M. D.
GOODWIN C. ELLIOTT, M. D.
RODNEY J. MILLAR, M. D.
ROBERT A. EKOALE, M. D.
PSYCHIATRIC SOCIAL WORK
CAROL C. CHAPMAN, ACSW
RADIOLOGY
JOHN H. CALLAGHAN, M. D.
JAN W. PATTERSON, M.D.
CONSULTANT
UROLOGY
GERALD O. OLSON, M. D.
CONSULTANT
ADMINISTRATION
FREDRICH W. HAGEBOECK

November 15, 1974

Elie G. Bovert
623 12th. Street
Antioch
California 94509

Dear Mr. Bovert:

You recently underwent a medical examination at Johns-Manville Products Corporation in compliance with the federal and state OSHA regulations concerning all persons who work with asbestos and/or other industrial pollutants and wear respirators in their work.

The medical history indicated a known arterial insufficiency in the right leg, and medication for diabetes and high blood pressure.

The physical examination indicated a significant decrease in vision since last examination. The pulses in the right foot were absent. The screening laboratory tests were within normal limits.

The chest x-ray showed an emphysematous appearance. There is a left paracardial scar, present since 1965, which is unchanged since 1973.

The lung function test indicated a moderately severe problem with mechanical air flow in your lungs. This may be related to smoking and you are urged to make every effort to stop smoking.

Because of remodeling in the medical department, the hearing test was deferred until the near future, at which time we will notify you of the results.

I suggest that you consult your personal physician regarding the significant decrease in vision and continue follow-up with him regarding the arterial insufficiency in the right leg and medications for diabetes and high blood pressure.

Sincerely yours,

Donald W. Smith, M.D.

DWS:sc

Mr. CONYERS. Our final witness is Dr. Leo Seidlitz who is now medical physicist of the University of San Francisco Medical Center.

We are glad that you were here today. Your name has been mentioned more than once and we would like you to make what has been indicated to me a very brief statement before we close.

TESTIMONY OF DR. LEO SEIDLITZ, MEDICAL PHYSICIST, UNIVERSITY OF CALIFORNIA MEDICAL CENTER

Dr. SEIDLITZ. I certainly appreciate your patience and admire your endurance. I will be as brief as I can.

Mr. Chairman, I am Leo Seidlitz, as you've already indicated. I am medical physicist and chairperson of my local union's health and safety committee, American Federation of State and County Employees, Local 1650.

I am also employed by the University of California Medical Center, San Francisco. At least I believe I am still employed there. My union believes I am employed there. But the employer believes I've been fired as of last July. In other words, we're in the dispute at this very time that the proper action has been taken against me by the University of California.

We heard a lot of testimony today about DBCP, both personally related and also in more general terms.

Now I do not suffer from sterility caused by DBCP nor do I have cancer. I've never been exposed to DBCP, yet I have been hurt by it.

Or to put it more properly I've been hurt by the fallout from the DBCP scandal. That was well known and I'm sure you certainly know that it was appropriated by the State legislature in California, $2,000,000, as a consequence of a scandal and scandalous behavior by the University of California and one of its researchers, Dr. Charles Hine, in regard to the DBCP material.

And this $2,000,000 was to set up two occupational health centers, one in northern California and one in southern California.

The one in northern California was supposedly to be set up at the University of California-San Francisco, where Dr. Hine is the professor of occupational medicine, sole person, the staff, as a matter of fact, in that field.

One would have expected that Dr. Hine would have possibly hid behind a barrel or some other convenient shielding and let this thing go on.

Instead, Dr. Hine has or had, at first, tried to become the director, naturally, of the entire occupational health center. This was beaten down by enough of the people involved in that, and he did not achieve that post.

But just recently, a couple of months ago, he was appointed by the University of California by its School of Medicine at San Francisco, as codirector of the medical residency program of the occupational health center.

In other words, Charles Hine will now be making more little "Charlie Hines."

There has been in the task force report preceding the actual occupational health center setup a description of the shortage of physicians, occupational medicine physicians.

We do not have a shortage of company doctors. We have a surplus of them and Dr. Hines, well, you've seen more company doctors do more of his damage to workers.

Early in 1978, I made a proposal as a member of the faculty of the University of California Medical Center and also as a member of the labor studies program at the City College in San Francisco, of a joint activity between these two organizations in the field of worker outreach and educating about health hazards.

I felt that all the money that had been appropriated for the occupational health center should not be going solely to train professionals; that this would be one part where there would be direct input and service to workers but, even more important, it is important that the labor movement and rank and file workers, in particular, of the sort that came forth today, have an input and influence on that center. We know, at least I know and it's been demonstrated that the best of programs which have a social orientation may, in an academic setting, go astray, tangents of all kinds that are very interesting to the researcher. They would forget the purpose of the occupational health center, namely to improve the lot of the workers with respect to occupational health hazards.

Well, I introduced one such proposal to be part of the occupational health center, funded by State money. This got a bureaucratic shuffle. Not to this date, well, 2 years later, it has never been turned down.

It goes from place to place. Sometimes Dr. Perevance has it, sometimes Dr. Spear has it, sometimes Dr. Truday has it. But it's never been pinned down.

By pure coincidence, about the same period, April–May 1978, Federal OSHA put out a request for proposals regarding worker outreach education, the very kind of proposal, seeking the very kind of proposal I had made.

So I resubmitted it in amplified form for transmission to Federal OSHA. I submitted it through the proper channels.

At one level, the dean of continuing education approved it, sent it to the last level, namely the Chancellor for Academic Affairs, and it was vetoed there. Federal OSHA was not given a chance to approve or not approve, to submit this money, or not submit this money.

Without taking any more of your time, I would just simply make an assertion at this point and I can prove it and will send to you some written material on this matter, but because of my activity in general on health and safety within UC and as a chairperson of the health and safety committee specifically, and culminating in my two proposals for having strong and significant worker input into the occupational health center, the university suddenly found that my part-time salary of $400 a month was too much for them to bear, and allegedly laid me off for fiscal reasons.

Mr. CONYERS. Well, I really don't want to continue to pursue this. This is slightly off the course of the hearing on the legislation, you must admit.

I'd like to be further advised of it but I don't think it's necessary to put it into the record and to make it an official part of these hearings.

I am concerned about the point that you're making. However, it does not bear directly upon the Miller proposal that is before us now.

Dr. SEIDLITZ. It bears indirectly in the sense that many people said they had to build new things in the legislation. Perhaps the DBCP business would not have happened the way it did. And I, further down the chain, suffered the action against me that I have. And this is relevant.

Thank you.

Mr. CONYERS. Well, thank you for appearing before us and you are the last witness for our hearings in San Francisco. We've had a lot of witnesses today and covered a lot of time. I am grateful to the subcommittee's counsel and staff for staying with me throughout these hearings.

At this point, we pronounce the hearings closed.

[Whereupon, at 4:20 p.m., the hearing was closed.]

ADDITIONAL STATEMENTS

PROPOSED TESTIMONY ON H. R. 4973 BY TIBOR R. MACHAN, ASSOCIATE PROFESSOR OF PHILOSOPHY, SUNY COLLEGE, FREDONIA, AND VISITING LECTURER IN ECONOMICS, UNIVERSITY OF CALIFORNIA, SANTA BARBARA.

Several issues must be touched on in order to adequately assess the merits of this proposed piece of legislation. To begin with, what the bill proposes is to fine and or imprison anyone in business who, in the capacity of a "manager with respect to a product or business practice . . . discovers . . . a serious danger associated with such product (or component of that product) or business practice and . . . knowingly fails to so inform each appropriate Federal agency in writing, if such agency has not been otherwise so informed, and warn affected employees in writing, if such employees have not been so warned, before the end of thirty days after such discover is made." It is necessary to quote the bill because this will make the scrutiny of its terms simple.

First of all, the bill imposes the duties of a policeman on business employees, managers. But that is not what these individuals have been hired to do. Nor are they competent at the task this bill will require them to perform, namely, to seek out "information that would convince a reasonable person in the circumstances in which the discoverer is situated that it is probable the serious danger exists." As is well known, the duties of the police include becoming expert at adhering to the provisions of due process. Accusations, charges, suspicions, etc., must be issued or communicated in very specific ways, and the enforcers of laws must be thoroughly prepared to conform to the spirit and letter of the law when they engage in their police

work. It is entirely beyond the responsibility of a corporate or business manager to obtain the needed experties for purposes of becoming a police informer, which this bill requires of such an individual.

Second, this bill imposes on business firms the burden of carrying out the work for which the taxpayers have already been forced to pay, namely, law enforcement. It is evidently against the law in our time to produce goods and services which are demonstrably harmful to consumers, especially when consumers are not permitted to become aware of this fact and could have been made so aware. Any firm perpetrating such action can be taken to court today. But unless some grounds have been uncovered to lead the agencies of lawenforcement to suspect such violations of the law as may be applicable, it would be entirely unjust, even in violation of due process of law, to require of the firm that it bear the cost of discovery and disclosure. The spirit and letter of the principle of not guilty until proven to be so--or, not treated as suspect unless probable cause is shown--are violated by the present proposed legislation.

Third, although it may appear that legislation such as that proposed here will go a long way toward eliminating some harmful business products or services, there is nothing to prove that this will indeed happen. The bill presupposes the widespread carelessness of managers with respect to a product or business practice--indeed, the bill preupposes their willful disregard of serious dangers in such products and practices. If this assumption is correct, it must be made to apply not only to managers in business firms but to everyone else in a

decisionmaking position, inside or outside the business community. For example, members of the bureaucracy, the police, the various political bodies, and so forth, are all human beings capable of what others are capable of. To pick on business people as a special class is extremely discriminatory. Consider that teachers at universities can abuse their work as much as any manager of some production line or business practice. This bill would open the door to a more general piece of legislation that would require that members of every profession be fined unless they engage in the practice of police informant. In the profession with which I am personally familiar, it would have to be regarded as punishable for a professor not to inform the Department of Education if he has discovered that one of his colleagues is engaging in indictrination rather than teaching. The writing of books which contain falsehoods would have to be reported, since there is no question that reading these books can lead people to order their lives in dangerous, harmful ways. Of course, besides teachers, doctors, football players, politicians, ministers, and just about everyone else who is engaged in some profession, working for some organization that offers the product or practife of that profession, would logically have to be included under the term "appropriate manager." Otherwise this bill would be extremely discriminatory, singling out just one group of individuals and requiring of them the performance of tasks for reasons that apply just as much to members of other groups.

Let me conclude my remarks by making some general observations about the spirit or motivation in back of this proposed piece of legislation.

First, to believe that one can regulate all the potentially harmful practices of the business community is folly. There is no justification for this belief. Thus what remains is the motivation to do something, anything, to prevent some future harm. This hope should not suffice as grounds for such discriminatory and onerous legislation as the present bill will certainly be if enacted.

Second, however complex a product or a business practice, those who purchase it are not required to do so. They do this voluntarily, in the majority of the cases, including drugs, hospital equipment, and other seemingly necessary items. When looked at out of context, this may appear to be dead wrong. But not even emergencies should be regarded as totally unanticipated. Once this is recognized, it should be noted that just as producers are human and have the degree of good will and ingenuity of human beings in general, so the same is true with consumers. Entirely on their own, both groups can prepare to cope with each other's possible negligence or even occasional malice. Only when some actual violation of someone's rights has occurred is there just ground for interference in the interactions between members of these groups. There is no room, in short, for preventive justice in a free society--and in any kind of society the practice is impossible to carry out successfully, anyway.

Third, and finally, this proposed piece of legislation continues a very sorry trend in recent history, namely, the abandonment of due process of law when it comes to dealing with members of the business community. Unlike even the so-called mentally disturbed citizens among us, more and more people in business are regarded guilty of something without having been found guilty through a process of demonstration. The bigness, frequently very visible success, and plain wealth of some members of the business community, coupled with the crimes found in this group of citizens of our society--which is by no means proportionately greater than in any other group, except for the artificiality created to extensive regulation which, were it applied to teachers or dancers or singers, would make many members of those professions criminals--have led to treating them as if they were second-or third-class citizens. I am not defending all these people, anymore than I would defend all scientists or musicians. But members of all these groups must have their basic rights protected and preserved. And this bill, along with others following the same pattern, just accomplishes the opposite. In the process they rob members of the business community of the need to think for themselves, to make morally responsible decisions for themselves. As a friend recently told me, who is an attorney with one America's largest corporations, we just do what is permitted, since the government has a rule about everything these days.

Thank you for your attention.

V I T A

TIBOR R. MACHAN

BORN: March 18, 1939 (Budapest)

FAMILY: Marty Zupan (wife)
Katherine Machan (child)

LANGUAGES: English, Hungarian, German

EDUCATION: Claremont Men's College (BA 1965)
New York University (MA 1966)
UC Santa Barbara (PhD 1971)

POSITIONS (academic):
Teaching Assistant, UCSB (1967-70)
Assist. Prof., Cal. State, Bakersfield (1970-72)
Assist. Prof., SUNY Fredonia (1972-75)
Assoc. Prof., SUNY Fredonia (1975-)
Tenured at SUNY Fredonia (1976)
Visit. Assoc. Prof., Pol. Science, UCSB (1979)
Visit. Lecturer, Economics, UCSB (1980)
Resident Scholar, Reason Foundation (1979)

POSITIONS (admin.):
Co-director, Conf. Pol. Phil., USC (1970)
Co-director, Conf. Pol. Phil., USF (1971)
Co-director, Conf. Reason & Values, Pomona C. (1977)
Educational Programs Director, Reason Foundation, Santa Barbara, California (1978-)
Director, Liberty Fund Summer Seminar Program (1979)
Co-director, Conf. Gov. Regulation, Liberty & Justice, UCSB Economic & Reason Foundation (1979)
Director, Conf. Virtue & Pol. Liberty, Reason Foundation (1980)
Editor, REASON PAPERS (annual journal), since 1974

AWARDS:
Claremont Men's College Scholarship (1963, 1964, 1965)
Cal. State Scholarship (1968, 1969)
SUNY Summer Research (1973, 1974, 1978)
Institute for Advanced Studies, Vienna, Austria (1974)
Earhart Foundation (1977, 1979)
Nat. Right to Work Legal Defense Foundation (1977)

FELLOWSHIPS:
National (NEH) Fellow, Hoover Institution (1975-76)
Institute for Humane Studies (1975)

COURSES TAUGHT:

Introduction to philosophy
Political Philosophy
Marxist Thought
Marxist Economics
Social Philosophy
Democratic Theory
History of Economic Thought
Existentialism
Phil. of Psychology
Phil. of Social Sciences
Rights Theory
Philosophy and Public Policy
Business Ethics
Ethics & Metaethics

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INTRODUCTION TO OSHA TESTIMONY

My name is Dr. M. Donald Whorton. I have with me two of my colleagues, Dr. Thomas Milby and Dr. Sumner Marshall. I am board certified in internal medicine and occupational medicine and presently am medical director of the Labor Occupational Health Program, University of California, Berkeley. I have spent six years in the practice of occupational and internal medicine and have published numerous articles in scientific journals on subjects relating to my areas of qualification.

Dr. Milby is president of Environmental Health Associates, a research consulting firm in Berkeley, California. Dr. Milby is adjunct associate professor of Occupational Medicine at the University of California, and has practiced occupational medicine for 18 years. He also is the author of numerous scientific articles and is here to assist me in my testimony today.

Also with me is Dr. Sumner Marshall, who is board certified in the specialty of urology and in private practice in Berkeley, California. Dr. Marshall is also an associate clinical professor of urology, School of Medicine, University of California, San Francisco. Dr. Marshall has been in the active practice of urology for 14 years and, as well, has authored numerous scientific articles.

In connection with the investigation concerning which we are about to give testimony, I have acted as principle investigator and project leader. Dr. Milby has provided assistance

to me in areas of toxicology and epidemiology, and Dr. Marshall has provided our team with expertise in the clinical specialty of urology.

At this time we wish to state that we will limit our testimony to the events surrounding the discovery, clinical findings, and evaluation of the occupationally related infertility problem at Occidental Chemical Company in Lathrop, California. During the course of this investigation we have also acted as consultants to Oil, Chemical, and Atomic Workers Union Local 1-5, the Occidental Chemical Company, Western Division, the National Institute for Occupational Safety and Health, the United States Occupational Safety and Health Administration. In addition, during this period we have provided assistance to the State of California Department of Health, the State of California Department of Industrial Relations, Dow Chemical Company, and Shell Oil Company.

How We Became Involved

In late June and early July 1977 the Oil, Chemical, and Atomic Workers Union (OCAW), Local 1-5 asked seven male employees of the Occidental Chemical Company's Agricultural Chemical Division (ACD) to volunteer for sperm analysis. The reason for such an unprecedented action was the persistence of an unfounded suspicion that men who worked in this area of the plant were infertile. The results of these sperm counts were sent to Dr. Donald Whorton, University of California, who had functioned as a consultant to the union in the

past (the laboratory would only release the results to a physician). By the middle of July Dr. Whorton had received seven sperm-count reports, all of which were abnormal. Dr. Whorton informed Rex Cook, Secretary-Treasurer of the OCAW local, of the abnormal results and requested an opportunity to meet with the men from whom the sperm samples had come. On July 19 Dr. Whorton participated in a joint meeting with the management of Occidental Chemical and the Union. At that meeting Dr. Whorton stated that he wished to talk with the seven men and to re-test them. This was agreed upon. Later in the afternoon Dr. Whorton met with six of the seven men, five of whom were requested to submit to re-testing. The sixth man was omitted because of a prior vasectomy. Arrangements were made for the men to be re-examined on July 22, 1977 in Berkeley, California. Each man was requested to refrain from further ejaculations until after the examination (a period of three days). Dr. Whorton later met with both the Union and the management on the evening of the 19th to reconfirm the procedures.

On July 22 the five men came to Dr. Whorton's office in Berkeley for the re-examination. Each had been given a medical history questionnaire to complete prior to the examination. On arrival each was given a specimen container and each provided a specimen for semen analysis. This analysis included a sperm cell count as well as motility and morphology of individual sperm cells. The specimens were immediately taken to the laboratory at Alta Bates Hospital for analysis. Also,

while at the hospital, blood samples were taken for complete blood count with differential, SMA 12, T3 resin uptake, T4, serum testosterone, follicle stimulating hormone (FSH), and luteinizing hormone (LH). A urine specimen for routine urinalysis was also obtained. The men returned to Dr. Whorton's office and each reviewed his medical questionnaire with Dr. Whorton. Dr. Whorton also asked a series of specific questions relating to the genitourinary system. He then performed a complete physical examination on each individual. Late in the afternoon of the 22nd, Dr. Whorton received the results of the semen analyses from the laboratory. Again, the semen analyses were decidedly abnormal; most men were azoospermic, the remainder, severely oligospermic. Each man was informed of the results of his semen analysis.

Dr. Whorton then informed the Union and the Company of the results. On July 23, 1977 he met again with the Union and Company representatives to determine which other individuals should be tested. A list was assembled of all current ACD workers, mechanics assigned to the ACD area, clerical personnel assigned to the ACD, and the laboratory personnel who work with various ACD products. In addition, several former ACD employees who still worked for Occidental were included. Thirty-six individuals in addition to the original five were examined during the next two weeks for a total of 41 examinations. Each received a similar medical examination and underwent similar laboratory testing as the original five. The only exceptions were the vasectomized males, who, of

course, were not requested to give a sperm sample. The females were not tested for serum testosterone. Of the 41 workers examined, 3 were women, 11 were men with vasectomies, and 27 were men who were able to provide a semen specimen.

In late July of 1977 both the Union and the Company requested NIOSH to undertake a Health Hazard Evaluation on the remaining workers in the plant. NIOSH contracted with Dr. Whorton for this study. Dr. Whorton sub-contracted with Dr. Thomas H. Milby of Environmental Health Associates, Berkeley, and Dr. Ronald Krauss of Alta Bates Hospital, Berkeley, for assistance.

After analysis of the results of the first forty-one examinations, the need to address four major questions in the subsequent Health Hazard Evaluation became apparent:

1) Did the infertility problem extend beyond the ACD to involve other male employees;
2) What was the extent of the infertility problem in former male employees of the ACD;
3) Is there a hormonal assay available that is equally effective as a sperm count for identifying affected individuals; and
4) Although DBCP was considered to be the most likely causal agent, could one or more other chemical agents also be involved.

Careful assessment of the data from the first forty-one examinations made it clear that there was no need for an exhaustive medical workup of each subsequent participant.

Accordingly, an abbreviated medical history form and physical examination strategy was devised. The questionnaire focused on the reproductive system, especially reproductive history. Medical evaluation was largely confined to the genitourinary system and laboratory work was limited to sperm count and evaluation of certain hormonal levels that appeared to hold promise as indicators of effect.

Early in our work, we became aware of the information published in the American scientific literature in the 1960's which implicated DBCP as a producer of testicular atrophy in animals. As well, we learned of observations reported by manufacturers of DBCP that the chemical has produced depressed sperm counts in exposed workers.

Exposure

A major, never fully-resolved problem was estimation of individual exposure to DBCP. For the purposes of statistical analysis, DBCP exposure was defined in two ways, one qualitative, the other quantitative. Qualitative exposure was defined as a simple yes/no category with yes indicating a history of any form of exposure to DBCP, whatever the magnitude or whenever the time. The second half of this category, "Never Exposed to DBCP," was likewise based on the participant's indication that he never worked in any of the several areas where DBCP was known to have been processed at one time or another. Applying these qualitative criteria, 154 individuals were classified as exposed to DBCP and 42 were

classified as not exposed (for a total of 196 employees). Only 107 and 35 of these employees, respectively, were able to produce semen specimens for analysis.

A quantitative estimate of exposure was also calculated. To obtain the information necessary for this estimate, each employee was questioned about his exposure to DBCP. Time in ACD was considered de facto evidence of exposure. The total time of exposure was estimated by months worked in ACD, pellet plant, application, etc.

The exposures were added in a cumulative manner in order to provide an exposure sum by months. The data were grouped according to duration of exposure in groups large enough to be statistically useful. Some individuals who had been categorized as exposed in the qualitative exposure classification were omitted from the quantitative classification system because no reasonable quantitative estimate of exposure could be calculated. These employees were placed into a group of unquantifiable exposure. By this system, 91 men able to produce a semen specimen for analysis were classified by months of exposure (Table).

A control group was constructed of 35 employees who had no known exposure to DBCP and were able to produce semen for analysis. The design of the plant provided physical separation of ACD from the rest of the plant, thus tending to prevent casual exposure to DBCP.

There was no attempt made to obtain a control group from another plant in the area due to the nature of the test required.

Obtaining semen samples on individuals at known risk is difficult; obtaining semen samples from a population in which there is no perceived risk or problem would in the opinion of the investigators be nearly impossible.

Sperm Counts

Sperm count data were examined to detect the influence of age and exposure to DBCP. No statistical correlation was found to exist between age and sperm count when all employees were examined as a single group, nor when employees were grouped as Exposed or Not Exposed.

Applying the qualitative estimate of exposure (Exposed--Not Exposed), median sperm count for the group of 35 men classified as Never Exposed to DBCP was found to be approximately 79 million, while for the group of 107 men classified as Once Exposed to DBCP, the median sperm count was approximately 45 million (Figure 1). The difference in the median sperm count between Exposed and Not Exposed is viewed by us to be a major finding in this study.

A second comparison of exposure and sperm count involved the 91 men from the group of 107 men qualitatively classified as Once Exposed to DBCP who could be assigned a quantitative exposure value. Also included in this comparison were the 35 men qualitatively classified as Never Exposed to DBCP. Each man was placed in one of two groups according to sperm count. The two groups were: "Greater Than 40 million sperm/ml." and "Less Than 40 million sperm/ml." The dividing point

of 40 million sperm/ml. was chosen because there is little disagreement among experts that a sperm count of 40 million or more per ml. can be considered a normal value. The percent of men who fell into each exposure category was calculated and the between-group ratio was examined (See Table). From the Table it can be seen that the number of normospermic men in the No Exposure group was eight times greater than the number of oligospermic men in that same group. In the 1-6 month category the ratio was three to one; in the 7-24 month category the ratio was one to one; and in the 25-42 month category the ratio reversed so that the number of oligospermic men is now twice as great as the number of normospermic men in this category. An even more striking difference is seen in the greater than 42 month duration category, where the ratios of oligospermic men to normospermic men is five to one.

Hormone Data

FSH, LH, and testosterone assays were done in an attempt to find a hormonal indicator that would predict alterations in sperm count, thus obviating the need to obtain a semen specimen in a population of employees exposed to a chemical suspected of possessing infertility-inducing properties. Our observations suggest that either FSH or LH (but not testosterone) could be useful in this role if a study population, like ours, contains a high percentage of azoospermics. The predictive value of both FSH and LH decrease to vanishing if one removes the azoospermics from the study population, as we

did by statistical manipulation. In short, in a population of men severely damaged to the point of widespread azoospermia, FSH or LH serum values would likely predict the existence of a problem which would then require the collection of sperm samples for clarification. In a population of oligospermic men, neither hormone assay could be counted upon to detect a problem. Thus the sperm count remains the single best indicator of DBCP-induced infertility.

Summary and Conclusions

The extent of the infertility problem at the Occidental Chemical Company's Lathrop plant can be summarized as follows: 13.1 percent of the exposed, nonvasectomized group were azoospermic, 16.8 percent were definitely oligospermic, and 15.8 percent were mildly oligospermic(20-39 million sperm per ml. of seminal fluid). Of the 142 men examined who provided semen specimens, 75.4 percent were eventually classified as exposed. The drop in the median sperm count of the exposed group compared to the unexposed group was considered a major observation. Clearly, the depression in sperm counts observed in some of the men has caused infertility problems. This is most extreme in the azoospermic group but also has been observed in some individuals of the oligospermic group as well. In fact, initially, the infertility problem was the reason that this situation came to our attention.

During the investigation, individuals from areas other than ACD were found to have been exposed at one time or

another to DBCP. In the early 1960's the company impregnated fertilizer pellets with DBCP. Some of the individuals who worked in these areas were found to be severely affected. Also, a high percentage of the applicators, demonstrators, or set-up men were found to be affected.

The likelihood of a causal relationship between DBCP exposure and the observed infertility is great, especially if one considers the studies reported from DBCP manufacturers.

We have scant data with which to address the question of reversibility of DBCP-suppressed testicular function. The information that we do have suggests that reversibility can occur in some cases, but that at some point along the dose-response curve damage may be permanent. Suggesting the potential for permanent damage is the example of two azoospermic individuals who had had no exposure to DBCP for nine and thirteen years respectively. The first individual had been exposed for a duration of four years; the second individual for two years. Holding out the possibility for recovery are the cases of two normospermic individuals who had had two and one-half and three and one-half years exposure to DBCP two and one-half and three years ago, respectively. These observations would suggest the presence of a dose-related response spanning an entire spectrum of damage. In summary, it is our opinion that the final answer to the question of reversibility can only be obtained by long-term follow-up of affected individuals.

TABLE I

Distribution of DBCP Exposure Months
Among 91 Nonvasectomized Employees
From Whom Sperm Samples Were Obtained

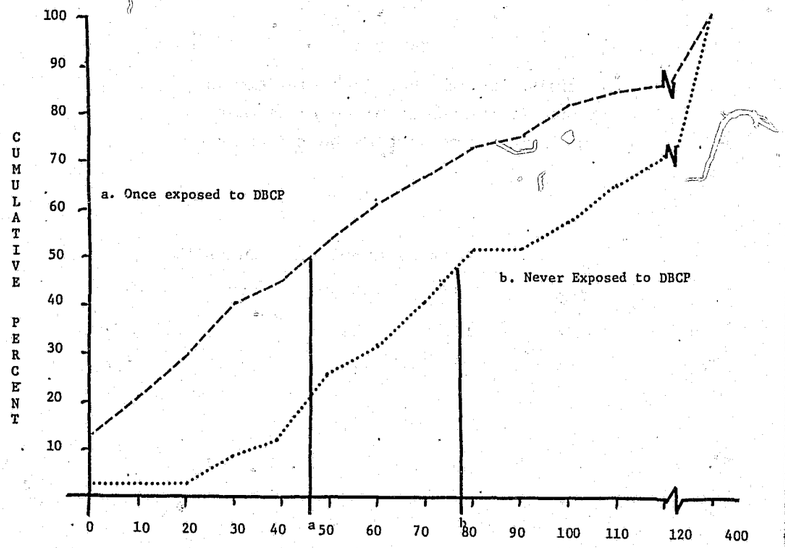
	Exposure Duration (Months)				
	1-6	7-24	25-42	>42	Total
N	48	14	12	17	91
(%)	(53)	(15)	(13)	(19)	(100)

13

FIGURE 1

Cumulative Percentage Distributions for Sperm Count for Two Groups:

a. Exposed to DBCP (N = 107) b. Never Exposed to DBCP (N = 35)



Sperm Count in Millions:

a. Median Sperm Count = 45.6×10^6/ml

b. Median Sperm Count = 78.7×10^6/ml

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TABLE II

RATIO OF NORMOSPERMIC* MEN TO OLIGOSPERMIC** MEN BY MONTHS EXPOSURE TO DBCP

N = 126

	Exposure Duration (Months)				
	None	1-6	7-24	25-42	>42
Normospermic	8	3	1	1	1
To	..	..	..	..	..
Oligospermic	1	1	1	2	5
N	35	48	14	12	17

*Normospermia = $<40\times10^6$ (44 men are in this category)

**Oligospermia = $>40\times10^6$ (82 men are in this category)

Ratios are rounded to nearest whole number

Reprint from Journal of Occupational Medicine, March 1979
The Lancet, December 17, 1977

STATEMENT BY THE UNITED STEELWORKERS OF AMERICA

The United Steelworkers of America strongly supports enactment of legislation to protect workers and consumers by providing strict criminal penalties for corporations and corporate managers who conceal serious workplace hazards or dangerous consumer products which could cause death or serious injury.

The time has long since passed when corporate officials should be held personally accountable for the human damage they cause by intentionally placing business interests before the safety and health of employees and the public-at-large. Just as the street criminal who harms a citizen should be subject to the criminal-justice system, so too should the business executive who conceals or covers up dangers in the workplace or who places a dangerous product on the market.

The public record is replete with tragic examples of corporate actions which have sought to further business interests at the expense of workers and consumers. The asbestos industry, for many years, attempted to conceal the worker and community health hazards of asbestos exposure. A number of chemical and other companies have dumped toxic wastes which have contaminated water supplies and neighborhoods. Defective automobiles, automobile tires, and other dangerous consumer products have been introduced into the marketplace and have caused serious injury or death to an unsuspecting public. Thousands of workers have been exposed to industrial carcinogens and other toxic chemicals while the hazardous nature of these substances have been withheld or surpressed by employers.

The Law Enforcement Assistance Administration (LEAA) has estimated that 75 percent of all corporate crimes are in the areas of environmental and labor protection. It is significant that according to LEAA, the penalties against corporate officials who violate environmental and worker protection laws are far less severe than for ordinary lawbreakers. Fines are usually nominal and prison sentences are rare.

Most federal regulatory laws are not enough to overcome corporate indifference to worker and consumer safety and health. Part of the reason is that penalties assessed under these laws are comparatively small. Last year, for example, nearly one-third of all workplace safety violations were classified as "serious, willful or repeat," but the average fine for these violations was only $500, levied against corporations rather than individuals.

Presently, two bills are being considered by the House Judiciary Subcommittee on Crime, H.R. 4973 and its redraft, H.R. 7040. Of the two proposals, we believe that H.R. 7040 is the more preferable. However, our union, while supporting the intent of the proposed legislation, believes that it should be strengthened.

Perhaps most importantly, the "knowingly fails" to inform or warn test of criminality (which is the only test included in the bills) is overly restrictive and narrow. Under this criteria it would be extremely difficult to apply criminal sanctions to corporate wrongdoers. We believe that instead the scope of the legislation should cover those corporate acts which "recklessly endanger" the safety and health of workers and consumers. Under this criteria, such acts as the distortion of information, failure to adequately test and other acts of corporate negligence would be subject to criminal liability.

Secondly, we believe that the term "manager" should be expanded to include all corporate officials who knew or should have known that an illegal act was occurring or would occur and failed to take reasonable preventive action. Such an expansion of liability would serve as an effective check on those senior officials who are responsible for overseeing the affairs of a corporation.

Enactment of such legislation would provide a powerful deterrent to corporate actions which violate our laws and endanger our citizens. It would also put corporate America on notice that as a nation we will no longer tolerate business activities which jeopardize the health and safety of workers and consumers. For these reasons, the United Steelworkers of America supports H.R. 7040 and urge that it be further strengthened.

CORPORATE CRIMINAL LIABILITY

TUESDAY, APRIL 22, 1980

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON CRIME,
COMMITTEE ON THE JUDICIARY,
Washington, D.C.

The subcommittee met at 9:55 a.m., in room 2237 of the Rayburn House Office Building, Hon. John Conyers (chairman of the subcommittee) presiding.

Present: Representatives Conyers, Evans, Gudger, Hyde, and Sensenbrenner.

Staff present: Steven Raikin, assistant counsel; and Deborah Owen, associate counsel.

Mr. CONYERS. Good morning. The subcommittee will come to order.

Mr. SENSENBRENNER. Mr. Chairman, I would like to ask unanimous consent that these proceedings may be photographed in whole or part by still or motion picture photography.

Mr. CONYERS. Without objection, so ordered.

That is in accordance with committee rule 5(a).

This morning the Subcommittee on Crime convenes its sixth hearing on a bill to amend title 18 of the United States Code to impose criminal penalties for knowing nondisclosure by business entities of concealed serious dangers in products and business practices.

On April 15 of this year, the sponsor and I reintroduced this bill, the sponsor being Hon. George Miller from California; which was formerly H.R. 4973, and now bears the new bill number H.R. 7040.

[A copy of H.R. 7040 follows:]

IX

96TH CONGRESS
2D SESSION

H. R. 7040

To amend title 18 of the United States Code to impose penalties with respect to certain nondisclosure by business entities as to serious concealed dangers in products and business practices, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

APRIL 15, 1980

Mr. MILLER of California (for himself and Mr. CONYERS) introduced the following bill; which was referred to the Committee on the Judiciary

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A BILL

To amend title 18 of the United States Code to impose penalties with respect to certain nondisclosure by business entities as to serious concealed dangers in products and business practices, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That chapter 89 of title 18 of the United States Code is amended by adding at the end the following new section:

"§ 1822. **Nondisclosure of serious concealed dangers by certain business entities and personnel**

"(a) Whoever—

"(1) is a manager with respect to a product or business practice;

"(2) discovers a serious concealed danger that is subject to the regulatory authority of an appropriate Federal agency and is associated with such product (or a component of that product) or business practice; and

"(3) knowingly fails during the period ending fifteen days after such discovery is made (or if there is imminent risk of serious bodily injury or death, immediately)—

"(A) to inform an appropriate Federal agency in writing, unless such manager has actual knowledge that such an agency has been so informed; or

"(B) to warn affected employees in writing, unless such manager has actual knowledge that such employees have been so warned;

shall be fined not more than $250,000 or imprisoned not more than five years, or both, but if the convicted defendant is a corporation, such fine shall be not more than $1,000,000.

"(b) Whoever knowingly discriminates against any person in the terms or conditions of employment or in retention in employment or in hiring because of such person's having informed a Federal agency or warned employees of a

serious concealed danger associated with a product or business practice shall be fined not more than $10,000, or imprisoned not more than one year, or both.

"(c) If a fine is imposed on an individual under this section, such fine shall not be paid, directly or indirectly, out of the assets of any business entity on behalf of that individual.

"(d) As used in this section—

"(1) the term 'manager' means a person having—

"(A) management authority in or as a business entity; and

"(B) significant responsibility for the safety of a product or business practice or for the conduct of research or testing in connection with a product or business practice;

"(2) the term 'product' includes services;

"(3) the term 'discovers', used with respect to a serious concealed danger, means obtains information that would convince a reasonable person in the circumstances in which the discoverer is situated that the serious concealed danger exists;

"(4) the term 'serious concealed danger', used with respect to a product or business practice, means that the normal or reasonably foreseeable use of, or the exposure of a human being to, such product or business practice is likely to cause death or serious bodily injury

to a human being (including a human fetus) and the danger is not readily apparent to the average person;

"(5) the term 'serious bodily injury' means an impairment of physical condition, including physical pain, that—

"(A) creates a substantial risk of death; or

"(B) causes—

"(i) serious permanent disfigurement;

"(ii) unconsciousness;

"(iii) extreme pain; or

"(iv) permanent or protracted loss or impairment of the function of any bodily member, organ, or mental faculty;

"(6) the term 'warn affected employees' means give sufficient description of the serious concealed danger to all individuals working for or in the business entity who are likely to be subject to the serious concealed danger in the course of that work to make those individuals aware of that danger; and

"(7) the term 'appropriate Federal agency' means the Federal agency on the following list which has regulatory authority with respect to the product or business practice and serious concealed dangers of the sort discovered:

"(A) The Food and Drug Administration.

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"(B) The Environmental Protection Agency.

"(C) The National Highway Traffic Safety Administration.

"(D) The Occupational Safety and Health Administration.

"(E) The Nuclear Regulatory Commission.

"(F) The Consumer Product Safety Commission.

"(G) The Federal Aviation Administration.

"(H) The Federal Mine Safety and Health Review Commission.".

SEC. 2. The table of sections for chapter 89 of title 18 of the United States Code is amended by adding at the end the following new item:

"1822. Nondisclosure of serious concealed dangers by certain business entities and personnel.".

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Mr. CONYERS. This version of the legislation reflects the recommendations made by a number of the 26 witnesses that have appeared before the subcommittee on behalf of this legislation. It is a product of drafting sessions that involved a number of persons from the Department of Justice, the Legislative Counsel, and the staff of the subcommittee.

The new features of the bill include a protection for whistleblowers, revised penalties, and a 15-day time limit for corporate officials to report concealed dangers.

This legislation has been endorsed by a wide range of representatives from consumer, labor, environmental, religious groups, State government officials, as well as experts from scientific, medical, and the legal fields.

We also had victims of some of the instances testify at the hearing in San Francisco.

We have had the reaction of persons in the business community, particularly the chairman of Monsanto, John Hanley, who has strongly supported the bill; as has the associate director of government regulation of the National Association of Manufacturers, Mr. Howard Vine.

So we are pleased to have as witnesses here today representatives from the Associated General Contractors, the National Association of Manufacturers, and other constitutional and legal scholars, who will also be witnesses.

We welcome our first witnesses, Mr. Jerris Leonard and Mr. Thomas Houser.

Mr. Leonard is the senior member of his law firm, and before that served as Assistant Attorney General for the Civil Rights Division of the Department of Justice; and also as Administrator of LEAA.

Mr. Houser is presently serving as general counsel of the National Association of Manufacturers.

We welcome you, gentlemen, and incorporate your prepared statement into the record. Please proceed in your own way.

TESTIMONY OF JERRIS LEONARD, SENIOR MEMBER, LAW FIRM OF LEONARD, COHEN, GETTINGS & SHER, WASHINGTON, D.C., ACCOMPANIED BY THOMAS J. HOUSER, GENERAL COUNSEL, NATIONAL ASSOCIATION OF MANUFACTURERS, WASHINGTON, D.C.

Mr. HOUSER. Thank you Mr. Chairman and good morning, members of the committee and counsel.

I note in your opening statement, Mr. Chairman, that you refer to Mr. Hanley and Mr. Vine as supporting your legislation.

I think it would be more correct to state up front they have evidenced support for your interest and intent, rather than for this specific legislation.

As a matter of fact, I think probably most Americans and most organizations understand your interest and that of the cosponsors', in attempting to discourage business managers from unnecessarily placing their fellow coworkers in danger in the workplace, or from producing unsafe consumer products.

However, Mr. Chairman, frankly, we believe you have chosen the wrong vehicle to accomplish your objectives.

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Before I get into the reasons for that disclosure or statement, I would like to make a disclaimer:

H.R. 7040 is just about 1 week old, and differs in a number of particulars from H.R. 4973; and it wasn't until this morning that we were able to see an actual copy of that bill, Mr. Chairman.

And, necessarily, our comments today I think must be seen as preliminary; and we would like the opportunity, with your permission, to file a fuller statement at a later date.

Mr. CONYERS. That would be quite all right.

Mr. HOUSER. One reason we believe you've chosen the wrong vehicle is your selection of criminal sanctions.

The U.S. Constitution protects our citizens against vagueness in criminal laws. And we believe this bill is seriously vague.

Let me be specific:

Early in the bill it refers to "business entities." But that's about the only time "business entities" are mentioned in the bill.

It lays down no requirements nor gives any notice as to the expectations of behavior on the part of "business entities".

If it is your interest to punish, and jail, and fine, business entities, I would suggest to you that the language does not get the job done; because it doesn't lay down the required due process and notice requirements.

Let's take the case of a manager, Mr. Chairman, acting in good faith, but he wants to make a report—but he's confused; he doesn't understand Washington; and he chooses the wrong agency to report to.

The bill requires reporting to an "appropriate" Federal agency.

Is he subject to prosecution under this bill?

Or let's take the situation where a manager in good faith again is uncertain as to the agency to report to, and retains counsel. As you well know, Mr. Chairman, counsel sometimes misadvise their clients; and in this case, he's misadvised.

Who goes to jail? The good-faith manager, or the counsel?

What about the quantum of information that is necessary to trigger a report decision on the part of the business manager? Does he need a confirmed technical report? Is it a matter of oral opinion? Is it just a belief on his part? Or can it be hearsay?

The language in the statute is very unclear as to the quantum of information that is necessary to trigger the report requirement.

And beyond the vagueness issue, there's a serious question as to whether or not this bill provides a civil remedy by an individual.

Another reason underlying our belief that you've chosen the wrong vehicle, is the fact that adequate legal remedies already exist to achieve disclosures. Without going into great detail, let me point out a few:

The Occupational Safety and Health Act of 1970, the Toxic Substances Control Act of 1976, the Consumer Product Safety Act—all three of these acts, Mr. Chairman, provide criminal sanctions, each seeking in a different way to achieve safety in the workplace, and safety in consumer products.

Beyond these criminal sanctions, there are a variety of civil remedies, ranging from tort to contract to quasi-contract, which are available to individuals in the civil arena.

Because disclosure is the key to your bill, and because disclosure raises the vagueness question, almost in every case it might be well advised to have your staff contact the Federal Government premier agency when it comes to disclosure—the SEC.

Curiously, this legislation on the one hand presupposes that a notified appropriate Federal agency can react quickly and effectively and with adequate authority; and, yet, on the other hand, it seems to be an admission that the involved Federal agencies have not done their job correctly.

You know better than I, Mr. Chairman, that the Federal Government very seldom acts quickly, and there's constant debate in this society as to how effectively they can act.

I am unaware of any evidence in this record that substantiates the authority of each and every named Federal agency to act pursuant to this bill.

In addition, this bill places an enormous burden on the prosecutor, which, in this case, happens to be the Justice Department.

If you will think about this, Mr. Chairman, the Justice Department has to locate and find a person who failed to report after an incident or injury or death takes place, which may take place months or years after the time that the person was supposed to have filed his report. It is a very, very difficult burden on the Justice Department.

And we might have Mr. Leonard comment on that when it comes his turn.

The legislation—and this bothers us very substantially, Mr. Chairman—has the potential to disrupt production. If somebody files a report, whether it's well founded or ill founded, there's likely to be a plethora of reviews and inspections and investigations into the production process; and it's likely to be called to a halt.

What makes this a complex question is that many of our production processes are long and complex, and at the beginning, for example, of the construction of a consumer product, there may be an exposed hazard. And a unit manager, when that product passes his area, may spot that exposed hazard.

Later on in the production process, that hazard could be covered or eliminated; and yet, under this bill, I think this manager may be forced to report the hazard as he sees it going down the production line, even though we know when it comes off the production line the hazard has been eliminated.

So it places the unit manager, who is in a peculiar position in the production process, in a very uncertain position.

In addition to that, Mr. Chairman, when there are reports—founded or ill founded—made to agencies, there's an awful lot of media coverage; and the ill will that is generated against the corporations can never be recouped, even when in the end it turns out that the report was ill founded.

And you know better than I that retractions are always on the last page in the newspaper.

Finally, on my part, Mr. Chairman, another reason for indicating that we believe you have chosen the wrong vehicle, lies in the constitutional requirement of due process. Due process deals with such concepts as fairness, adequate notice, a reasonable time to act

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colleagues said, "It may be a good piece of legislation, because it's going to make work for a whole new generation of lawyers."

Now, I don't mean to be totally negative, because I appreciate what you are trying to accomplish; and I have these specific sugestions—and I trust my experience both in the Department, as well as LEAA, gives me a perspective to tell you that I think that these proposals may lead you to the kind of remedy that is going to be effective for what you are seeking.

First of all, I think you need to exercise more of an oversight function.

I think the committee needs to really hear from more than 26 witnesses. I think that you really need to determine the extent to which State government is responding to the needs that the committee may find to be out there and that are extant today.

Now, I don't think you can do that without exhaustive oversight and investigative hearings. I think that is going to separate the sheep from the goats, if you will; because I think there are some State governments and State prosecutors that are doing a good job in this area. And that the Federal Congress need not be concerned about those areas.

Determine which Federal agencies and areas of Federal law and substantive regulation are lacking in effective remedial action.

I don't think that the portent of this bill is necessary on a broad cut of all Federal agencies. Some of them, I would urge you, if you look at the facts you will find, are doing an excellent job.

And, third, and maybe most importantly—before you pass new substantive legislation, this committee has tremendous clout over the Department of Justice. I will guarantee you that.

When I was there, any member of the committee—the lowest ranking Republican, if you please—who called, got immediate attention—Mr. Sensenbrenner.

Mr. SENSENBRENNER. Things have changed. [Laughter.]

Mr. LEONARD. Design with the Department of Justice a plan for Federal action, using current Federal criminal and civil law.

I would like to point out something to the subcommittee: There is a great statute on the books called the Federal RICO statute, that was passed in 1970. It has a treble damage civil action provision in it, and it is not difficult to use in the kinds of situations you are looking at. If you can prove the necessary nexus of Federal communications, either by wire or fraud or mail; and fraud, if there's any fraudulent activity, the individual is entitled to treble damages.

And this committee could encourage a much broader use of that statue.

In short, my view is that you can design with current Federal law a far better program of getting, seeking, the remedies that you are after.

And I trust, Mr. Chairman, that nothing that I have said has offended you or what you are trying to accomplish; because I certainly didn't mean to do that.

I laud you for what you are trying to do.

Mr. CONYERS. Well, thank you both.

You can rest assured I do not feel offended by anything you have said here today, nor does the subcommittee, to my knowledge.

or react, or reasonable opportunity to comprehend the consequences of one's action or reaction.

And, unfortunately, we believe that this legislation is so vague as to negate the due process clause.

We are dealing here with an act of omission, as opposed to an act of commission. And counsel, here, will deal with that later.

But when you are dealing with an act of omission, it further complicates the already-difficult due process question to the point where we may have to substitute our gods for mere mortals as criminal judges in the event this legislation passes.

Mr. CONYERS. That sounds pretty serious.

Mr. HOUSER. Thank you very much.

Now, Jerry Leonard.

Mr. CONYERS. Mr. Leonard, we welcome you again before the subcommittee in a slightly different capacity.

Mr. LEONARD. Thank you, Mr. Chairman. It's a pleasure to be before this distinguised subcommittee, Mr. Chairman, and its members.

And let me, first of all, state that as now a practicing lawyer, but one who spent some 16 years in government, both in the State legislative branch as well as in the Federal Department of Justice, that I have nothing but a great deal of sympathy and support, and, hopefully, some understanding for what you are trying to accomplish; and the problem that you perceive to be out there in the breadth of America as you held your hearings around the country with respect to the difficult problem of trying to have all in business, large or small, comport to the standards that the Congress and the States have asserted.

And I do have some suggestions to make which I hope, Mr. Chairman, you and Steve Raikin, whom I've dealt with for sometime in other capacities, are seriously working on this problem; and I hope you'll give some serious consideration to the recommmendations I have to make to you.

But, first of all, let me just address a few comments about the bill:

I can't say strongly enough that I would urge you to reject it.

And I do so because I think that the concepts—that because of the concepts that are embodied in it. Mr. Houser has touched on some of the constitutional problems. I know you are going to have learned and distinguised counsel here from the universities and law schools; but I believe you have a serious fifth amendment problem.

And I think if you look at it from the standpoint not so much of the ivory tower, but of the day-to-day workings of the criminal justice system, you are going to see that problem.

It's one thing to theorize about whether or not a particular constitutional issue is going to develop. It's another thing Mr. Chairman, for a small businessman or woman, who may have 2 or 3 or 5 or 10 employees, to find himself or herself in the horrible dilemma of trying to decide whether or not a Supreme Court somewhere down the line, is going to decide that the action that they took was appropriate and proper under the circumstances, and not a violation of their constituional rights; if they go running to a Federal regulatory agency that has criminal sanctions, and tell

the story about some unfortunate happenstance in that small business.

Let me just address for a moment that problem:

This bill does not distinguish between the Fortune 500 and the 95 percent or 90 percent of the businesses in this country that are truly small in every one of your districts—little business people: 3, 4, 5, 50 employees.

That's what I am concerned, from a practical and pragmatic point of view, about this legislation; because I dare say to you, that if that small business person—first of all, if he even has knowledge of this legislation; and suspects or is concerned that he's in violation of it, and he goes to his lawyer he will find that he will have to go to a Federal criminal law specialist.

And I sincerely, from my own experience in my own law firm, tell you, that there are more and more Federal criminal defendants today who are plea bargaining; and in the civil area accepting consent decrees, because they simply cannot afford the cost of litigation.

I believe, if I an not mistaken, that a page of transcript today, is something like $5.

Now, what small business person can afford to engage in any discovery, any of the other remedies he or she might have, in order to fully protect their rights?

Beyond the economics, the legislation in my view is a continuum of a pilosophy of guilt without intent, and guilt by failure to ask.

All these concepts are historically anathema to our system of jurisprudence.

Today we have taken the concept of conspiracy—and that's basically what we're talking about—that's embodied in this bill; a theory that is foreign to the basic concepts of Anglo-jurisprudence; and by statute and judicial interpretation, made it the most common Federal criminal action today.

I believe the statistics will bear that out.

Instead of probing the facts to determine if the defendant has the necessary intent to commit a specific act, and did in fact commit that act, we now probe the defendant's mind to determine if he or she possessed the necessary factual background and understanding to have required that person to act.

We do all of this by hindsight, by second-guessing, by Monday morning quarterbacking, and by inferring from the defendant's action and inactions, that he or she possessed the necessary degree of intent to have failed to report the alleged violation of the Federal regulation.

And if we find that under this legislation, the sanction is $250,000, or up to that amount, and 5 years in jail.

Now, I tell you, truly, that this concept of Federal criminal jurisprudence, continuing to be expanded as it is here, gives the Federal prosecutor as much power in our free society, and discretion, as any totalitarian police state prosecutor has.

I am talking not about what the words of the statute say, Mr. Chairman; I am talking about the way this statute is going to be enforced and applied. And from my very personal financial point of view, and from the standpoint of members of my firm, as one of my

colleagues said, "It may be a good piece of legislation, because it's going to make work for a whole new generation of lawyers."

Now, I don't mean to be totally negative, because I appreciate what you are trying to accomplish; and I have these specific sugestions—and I trust my experience both in the Department, as well as LEAA, gives me a perspective to tell you that I think that these proposals may lead you to the kind of remedy that is going to be effective for what you are seeking.

First of all, I think you need to exercise more of an oversight function.

I think the committee needs to really hear from more than 26 witnesses. I think that you really need to determine the extent to which State government is responding to the needs that the committee may find to be out there and that are extant today.

Now, I don't think you can do that without exhaustive oversight and investigative hearings. I think that is going to separate the sheep from the goats, if you will; because I think there are some State governments and State prosecutors that are doing a good job in this area. And that the Federal Congress need not be concerned about those areas.

Determine which Federal agencies and areas of Federal law and substantive regulation are lacking in effective remedial action.

I don't think that the portent of this bill is necessary on a broad cut of all Federal agencies. Some of them, I would urge you, if you look at the facts you will find, are doing an excellent job.

And, third, and maybe most importantly—before you pass new substantive legislation, this committee has tremendous clout over the Department of Justice. I will guarantee you that.

When I was there, any member of the committee—the lowest ranking Republican, if you please—who called, got immediate attention—Mr. Sensenbrenner.

Mr. SENSENBRENNER. Things have changed. [Laughter.]

Mr. LEONARD. Design with the Department of Justice a plan for Federal action, using current Federal criminal and civil law.

I would like to point out something to the subcommittee: There is a great statute on the books called the Federal RICO statute, that was passed in 1970. It has a treble damage civil action provision in it, and it is not difficult to use in the kinds of situations you are looking at. If you can prove the necessary nexus of Federal communications, either by wire or fraud or mail; and fraud, if there's any fraudulent activity, the individual is entitled to treble damages.

And this committee could encourage a much broader use of that statue.

In short, my view is that you can design with current Federal law a far better program of getting, seeking, the remedies that you are after.

And I trust, Mr. Chairman, that nothing that I have said has offended you or what you are trying to accomplish; because I certainly didn't mean to do that.

I laud you for what you are trying to do.

Mr. CONYERS. Well, thank you both.

You can rest assured I do not feel offended by anything you have said here today, nor does the subcommittee, to my knowledge.

Let me point out to you the quotation from John Hanley, president of the Monsanto Co., about the legislation involved and the concept behind it; he had this to say:

> I believe we should strongly support harsh legal penalties for chiseling managers who willfully and unreasonably endanger the lives or health of others * *. * there have been cases—too many of them—which have given all industry a black eye * * * Individual managers who knowingly and recklessly conceal clear and ongoing conditions of serious worker or consumer dangers should be recognized as the villians they are * * * What has to be stopped are the cases of deliberate and flagrant practices that seriously endanger public health.

Those are various quotes from remarks he made last October.

Then, with reference to Mr. Howard Vine, the associate director of the Government Regulation and Competition Unit of the National Association of Manufacturers, he has stated—and I quote in here—"it would be almost un-American to oppose the intent behind the Miller bill."

I also have comments about activities from the Business Roundtable.

But I use those two quotations to show support for what I assume to be the intent behind this legislation that is now before the subcommittee and for your examination. If they have said anything to the contrary, or modified their comments since then, I would like to know about it.

Mr. HOUSER. I am not aware they have modified their comments. I must say, Mr. Vine was speaking on his own behalf, whereas, as it was stated here today, his representation is of the National Association of Manufacturers; but in either case, as I indicated earlier, I think they are talking to your intent rather than the specific legislation under consideration.

In my opening comments I indicated that we understand your intent, and there has been no criticism of the intent expressed in the bill. It's the bill's language.

Mr. CONYERS. This is the only legislation we've ever had on which to make any remarks. This is the only bill that's ever been introduced on the subject.

Mr. HOUSER. I can't speak for Mr. Hanley. Mr. Vine is here; he would support our position in opposing the bill.

Mr. CONYERS. Let me ask you, are you aware that there are and have been legislation federally that supports the theory behind mandatory reporting that is involved here in the Miller bill? We have a number of pieces of legislation that have an affirmative duty to notify of information where there is a risk of injury or health involved. Certainly in the Toxic Substances Control Act, upon which the real theory is based not on any conspiracy theories or any other vague notions. This is a continuation of legislation that requires the reporting of hazardous substances or practices that are dangerous to the consumer or the worker, and places a criminal liability on it.

So, we are not really inventing some new theory of law here. It is merely a continuation of language that has been in the law and has been tested for some period of time.

Mr. HOUSER. Well, there is some question in not having the law, besides this one, to analyze it—there is some question as to whether or not they have withstood the vagueness test, the due process test.

Mr. CONYERS. What's the question? There hasn't been any question by those who have brought the cases so far. I can't assure you that every case you could ever think of has already been tested; but all I am suggesting is so far, in the charges that have been brought, the challenges have been successfully met.

Mr. LEONARD. Mr. Chairman, if I might comment on that?

I think the statutes you are referring to are aimed at industries which are in a very narrow cut, highly regulated overall.

This piece of legislation is going to impact on the mom-and-pop grocery store, Mr. Chairman. They are not the sophisticated type of business and industry that is in manufacturing of highly toxic materials. They know the danger of the business when they go into it, their profit structure and their cost structure and their pricing structure is designed and compensate them for those very high risks.

This piece of legislation goes far beyond that. And that is my plea to you with respect to the economics of it. If you were aiming at the drug companies, and there's already legislation on the books there. We've had a Supreme Court case. Unfortunately I can't remember the name of it—which holds the chairman of the board—the *Baltimore Warehouse* case—liable for material in the warehouse.

Mr. CONYERS. This doesn't really affect everybody in business. We did not draft it as widely as it might have been drafted.

As a matter of fact, it is limited to industries subject to the regulatory authority of eight named Federal agencies. So it doesn't affect everybody in NAM or everybody in business. It does not cross all interstate commerce or all commerce in general.

We do limit it in that regard.

Mr. LEONARD. Mr. Chairman, small business—every small business—in the United States is covered by the Occupational Safety and Health Administration.

Mr. HOUSER. We have basically two kinds of regulations, you develop them into two categories: the so-called economic regulations, and then on the other hand the regulations that deal with health and environment and safety.

The economic regulations specifically pick on certain industries, and totally regulate that industry, like the utilities industry; whereas the environmental health and safety regulations stand to be broad in their sweep, and bring in everybody.

And we are talking about some of the laws that are on the books, that are in the area of health, environment, and safety.

Mr. CONYERS. With regard to a definition of "manager," which is suggested as vague, I would like you to just remember in the bill as proposed, a manager who discovers a serious concealed danger must report it to any appropriate Federal agency.

There is an exemption saying that the manager has to have actual knowledge, and this reporting is accomplished, I think by merely sending a postcard in the mail.

The notification is fairly general, and I don't think it imposes a liability that would mean a rush to an attorney to begin a complicated criminal proceeding. It is merely reporting of dangers that come to his attention to which he has actual knowledge, not suspicion or anything else.

It does not mean that the act must subsequently become a violation. It could be just as it appears to him to the best of the knowledge.

Mr. HOUSER. As I pointed out, Mr. Chairman, that's one of the problems; because of the long, complex, productions lines we have.

Early in the construction of a consumer product there may be a hazard that exists early-on; but as it goes through the production process, it is eliminated.

Here you've got this unit manager up there at the front of the production line who is running to the Federal agencies. They come out. They stop production. And there is no reason for it, whatsoever.

Mr. CONYERS. That is a pretty drastic scenario. I don't know if they would stop production if you say that the complaint would be cured in the process of a continued production line. Why wouldn't they as easily as anybody else see that this was an illusory situation, or was one that, as you describe it in your conjecture, cured in the course of production?

Mr. HOUSER. Whether or not it was, he would trigger the report; there would be publicity, there would be ill will; he is compelled under this bill to report that incident as he sees it.

Mr. CONYERS. Well, if it could cause a death or danger to consumers, wouldn't you want him to report it rather than run the risk that would be involved?

Mr. HOUSER. It seems to me in the particular circumstance you ought to do some checking around as to the end product, talk with some of his supervisors to find out as to when that production process is ended.

Mr. CONYERS. You are aware of the fact that you've got a 15-day period for reporting. He would not have to immediately leap to his postcard or telephone to give notice. He has a 15-day period. In other words, without staying on this hypothetical, if this is going to be the test, even then it would be easily cured within the period of time that he had to report it. It does not require he report instantly.

Mr. HOUSER. But under fear of going to jail, the average person who works in the plant with that average level of education, is going to protect his flank; he's going to report it; if he understands this legislation, he's going to report it.

And may the Devil take the hindmost as to what happens: "I'm going to protect myself." Then the publicity hits, the production can stop—maybe not stop, but it could stop; and we've got all these downside risks when it's not even necessary under the circumstances.

You talked about actual knowledge, Mr. Chairman, and that's part of the problem I raised in my testimony: what constitutes actual knowledge?

You are in a jury setting, now, talking to a jury and you are trying to prosecute an individual whom you say has actual knowledge; is he expected to act when somebody tells him there's a danger there? Or based on hearsay conversations he believes there's a danger there? Or have some kind of a written report clearly indicating that there's some kind of a danger there?

That's the problem with the legislation.

Mr. CONYERS. You know as well as I do what would comply to actual knowledge; there'd be no way you could exchange notes confusing either the manager or the jury or the judge.

Mr. HOUSER. Does "reason to believe" constitute actual knowledge?

Mr. CONYERS. If he has reason to believe, I would imagine it does; wouldn't that constitute actual knowledge on his part?

Mr. HOUSER He could pick that up partly from hearsay.

Mr. CONYERS. Well, first of all, suspicion does not, of course, need to be reported, and would not constitute actual knowledge.

The "appropriate managers" are only required to report serious concealed dangers when they obtain information that would convince a reasonable person under the circumstances that the serious concealed danger exists. Mere suspicion does not need to be reported, and only a serious concealed danger must be reported, and it is defined as the normal or reasonably foreseeable use, or the exposure of a human being to such product or business practice that is likely to cause death or serious bodily injury. The danger is not readily apparent to the average person. The report language can provide further examples of the full meaning of "discover" and "serious concealed danger."

Now, about the coverups that have arisen from the kinds of cases that we have encountered in hearings, it's very clear—the Love Canal, instances of asbestos, DBCP. These are not hypothetical. And I think we may have to worry about these small exceptions that you bring to us, but we are talking about willful determination of obvious matters.

It seems to me that our language says it as fairly as possible to cover these matters as best we can. Now, we can, in report language, expand on this, and perhaps cover some of the matters which you have raised; but it seems to me that they are pretty clear as they presently read.

Mr. HOUSER. Part of the difficulty is—and I understand what you are trying to do—it's just a criminal fact that you are dealing with an act of omission as opposed to an act of commission; and I think Mr. Leonard has dealt with the problems you have in dealing with that form of criminal action.

Mr. CONYERS. Let me yield now to Mr. Hyde.

Mr. HYDE. Thank you, Mr. Chairman.

Let me say at the outset that I do appreciate the majority staff providing us with documentation that assists us. I commend them for it.

However, when they cite the Federal Water Pollution Control Act, it would also be useful to know that there is a decision by the U.S. Court of Appeals, Tenth Circuit, that effectively invalidates the criminal penalties imposed by that Act for failure to disclose because they violated the fifth amendment privilege against self-incrimination. This is a point made by Mr. Leonard and Mr. Houser. The case is *Ward* v. *Coleman,* which is now before the Supreme Court on writ of certiorari.

The latest pronouncement from the U.S. Court of Appeals does not make this act a useful precedent for the argument that the fifth amendment is not a significant obstacle to this kind of legislation.

We will watch the developments in that case with interest.

Mr. Houser, why shouldn't union officials who know of safety problems be liable? This bill penalizes management, and perhaps it well should. However, if we are concerned about serious conditions and the health and safety of consumers and employees, why should not anyone who has knowledge of this be subject to these severe criminal penalties?

Why should we zero in on management, and not the union stewards who are out there in the workplace, or union members? Why should not everybody be responsible? Why just management?

Mr. HOUSER. Well, it is interesting that this bill assesses criminal penalties for discriminating against employees who report; and yet it seems to discriminate against business managers.

It seems to me union stewards very clearly ought to be covered. They move around the plant, they often have a wider view of what is going on in the production process than a unit manager who is limited in his responsibilities. Union stewards are constantly talking to workers on the production line. They are apt to learn faster than the unit manager as to a perceived danger, or actual danger in the production line. I do not think it is fair to eliminate union stewards from coverage in this bill.

Mr. HYDE. If one puts his mind to it, one could think of a lot of people who ought to be within the compass of this legislation. What about insurance inspectors? What about OSHA inspectors? What about nuclear regulatory people? What about State officials who inspect premises? Licensing officials? Perhaps we ought to require them to file reports.

Parenthetically, how many reports do you estimate this legislation will generate? Do you have any idea where we can warehouse them?

Mr. HOUSER. That is one of the problems I alluded to: to protect someone's flank, they are going to file a report whether they are totally convinced that the report is well-founded or not, to protect themselves from going to jail.

Mr. HYDE. Why shouldn't State officials, insurance underwriters, and OSHA people be subject to prosecution for failing to report this?

Mr. HOUSER. Arguably, they should be. They move around the plant periodically with some consistency, and that includes, I think, some medical personnel who have a responsibility to check the premises over from time to time; they ought to be included in the bill; not just business managers or unit managers.

Mr. HYDE. What about this whistle-blowing provision? If there is a troublemaking employee who is not adding to the productivity of the plant, do you think that this bill could create an opportunity for him to have a job for life by reporting an imaginary concealed danger to the Government?

It would be difficult to discharge such a person under the provisions of this bill if not?

Mr. HOUSER. This really interferes with the relationship between management and labor in the plant. It gives a vengeful employee a real opportunity to lock himself into all promotions that become available; and it's almost impossible to get rid of him, because he

can allege he was discriminated against. And, before you know it, the employer finds himself defending himself in a lawsuit.

It is a very tenuous situation.

Mr. HYDE. On the other hand, there are whistleblowers who are sometimes the victims of retribution, certainly in Government, and in private industry as well, I am sure. We ought to think of some way to protect the legitimate whistleblower, but at the same time not lock the unscrupulous into perpetual employment.

Mr. HOUSER. The point is well-taken, sir.

Mr. HYDE. I have no further questions.

Mr. CONYERS. Mr. Sensenbrenner?

Mr. SENSENBRENNER. First of all, Mr. Chairman, since the gentleman from Illinois has referred to the case of *Ward* v. *Coleman,* I ask unanimous consent that the decision of *Ward* v. *Coleman,* handed down by the U.S. Court of Appeals for the Tenth Circuit on May 10, 1979, as reported in 598 F. 2d 1187, be included in the record at this point.

Mr. CONYERS. Without objection, it is so ordered.

[The document follows:]

L.O. WARD, Appellant,

v.

William G. COLEMAN, Jr., Individually, and as Secretary of Transportation of the United States of America, Russell E. Train, Individually, and as Administrator of the Environmental Protection Agency of the United States of America, and Admiral Owen W. Silar, Individually, and as Commandant United States Coast Guard, United States of America, Appellees.

L.O. WARD d/b/a L.O. Ward Oil and Gas Operations, Appellant,

v.

UNITED STATES of America, Appellee.

No. 77-1952.

United States Court of Appeals, Tenth Circuit.

Submitted March 14, 1979.

Decided May 10, 1979.

Action by owner and operator of drilling site to enjoin enforcement of administratively assessed penalty under the Federal Water Pollution Control Act was consolidated with action by the United States to collect unpaid penalties for oil spillage in "navigable water." The United States District Court for the Western District of Oklahoma, Luther B. Eubanks, J., 423 F.Supp. 1352, denied operator's motion for summary judgment and thereafter entered judgment on verdict in favor of the Government, and operator appealed. The Court of Appeals, Barrett, Circuit Judge, held that where it appeared from detailed examination of the language of the statute, the administrative enforcement scheme, and the indicators of congressional intent that civil penalty found in the Federal Water Pollution Control Act was criminal in nature, compelled notification of discharge required to be filed with the Coast Guard could not be used in determining either liability for or the amount of civil penalties; however, the self-reporting requirements are not invalid and it is permissible to assess civil penalties based on discharge of oil or other hazardous substance under the Act provided the evidence used to establish a discharge is derived from a source wholly independent of the compelled disclosure.

Reversed and remanded.

1. Navigable Waters ⇐1(1)

Where river is navigable in fact, its tributary is also a "navigable water" of the United States for purposes of the Federal Water Pollution Control Act. Federal Water Pollution Control Act Amendments of 1972, § 101 et seq. as amended 33 U.S.C.A. § 1251 et seq.

See publication Words and Phrases for other judicial constructions and definitions.

2. Federal Courts ⇐1008

Before statute providing for three-judge district court came into play, injunction restraining enforcement or operation of an Act of Congress had to be sought, and three-judge district court did not have to be convened where the constitutionality of an Act of Congress was merely drawn in question. 28 U.S.C.A. § 2282 (Repealed 1976).

3. Federal Courts ⇐1004

Three-judge district court did not have to be convened under former statute in action to enjoin enforcement of administratively assessed penalty under the Federal

Water Pollution Control Act on ground that enforcement scheme violated privilege against self-incrimination, where judgment for plaintiff would not have restrained the enforcement or operation of the Act since self-reporting aspect of the Act would not have been impaired and civil penalties could still have been assessed based on evidence derived from a source wholly independent of the compelled disclosure. Federal Water Pollution Control Act Amendments of 1972, §§ 311, 311(b)(3, 5, 6) as amended 33 U.S.C.A. §§ 1321, 1321(b)(3, 5, 6); U.S.C.A.Const. Amend. 5; 28 U.S.C.A. § 2282 (Repealed 1976).

4. Criminal Law ⇐393(1)

Fifth Amendment protects only communications which are testimonial in nature, compelled and incriminating. U.S.C.A.Const. Amend. 5.

5. Witnesses ⇐297(1)

Privilege against self-incrimination should be liberally construed.

6. Navigable Waters ⇐35

Where it appeared from detailed examination of the language of the statute, the administrative enforcement scheme, and the indicators of congressional intent that civil penalty found in the Federal Water Pollution Control Act was criminal in nature, compelled notification of discharge required to be filed with the Coast Guard could not be used in determining either liability for or the amount of civil penalties; however, the self-reporting requirements are not invalid and it is permissible to assess civil penalties based on discharge of oil or other hazardous substance under the Act provided the evidence used to establish a discharge is derived from a source wholly independent of the compelled disclosure. Federal Water Pollution Control Act Amendments of 1972, § 311(b)(5, 6) as amended 33 U.S.C.A. § 1321(b)(5, 6); U.S.C.A.Const. Amend. 5.

1. The Arkansas River is navigable in fact. Therefore, Boggie Creek, as its tributary, is also a navigable water of the United States for purposes of the FWPCA. *See*: 33 U.S.C.A 1362(7); *United States v. Ashland Oil and Transportation Co.*, 504 F.2d 1317 (6th Cir. 1974).

Stephen Jones, Enid, Okl. (David Butler, Enid, Okl., on the brief), for appellant.

Michael A. McCord, Dept. of Justice, Washington, D.C. (Sanford Sagalkin, Acting Asst. Atty. Gen., Washington, D.C., Larry D. Patton, U.S. Atty., Richard F. Campbell, III, Asst. U.S. Atty., Oklahoma City, Okl., Carl Strass, Dept. of Justice, Washington, D.C., on the brief), for appellee.

Kea Bardeen, Denver, Colo. (James G. Watt, Denver, Colo., on the brief), as amicus curiae for Mountain States Legal Foundation, Independent Petroleum Ass'n of the Mountain States, and Rocky Mountain Oil and Gas Ass'n, Denver, Colo.

Harold B. Scoggins, Jr., Washington, D.C., on the brief for amici curiae Independent Petroleum Ass'n of America.

W. Bland Williamson and Terry R. Doverspike, Tulsa, Okl., on the brief for amici curiae Oklahoma Independent Petroleum Ass'n.

Fred A. Gipson, Seminole, Okl., Richard S. Roberts, Wewoka, Okl., and Richard Bohanon, Oklahoma City, Okl., on the brief for amici curiae Energy Consumers and Producers Assn.

Before HOLLOWAY, BARRETT and McKAY, Circuit Judges.

BARRETT, Circuit Judge.

L.O. Ward (Ward) appeals from a judgment in an action seeking recovery of civil penalties assessed against him by the United States Coast Guard (Coast Guard) pursuant to the Federal Water Pollution Control Act, 33 U.S.C. § 1251, *et seq.* (FWPCA).

[1] Ward is the owner and operator of L.O. Ward Oil and Gas Operations—a sole proprietorship. On March 23, 1975, oil overflowed from a drilling site located in Garfield County, Oklahoma, into Boggie Creek, which is a distant tributary of the Arkansas River.[1]

After discovering the spill, Ward immediately began clean-up operations in the area.

Ward then submitted a report of the spill to the Environmental Protection Agency. The EPA forwarded the report to the Coast Guard[2] requesting that an assessment of civil penalties be made against Ward in accordance with 33 U.S.C. § 1321(b)(6). On December 19, 1975, following notice and opportunity to be heard, the Coast Guard assessed a $500.00 penalty against Ward for discharging oil into navigable waters in violation of 33 U.S.C. § 1321(b)(3).

Ward refused to pay the assessed penalty. He appealed the administrative ruling, contending that the enforcement scheme of § 1321 violated his Fifth Amendment privilege against self-incrimination. The administrative appeal was denied. On April 13, 1976, Ward filed suit in the District Court to enjoin enforcement of the administratively assessed penalty. At the same time, Ward moved to convene a three-judge court pursuant to 28 U.S.C. § 2282 (repealed August 12, 1976).

On June 4, 1976, the United States filed a separate action in District Court to collect the unpaid penalty and moved to consolidate the two cases for trial. The District Court denied Ward's motion to convene a three-judge court and ordered the cases consolidated. Ward subsequently moved for summary judgment in both cases contending that his compulsory report under § 1321(b)(5) resulted in the automatic imposition of punitive sanctions under § 1321(b)(6) and therefore violated his privilege against self-incrimination.

In a memorandum opinion and order dated December 22, 1976, the District Court denied the motion for summary judgment in its entirety. *Ward v. Coleman*, 423 F.Supp. 1352 (W.D. Okl. 1976). The case was thereafter tried to a jury, which resulted in a verdict in favor of the Government and the assessment of a penalty against Ward in the reduced amount of $250.

2. § 1321(b)(5) of 33 U.S.C. requires any person in charge of an on-shore facility to immediately notify the Coast Guard as soon as he has knowledge of any discharge of oil or other hazardous substance into the navigable waters of the United States. Failure to immediately report such a discharge subjects the offending party to criminal sanctions of not more than $10,000 or imprisonment for not more than one year, or both.

On appeal, Ward contends that: (1) the trial court erred in refusing to convene a three-judge district court, and (2) the FWPCA's enforcement scheme violates the self-incrimination clause of the Fifth Amendment to the United States Constitution.

I.

Before turning to Ward's challenge based upon the self-incrimination clause of the Fifth Amendment, we must determine whether the trial court erred in refusing to convene a three-judge district court.

28 U.S.C. § 2282 requires that a three-judge court be convened in any action where a preliminary or permanent injunction is sought to restrain "the enforcement, operation or execution of any Act of Congress for repugnance to the Constitution of the United States . . . ."[3] The purpose of § 2282 is "to prevent a single federal judge from being able to paralyze totally the operation of an entire regulatory scheme . . . by the issuance of a broad injunction order." *Kennedy v. Mendoza-Martinez*, 372 U.S. 144, 154, 83 S.Ct. 554, 560, 9 L.Ed.2d 644 (1963). If § 2282 applies, we must vacate the judgment and remand for consideration by a three-judge panel. *See: Federal Housing Administration v. The Darlington, Inc.*, 352 U.S. 977, 77 S.Ct. 381, 1 L.Ed.2d 363 (1957).

[2] It is axiomatic that before § 2282 comes into play, an injunction restraining the enforcement or operation of an Act of Congress must be sought. *Flemming v. Nestor*, 363 U.S. 603, 607, 80 S.Ct. 1367, 4 L.Ed.2d 1435 (1960). A three-judge district court need not be convened where the constitutionality of an Act of Congress is merely "drawn in question." *Garment Workers v. Donnelly Company*, 304 U.S. 243, 58 S.Ct. 875, 82 L.Ed. 1316 (1938).

3. Although § 2282 has since been repealed it remains effective as to pending suits. Act of August 12, 1976, P.L. No. 94-381, 90 Stat. 1119.

[3] In the instant case, a judgment for Ward in the district court would not have restrained the enforcement or operation of the FWPCA. The self-reporting aspect of the Act would not have been impaired. Likewise, civil penalties could still have been assessed provided the Government could prove its case based on evidence derived from a source wholly independent of the compelled disclosure. *Cf. Harrison v. United States*, 392 U.S. 219, 88 S.Ct. 2008, 20 L.Ed.2d 1047 (1968); *Wong Sun v. United States*, 371 U.S. 471, 83 S.Ct. 407, 9 L.Ed.2d 441 (1963). In *Garment Workers v. Donnelly Co., supra*, the Court observed:

> "[The predecessor of § 2282] does not provide for a case where the validity of an act of Congress is merely drawn in question, albeit that question be decided, but only for a case where there is an application for an interlocutory or permanent injunction to restrain the enforcement of an Act of Congress. . . . Had Congress intended the provision . . . , for three judges and direct appeal, to apply whenever a question of the validity of an act of Congress became involved, Congress would naturally have used the familiar phrase 'drawn in question'" . . . .
>
> 304 U.S. at 250, 58 S.Ct. at 879.

See also: Flemming v. Nestor, supra, 363 U.S. at 607, 80 S.Ct. 1367.

We hold that the trial court did not err in refusing to convene a three-judge district court.

II.

As his primary ground for reversal, Ward contends that the self-reporting requirements of § 1321(b)(5) violate the self-incrimination clause of the Fifth Amendment when a report filed under that section is subsequently used to establish liability for purposes of assessing civil penalties pursuant to § 1321(b)(6).

[4] It is, of course, fundamental that the Fifth Amendment protects only communications which are testimonial in nature, compelled and incriminating. *See: Fisher v. United States*, 425 U.S. 391, 408, 96 S.Ct. 1569, 48 L.Ed.2d 39 (1976). The report mandated by sub-part (b)(5) is testimonial in character. *See: Andreasen v. Maryland*, 427 U.S. 463, 96 S.Ct. 2737, 49 L.Ed.2d 627 (1976). Moreover, it is clear that Ward was compelled to "notify the appropriate agency of the United States Government of [the oil] discharge" under pain of criminal prosecution. 33 U.S.C. § 1321(b)(5). Such required self-reporting has consistently been held to be compulsory for purposes of the Fifth Amendment. *Grosso v. United States*, 390 U.S. 62, 88 S.Ct. 709, 19 L.Ed.2d 906 (1968); *Marchetti v. United States*, 390 U.S. 39, 88 S.Ct. 697, 19 L.Ed.2d 889 (1968); *Albertson v. Subversive Activities Control Board*, 382 U.S. 70, 86 S.Ct. 194, 15 L.Ed.2d 165 (1965).

The basic issue we must here confront is: Whether the civil penalties prescribe in subpart (b)(6) are, in reality, criminal in nature thereby precluding use of a compelled report made pursuant to sub-part (b)(5) of § 1321.

Judicial determinations as to the civil or penal nature of a particular provision generally center around the issue of "whether the legislative aim in providing the sanction was to punish the individual for engaging in the activity involved or to regulate the activity in question." *Telephone News-System, Inc. v. Illinois Bell Telephone Company*, 220 F.Supp. 621, 630 (N.D. Ill. 1963), *aff'd*, 376 U.S. 782, 84 S.Ct. 1134, 12 L.Ed.2d 83 (1964); *Kennedy v. Mendoza-Martinez, supra; Trop v. Dulles*, 356 U.S. 86, 78 S.Ct. 590, 2 L.Ed.2d 630 (1958). In undertaking our assessment of the statutory provisions here in question, we must analyze (i) the Congressional intent discernible from the face of the statute, (ii) the enforcement mechanism of the statute, and (iii) the indicators of Congressional intent enumerated by the Supreme Court in *Kennedy v. Mendoza-Martinez, supra*.[4]

4. *See: Atlas Roofing Company, Inc. v. Occupational S. & H. Rev. Com'n*, 518 F.2d 990 (5th Cir. 1975), *aff'd*, 430 U.S. 442, 97 S.Ct. 1261, 51 L.Ed.2d 464 (1977).

Statutory Language

The FWPCA was enacted to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). In furtherance of these goals, Congress specifically prohibited the discharge of oil or other hazardous substances into the navigable waters of the United States and created a statutory enforcement scheme to carry out its mandates. *See*: 33 U.S.C. § 1321. Under the provisions of this enforcement scheme, every owner or operator of a discharging facility is required to immediately notify the Coast Guard of a discharge of oil or other hazardous substance. Should such an owner-operator fail to do so, he may be fined not more than $10,000, imprisoned for not more than one year, or both. 33 U.S.C. § 1321(b)(5).

In addition to this self-reporting requirement, owners and operators of discharging facilities are liable for clean-up costs, subject only to the defenses of act of God, act of war, negligence of the United States government, or act or omission of a third party. 33 U.S.C. § 1321(f). In the event that the discharged substance is determined to be "nonremovable," civil penalties may be assessed based upon toxicity, degradability, and the dispersal characteristics of the substances discharged. 33 U.S.C. § 1321(b)(2)(B). This civil penalty is again subject to the above-enumerated defenses.

Also, each owner or operator of a discharging facility is automatically assessed a "civil penalty" in an amount of not more than $5,000 for each offense. 33 U.S.C. § 1321(b)(6). The assessment of this penalty is without regard to fault and subject to no defenses. In determining the amount of the penalty, the Coast Guard is directed, by statute, to consider the "appropriateness of such penalty to the size of the business of the owner or operator charged, the effect on the owner or operator's ability to continue in business, and the gravity of the violation . . . ." 33 U.S.C. § 1321(b)(6). The civil penalties collected pursuant to sub-part (b)(6) and the "liquidated damages provisions" found in sub-part (b)(2)(B) are deposited into a revolving fund maintained by the Government to defray the costs of administration and cleaning up oil spills in situations where the clean-up costs are otherwise not recoverable—where spills are unreported, caused by acts of God, or committed by financially insolvent persons. *See*: 33 U.S.C. § 1321(k).

The fact that the civil penalty assessed pursuant to sub-part (b)(6) forms a part of this "revolving fund" indicates its remedial nature. *See: United States v. Tex-Tow, Inc.* 589 F.2d 1310 (7th Cir. 1978); *United States v. General Motors Corporation*, 403 F.Supp. 1151 (D. Conn. 1975).

However, the statutory language dealing with the automatic assessment and determination of the amount of the penalty indicates a punitive intent. The penalty is assessed automatically in every case without regard to fault. No defenses are available. Thus, while the remedial purpose of the revolving fund is to defray the costs of administration and cleaning up of oil spills in situations where clean-up costs are otherwise not recoverable, the factors used in determining the amount of the penalty are not, in our view, reasonably related to the purposes of the revolving fund. Rather, the factors are based on a retributive and punitive motivation.

The civil penalty cannot be characterized as compensatory. The statute specifically provides for reimbursement of clean-up costs or, in the event the substances determined as "nonremovable," liquidated damages. 33 U.S.C. §§ 1321(b)(2)(B) and 1321(f). This obligation for clean-up costs does not relieve the owner or operator of the discharging facility from liability for civil penalties under § 1321(b)(6).

Thus, in our view, while the statute, on its face, tends to evidence a punitive intent, we do not consider this determination as conclusive for purposes of treating it criminal in nature. We, therefore, turn to a consideration of the remaining factors: the administrative enforcement scheme and the *Kennedy v. Mendoza-Martinez* indicators of Congressional intent.

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The Administrative Enforcement Scheme

The authority for assessment and collection of civil penalties pursuant to sub-part (b)(6) is vested in the United States Coast Guard. 33 U.S.C. § 1321(b)(6); Executive Order No. 11735, 38 Federal Register 21243 (1973), Reprinted 33 U.S.C.A. § 1321 (Supp. 1977). By virtue of this authority, the Coast Guard issued Commandant Instruction 5922.11A dealing with the assessment of civil penalties under sub-part (b)(6). The Commandant Instruction sets out several criteria which the Coast Guard uses in determining the amount of penalty to be assessed:

> Consistent with the language of the Federal Water Pollution Control Act, Coast Guard policy *requires* the assessment of a civil penalty for each discharge of oil in violation of Section 311(b)(3) [1321(b)(3)] . . . . It is Coast Guard policy to assume that the penalty will be at or near the *maximum* unless a lesser penalty is justified by one of the factors listed in Section 311(b)(6) [1321(b)(6)].
>
> A number of considerations may be made in determining the gravity of a violation, such as the *degree of culpability* associated with the violation, the *prior record* of the responsible party, and the *amount of oil discharged. Substantial and intentional discharges should result in severe penalties, as should cases of gross negligence, and so on.* This is not to suggest that other considerations may not combine to determine the gravity of the violation.
>
> *Two factors should not be considered* in fixing the amount of the civil penalty: (1) *the responsible party's removal effort or expense* and (2) a decision by Federal and/or state authorities to bring criminal action for the same discharge. Liability for a civil penalty under Section 311(b)(6) [1321(b)(6)] attaches at the time of discharge. It is entirely unrelated to the subsequent removal responsibility for which the discharger must bear the expense, either directly or by reimbursing the Pollution Fund. *In no case may a responsible party avoid or reduce a civil penalty by removing the discharged oil* . . . . (Emphasis supplied.)[5]

In our view, the administrative enforcement mechanism applied by the Coast Guard clearly indicates that the assessment and determination of the amount of the penalty is based upon punitive considerations. The Coast Guard Commandant Instruction "requires the assessment of a civil penalty for each discharge of oil." The factors considered in determining the amount of the penalty are further removed from the remedial aspects of the "revolving fund" than are those factors enumerated in the statute. Among other things, the Coast Guard is to consider the degree of culpability, prior record and amount of oil discharged. Intentional discharges and those resulting from gross negligence "should result in severe penalties." A party may not "avoid or reduce a civil penalty by removing the discharged oil." This language is lacking in any "remedial" ring! The costs of investigation are not considered in assessing the amount of the penalty. Similarly, the factors involved in determining the amount of the penalty are not in any way related to what damage may have occurred to the environment by reason of the discharge. *See: United States v. W.B. Enterprises, Inc.*, 378 F.Supp. 420, 422–423 (S.D. N.Y.1974).

Indicators of Congressional Intent

In *Kennedy v. Mendoza-Martinez, supra*, the Supreme Court enumerated a series of "tests traditionally applied to determine whether an Act of Congress is penal or regulatory in [nature]":

> [I] Whether the sanction involves an affirmative disability or restraint, [II] whether it has historically been regarded as a punishment, [III] whether it comes into play only on a finding of *scienter*, [IV] whether its operation will promote

5. Commandant Instruction 5922.11A is reprinted in the Appendix to *United States v. LeBeouf Brothers Towing Company, Inc.*, 377 F.Supp. 558 (E.D. La. 1974), reversed, 537 F.2d 149 (5th Cir. 1976), *cert. denied*, 430 U.S. 987, 97 S.Ct. 1688, 52 L.Ed.2d 383 (1977).

> the traditional aims of punishment—retribution and deterrence, [V] whether the behavior to which it applies is already a crime, [VI] whether an alternative purpose to which it may rationally be connected is assignable for it, and [VII] whether it appears excessive in relation to the alternative purpose assigned are all relevant to the inquiry, and may often point in different directions. Absent conclusive evidence of congressional intent as to the penal nature of the statute, these factors must be considered in relation to the statute on its face. (Footnotes omitted.)

372 U.S., at 168–169, 83 S.Ct. at 567–568.

[I] "Whether the sanction involves an affirmative disability or restraint." Generally, imposition of monetary penalties does not involve the type of affirmative disability or restraint which occurs in the revocation of a previously granted governmental privilege. *See: Flemming v. Nestor, supra.* Nevertheless, the imposition of monetary penalties does "inflict a pocket-book deterrence or restraint on the recipient." *Atlas Roofing Company v. Occupational Safety and Health Review Commission, supra*, at 1001. Thus, because a sanction is used equally for both nonpunitive and punitive purposes, it offers little indication as to Congress' intent in this instance.

[II] "[W]hether it [the sanction] has historically been regarded as punishment." This indicator also gives little indication as to Congress' intent. Monetary penalties have traditionally been applied to both criminal and civil statutes.

[III] "[W]hether the sanction is activated only on a finding of *scienter*." The statute, on its face, does not contain an element of *scienter*.[6] The fine is automatically assessed without regard to fault. Thus, at first blush, this factor seems to weigh heavily in favor of the regulatory nature of the penalty. However, the factors enumerated in the statute and the Commandant Instruction used in determining the amount of the penalty indicate a *scienter* requirement. They speak of the "gravity of the violation," "degree of culpability," and whether the discharge was intentional or resulted from gross negligence.

Moreover, the statute dealing with the imposition of criminal penalties for the discharges of oil or hazardous substances similarly does not require *scienter*. *See*: 33 U.S.C. § 407 and 411; *United States v. White Fuel Corp.*, 498 F.2d 619 (1st Cir. 1974). Thus, this indicator lends a credence to a finding that the statute is criminal in nature.

[IV] "[W]hether the statute promotes the traditional aims of punishment—retribution and deterrence." In our view, this factor lends considerable weight to a finding that the civil penalty is actually criminal in nature. The statute and the administrative policies adopted pursuant thereto have the effect of retribution. The penalties are based on such factors as the gravity of the violation, the degree of culpability and the prior record of the party. The fact that a party acted in good faith, could not have avoided the discharge and, once it occurred, undertook clean-up measures immediately is to be given no consideration in relation to the "imposition or amount of a civil penalty."

We do not believe that the deterrence factor comes into play in any significant measure. The deterrence aspect of the statute as a whole is not found in sub-part (b)(6), but rather in the compensatory damage aspects of the statute.

Thus, we conclude that the retributive aspect of the civil penalty provision weighs heavily in favor of finding the statute penal in nature.

[V] "[W]hether the behavior to which it applies is already a crime." This factor falls clearly in favor of a finding that the statute is criminal in nature. Section 13 of the Rivers and Harbors Act of 1899, 33 U.S.C. § 407 specifically prohibits the dis-

6. Prior to 1972, the civil penalty provision in question, then codified at 33 U.S.C. § 1161(b)(5), specifically included the element of acting "knowingly" and provided for a maximum penalty of $10,000.

charge of refuse matter of any kind or description into the navigable waters of the United States. In *United States v. White Fuel Corporation, supra,* the court considered § 407 and held that a tank farm operator could properly be held criminally liable where oil found in navigable waters came from an accumulation of oil which had gathered under the operator's property and seeped into the water through indirect percolation. The court characterized § 407 as a "strict liability statute" and held that common law *mens rea* need not be alleged or proven.

The factual situation presented in *White Fuel Corporation* is almost entirely analogous to the circumstances presented in this case. It is, therefore, clear that the behavior to which the civil penalty applies is already a crime.

[VI] "[W]hether an alternative purpose other than punishment may rationally be ascribed to the sanction." We have heretofore discussed the remedial aspects of the civil penalty as they refer to the Pollution Fund. In addition to these factors, the Government urges that the penalty can be regarded as compensation to the United States for tortious damage to the environment. *See: United States v. W.B. Enterprises, Inc., supra.* We agree that the penalty could be regarded as such compensation, if the factors involved in determining the amount thereof reasonably related to the extent of damage to the environment. However, as previously noted, the factors are not addressed to this issue. Therefore, we decline to employ the Government's rationale.

[VII] "[W]hether [the sanction] appears excessive in relation to the alternative purpose assigned." The answer to this question is not easily resolved, because civil penalties are variable in nature. However, we believe that the factors employed in determining the amount of the penalty indicate a punitive nature. Imposition of penalties even in situations where the discharge is accidental, non-negligent and non-intentional, could be excessive. This is especially so, when the operator, in good faith, attempts to clean up, and, in fact, does clean up the discharge on his own initiative. Inasmuch as the amount of the penalty is correlated to the size of the business involved, a large business concern may very well be heavily penalized despite a lack of fault. Any subsequent clean up operations and attempted removal by the operator would not mitigate this penalty. Commandant Instruction 5922.11A, *supra.* In such a situation, the imposition of a large penalty would be excessive. Thus, we conclude that this indicator leans in favor of the penal nature of the Act.

[5, 6] We are reluctant to set aside a statutory enforcement scheme created under an Act of Congress, *Flemming v. Nestor, supra.* Nevertheless, we must recognize and abide the maxim that the privilege against self-incrimination should be liberally construed. *Michigan v. Tucker,* 417 U.S. 433, 94 S.Ct. 2357, 41 L.Ed.2d 182 (1974). A detailed examination of the language of the statute, the administrative enforcement scheme, and the indicators of Congressional intent, lead us to conclude that the civil penalty found in 33 U.S.C. § 1321(b)(6) is criminal in nature.[7] For all of the reasons above related and discussed, we therefore hold that the compelled notification of discharge required to be filed with the Coast Guard pursuant to § 1321(b)(5) cannot be used in determining either liability for or the amount of civil penalties imposed under § 1321(b)(6). We do not, however, strike down the self-reporting requirements of § 1321(b)(5) or the statute requiring imposition of civil penalties under 1321(b)(6). In our view, it is permissible to assess civil penalties based on a discharge of oil or other hazardous substance under the Act, provided that the evidence used to establish the discharge is derived from a source wholly independent of the compelled disclosure required by § 1321(b)(5). *See: Harrison v. United States, supra; Wong Sun v. United States, supra.*[8]

Reversed and remanded for further proceedings consistent with this opinion in the collection suit, No. 76–0546E of the District Court; there being no need for injunctive relief as sought in No. 76–0303E, that cause shall be dismissed on remand.

7. We were not presented with and we do not decide the question of whether 33 U.S.C. § 1321(b)(6) is criminal in nature for any purpose other than protecting an individual's right against self-incrimination under the Fifth Amendment to the United States Constitution.

Mr. SENSENBRENNER. Mr. Leonard, you mentioned there are very serious fifth amendment problems with this bill. What would be your opinion if the bill were amended to include a grant of immunity to those who made the required disclosure, so the fifth amendment problems would be resolved?

Mr. LEONARD. Well, I suppose purely theoretically, from that perspective, that would solve the problem.

However, I have serious reservations about that, from its practical application.

The granting of immunity is a very serious act that is viewed very seriously by the Department of Justice. It takes a good deal of paperwork and supervisory clearance.

If you were going to put that into the statute as a blanket grant of immunity, I have serious reservations about it; because I think it's a two-way sword:

It could conceivably be used by one who has in fact been involved in some kind of coverup of a prohibited activity, and be a tool for one of a number of actors to disassociate himself with—Mr. Chairman, excuse me, but I again say to you that the basic philosophy of this is a conspiracy fraud.

In addition, this is another gripping example where the vengeful employee can really zing it to the employer. He files a report and, let's say, he's got it in for the corporation; and it's an ill-founded report. He's free from prosecution. But under this, although it's vague, apparently this legislation attempts to get business entities. Although I advised the chariman earlier that I don't think it gets the job done. Apparently there is some attempt to penalize corporations for what their employees do or fail to do.

This is another perfect setup for the vengeful employee.

Mr. SENSENBRENNER. My second question relates to another one of the problems that the gentleman from Illinois brought up. This bill only imposes a criminal penalty on the white-collar criminal, rather than on a blue-collar criminal, or a government official, who might also have knowledge and does not disclose it. Do you think there would be equal protection problems posed by the unequal application of criminal sanctions, since only one class of people is singled out for punishment to the exclusion of other classes of people who might have knowledge of the same facts?

Mr. LEONARD. Mr. Sensenbrenner, I think the answer to that lies in what the term "manager" really means.

On page 3 of the bill, a "manager" is defined as "a person having management authority and significant responsibility for the safety of a product or business practice * * *."

I respectfully disagree that that limits it to the so-called white-collar manager person in the ordinary sense. I can think as an example of mechanics who are very definitely hourly paid skilled blue-collar workers who have significant responsibility in the safety area. Whether or not they have management authority in the ordinary sense is a more difficult question and, obviously, that is going to have to be decided by judicial determination.

I am not willing to concede at this juncture that there is not a significant body of employees in the United States who might not well fall within this definition.

Mr. HOUSER. I would just go on the record to disagree with my colleague.

I think what he is not seeing is the phrase "management." You can have responsibility without being a manager, but if you are a manager, you tend to be in the white-collar category.

I think while your question doesn't pose a perfect answer, the general answer is, yes, the bill tends to single out white-collar managers.

Mr. LEONARD. I respectfully disagree with that.

I think mechanics in many areas, and I can think of some specific businesses where a mechanic is a highly paid, skilled, blue-collar worker, and is specifically responsible for the management as well as the technical aspects of certain mechanical functions in the business, and yet is not a manager in the ordinary sense.

Mr. SENSENBRENNER. May I reclaim my time from the witnesses? [Laughter.]

I think that the preceding argument between counsel highlights somewhat the vagueness of this bill with respect to what constitutes managerial employees.

Neither of you gentlemen in your debate over what constitutes a managerial employee really answered my question. Do we have an equal protection problem posed here, where someone who might fall under the definition of managerial employee is a criminal if he knows of a certain activity and fails to disclose it; whereas, someone else, with a different job description is not a criminal if he knows of the same activity, but fails to disclose it?

Is there an equal protection problem here or not?

Mr. LEONARD. As you have defined it, there is a problem; no question about it.

But I don't think there is an answer to it at this juncture.

Mr. SENSENBRENNER. With that thought, I have no further questions.

Mr. CONYERS. I think the court would have an answer pretty quickly.

Mr. LEONARD. Many courts.

Mr. CONYERS. Yes; we thank you very much.

I welcome now our colleague from North Carolina, Mr. Gudger.

Mr. GUDGER. Thank you, Mr. Chairman.

I have very much appreciated the testimony of these two outstanding witnesses. I regret it has been necessary for me to cover another subcommittee meeting on courts, dealing with the new Code of Federal Appeals and Patent and Customs, and Court of Claims Review at the sub-Supreme Court level; a very delicate matter and, unfortunately, a very important witness. So I had to absent myself during a part of Mr. Leonard's testimony.

I have quite a number of questions that come to my mind, and I think I will try to present them in the context of case situations, experience in some instances, or in others, circumstances.

One problem right now we've been confronting is the blue mold disease that attacks the tobacco plant. A product known as "rilomil" has yet to be approved by EPA, but in five countries it is effective in controlling this blue mold disease in the fields.

We have applied to EPA for conditional approval, but there is a suspected hazard in this particular product. Let us assume that

there may be chemical components there that could be determined to have future hazards, such as carcinogens, or something of that nature. We don't know as of yet. It's not certain. The state of the art hasn't arrived there.

All there is is a product for EPA processing which has not yet been completed.

What is the duty of someone in the managerial position to reveal his suspicions, if they are merely that, to EPA, in this instance, to his employees, since the employees are working with a product that hasn't yet gone through a regulatory study?

Mr. HOUSER. It seems to me his first responsibility is to work in the corporation to try to eliminate the downside risks in the product.

If they can't do that, then it seems to me there has to be some conversation with the appropriate regulatory agency to decide whether or not the product is sufficiently safe to go on the market, or sufficiently unsafe to not go on the market.

What you are leading toward is another full area of conversation, which is the so-called risk-free society.

Mr. GUDGER. That is exactly what I want you to comment upon, because here we have Federal regulatory bodies who are serving as a screening agency. Why do we impose upon a managerial group a responsibility to reveal every apprehension when the product is not going to be marketable until it is licensed by a Federal regulatory agency?

Mr. HOUSER. It seems entirely out of order to request them at that point when the product is not even going onto the market; it is still in the process of being developed, at that point.

It seems unfair again to subject that product—now you are talking about developing products and research and creativity.

This bill, as I understand you are talking about it, would have a dulling effect on that kind of process, if a manager at that point in the experimental process has to blow the whistle on some product.

Mr. GUDGER. Let me ask you this:

In my practice before coming here, I handled cases dealing with retinopathy, which is a deterioration of the retina, caused by the use of antimalarial drugs in the treatment of arthritis. It was discovered right after World War II that these anti-malarials had a remarkable effect in relieving arthritis, even rheumatoid arthritis pain and with virtually the trend of decomposition characteristics of the disease. It was known by the producer, of course, that there might be some hazard in the use of this product, and the product was never sold except to a licensed physician for use under appropriate regulation and routine examination within certain levels of prescription. This provided a good routine check which eliminated this hazard. Without this, the patient was in serious risk of substantial blindness.

Why is not the FDA the proper agency to determine whether or not these products that are being produced by the pharmaceutical companies are operating within certain appropriate hazard restraints and protections?

Mr. HOUSER. Arguably it would be, sir; and as I indicated in my comments, there exist adequate laws and remedies to handle those kinds of problems.

As I understood your commentary, in this case the presence of the physician in the picture probably eliminate the concealed nature of the danger; because the doctor knows it. And in administering to the patient, you eliminate the concealed nature of the medication, and thus, would not trigger this legislation, because it would not be concealed.

Mr. GUDGER. Is there anything in the legislation that would aid the manufacturer to warn his employees, or warn any other Federal agency of these hazards that may or may not exist?

Mr. HOUSER. No. That's why I indicated earlier, it would be very disruptive of production and research and development.

Mr. GUDGER. One final question.

Certain events evolved in my own district where an aircraft ejection seat had a triggering device which was manufactured to Government specifications for a single-engine aircraft. The manufacturing company told the Pentagon that this particular device had hazards, that it could cause death under flight conditions at low altitudes.

Such a situation did develop; the case was brought against the manufacturer; strict liability applied to the product that caused the death. Although he had warned the appropriate Government agency, the manufacturer was held liable against civil damages, obviously, not criminal.

The Federal Government, in that instance, had required the manufacturer, if he was going to get the contract, to overlook the hazard that the Federal Government had been warned about.

In that situation, would this act mean that that manufacturer or management personnel of that manufacturer would have been criminally liable?

Mr. HOUSER. I think not, because there was total disclosure.

You make a very interesting point, Congressman. Mr. Chairman, he raises the question that when you are dealing with Federal contracts and contractors, which make up an enormous part of our economy, should Federal employees who handle and issue these contracts and set specifications, be held liable under these bills, if the specifications breakdown and there is damage, injury, or death?

Mr. GUDGER. Now, let us take this question I presented a step further. Suppose this triggering device that was being used in a military acquisition contract for the Federal Government has some other application to other agencies, like FAA, who has to be notified that perhaps there may be occasions when test pilots operating equipment privately for testing concerns may be exposed to this particular hazard, or private industry implementing the Federal contract at a different level, do they have to be notified that there may be a hazard inherent?

Where is a limit of the discharge of the obligation to reveal to the Federal agency? Is it always enough to reveal to the one agency, particularly where you have a contract situation on military procurement?

Mr. HOUSER. Arguably, Congressman, under criminal sanctions you notify somebody, and it would be very difficult to criminally punish you because you acted in good faith and in good conscience.

But under civil liability, it seems to me, arguably, you are exposed all the way up the line.

Mr. LEONARD. Mr. Chairman, I just might add, I think you might look, in light of Congressman Gudger's question—and I have not seen this bill until this morning—but I am not sure the draft answers the question of concealed from whom?

Maybe Steve has given that consideration. It is an interesting question, not from that specific situation; but you might well have a product that is sold both to a government agency as well as to the public.

Now, would the manufacturer be exempt or exonerated if he revealed it to the Federal agency, and they said, "Well, we don't care about that"; and, on the other hand, it constituted a certain danger to the public, in the product that was manufactured for them?

The ejection seat I don't see as a very good example; but there could be those questions that arise. So the question of concealment, and the question of who is informed, and what is the responsibility for that?

For instance, in that situation, if you have that kind of a seat in a private airplane, I assume that would come under the jurisdiction probably of the Product Safety Commission, which is one of the agencies listed in the bill.

Does the fact that it's reported and known by one Federal agency connote notice to all Federal agencies?

Mr. GUDGER. This was the point I was trying to evolve, the question of whether or not revelation to one agency, even if it is an agency that is compelling the production of products which the manufacturer would prefer to see modified, would that reporting to that one Federal agency constitute notice?

Mr. HOUSER. Under this legislation you have to report to an "appropriate" Federal agency; so the answer would be: not necessarily so. You might have to report to the one you are dealing with, but also the one that has specific responsibility for the product.

Mr. GUDGER. Mr. Chairman, I failed to hear previous questions, and I don't know whether the question of adequacy of the definition of the term "manager" has developed, as to what level of management is involved. Is it the supervisor of that particular shop who knows about that concealed defect or is it the president of the corporation? Just where is the level?

I heard the question of blue-collar obligation to reveal mentioned by Mr. Sensenbrenner, or an excuse from the obligation to reveal; and he was suggesting the question of whether or not there is equal accountability.

My concern is this:

What is the level of management in your interpretation of the bill?

Mr. HOUSER. One of the dangers of this bill is the problem of trying to find responsibility by title. In differing corporations, different job titles have different responsibilities and managerial authority assigned to them.

What constitutes "significant" managerial authority is something that is going to have to be defined by the courts.

Mr. GUDGER. Well, now, if it's determined by the courts that that significant managerial authority is at the shop level where this particular element of this ultimate manufactured product is assembled, then does it pass on up the line to each person beyond him to whom he accounts? Or does it stop with him? Is he the only one who has the obligation to reveal or is he and every person above him obligated?

Mr. HOUSER. It suggests he or she. There is an area of vagueness here.

Mr. CONYERS. I think counsel can clear that up.

Mr. RAIKIN. Yes.

First of all, the record should reflect that in the new draft of the Miller bill, H.R. 7040, the definition of "manager" was purposely and specifically redrafted to build in a two-part test.

That is, the manager is the person within the corporation having both management authority in or as a business entity and having significant responsibility for the safety of a product, et cetera.

Now, the significant responsibility phrase was not pulled out of thin air. It is based on two Supreme Court decisions which, with the Chairman's permission, I would like to include in the record at this point.

Mr. CONYERS. Yes.

Mr. RAIKIN. The *United States* v. *Dotterweich* and *United States* v. *Park*.

[The following was submitted for the record:]

UNITED STATES *v.* DOTTERWEICH.

CERTIORARI TO THE CIRCUIT COURT OF APPEALS FOR THE SECOND CIRCUIT.

No. 5. Argued October 12, 1943.—Decided November 22, 1943.

Upon review of the conviction of a corporate officer on informations charging the corporation and him with shipping in interstate commerce adulterated and misbranded drugs, in violation of § 301 of the Federal Food, Drug, and Cosmetic Act, *held:*

1. The provision of § 305 of the Act, that before reporting a violation to the United States attorney the Administrator shall give to the person against whom such proceeding is contemplated a notice and an opportunity to present his views, does not create a condition precedent to a prosecution under the Act. P. 278.

2. It was open to the jury to find the officer guilty though failing to find the corporation guilty. P. 279.

3. Where there is no guaranty such as under § 303 (c) of the Act affords immunity from prosecution, that section can not be read as relieving corporate officers and agents from liability for violation of § 301. P. 283.

4. The District Court properly left to the jury the question of the officer's responsibility for the shipment; and the evidence was sufficient to support the verdict. P. 285.

131 F. 2d 500, reversed.

CERTIORARI, 318 U. S. 753, to review the reversal of a conviction for violation of the Federal Food, Drug, and Cosmetic Act.

Solicitor General Fahy, with whom *Assistant Attorneys General Wendell Berge* and *Tom C. Clark,* and *Messrs. Oscar A. Provost, Edward G. Jennings,* and *Valentine Brookes* were on the brief, for the United States.

Mr. Samuel M. Fleischman, with whom *Mr. Robert J. Whissel* was on the brief, for respondent.

MR. JUSTICE FRANKFURTER delivered the opinion of the Court.

This was a prosecution begun by two informations, consolidated for trial, charging Buffalo Pharmacal Company, Inc., and Dotterweich, its president and general manager, with violations of the Act of Congress of June 25, 1938, c. 675, 52 Stat. 1040, 21 U. S. C. §§ 301–392, known as the Federal Food, Drug, and Cosmetic Act. The Company, a jobber in drugs, purchased them from their manufacturers and shipped them, repacked under its own label, in interstate commerce. (No question is raised in this case regarding the implications that may properly arise when, although the manufacturer gives the jobber a guaranty, the latter through his own label makes representations.) The informations were based on § 301 of that Act (21 U. S. C. § 331), paragraph (a) of which prohibits "The introduction or delivery for introduction into interstate commerce of any . . . drug . . . that is adulterated or misbranded." "Any person" violating this provision is, by paragraph (a) of § 303 (21 U. S. C. § 333), made "guilty of a misdemeanor." Three counts went to the jury—two, for shipping misbranded drugs in interstate commerce, and a third, for so shipping an adulterated drug. The jury disagreed as to the corporation and found Dotterweich guilty on all three counts. We start with the finding of the Circuit Court of Appeals that the evidence was adequate to support the verdict of adulteration and misbranding. 131 F. 2d 500, 502.

Two other questions which the Circuit Court of Appeals decided against Dotterweich call only for summary disposition to clear the path for the main question before us. He invoked § 305 of the Act requiring the Administrator, before reporting a violation for prosecution by a

United States attorney, to give the suspect an "opportunity to present his views." We agree with the Circuit Court of Appeals that the giving of such an opportunity, which was not accorded to Dotterweich, is not a prerequisite to prosecution. This Court so held in *United States* v. *Morgan*, 222 U. S. 274, in construing the Food and Drugs Act of 1906, 34 Stat. 768, and the legislative history to which the court below called attention abundantly proves that Congress, in the changed phraseology of 1938, did not intend to introduce a change of substance. 83 Cong. Rec. 7792–94. Equally baseless is the claim of Dotterweich that, having failed to find the corporation guilty, the jury could not find him guilty. Whether the jury's verdict was the result of carelessness or compromise or a belief that the responsible individual should suffer the penalty instead of merely increasing, as it were, the cost of running the business of the corporation, is immaterial. Juries may indulge in precisely such motives or vagaries. *Dunn* v. *United States*, 284 U. S. 390.

And so we are brought to our real problem. The Circuit Court of Appeals, one judge dissenting, reversed the conviction on the ground that only the corporation was the "person" subject to prosecution unless, perchance, Buffalo Pharmacal was a counterfeit corporation serving as a screen for Dotterweich. On that issue, after rehearing, it remanded the cause for a new trial. We then brought the case here, on the Government's petition for certiorari, 318 U. S. 753, because this construction raised questions of importance in the enforcement of the Federal Food, Drug, and Cosmetic Act.

The court below drew its conclusion not from the provisions defining the offenses on which this prosecution was based (§§ 301 (a) and 303 (a)), but from the terms of § 303 (c). That section affords immunity from prosecution if certain conditions are satisfied. The condition relevant to this case is a guaranty from the seller of the innocence of

his product. So far as here relevant, the provision for an immunizing guaranty is as follows:

"No person shall be subject to the penalties of subsection (a) of this section . . . (2) for having violated section 301 (a) or (d), if he establishes a guaranty or undertaking signed by, and containing the name and address of, the person residing in the United States from whom he received in good faith the article, to the effect, in case of an alleged violation of section 301 (a), that such article is not adulterated or misbranded, within the meaning of this Act, designating this Act . . ."

The Circuit Court of Appeals found it "difficult to believe that Congress expected anyone except the principal to get such a guaranty, or to make the guilt of an agent depend upon whether his employer had gotten one." 131 F. 2d 500, 503. And so it cut down the scope of the penalizing provisions of the Act to the restrictive view, as a matter of language and policy, it took of the relieving effect of a guaranty.

The guaranty clause cannot be read in isolation. The Food and Drugs Act of 1906 was an exertion by Congress of its power to keep impure and adulterated food and drugs out of the channels of commerce. By the Act of 1938, Congress extended the range of its control over illicit and noxious articles and stiffened the penalties for disobedience. The purposes of this legislation thus touch phases of the lives and health of people which, in the circumstances of modern industrialism, are largely beyond self-protection. Regard for these purposes should infuse construction of the legislation if it is to be treated as a working instrument of government and not merely as a collection of English words. See *Hipolite Egg Co.* v. *United States*, 220 U. S. 45, 57, and *McDermott* v. *Wisconsin*, 228 U. S. 115, 128. The prosecution to which Dotterweich was subjected is based on a now familiar type of legislation whereby penalties serve as effective means

of regulation. Such legislation dispenses with the conventional requirement for criminal conduct—awareness of some wrongdoing. In the interest of the larger good it puts the burden of acting at hazard upon a person otherwise innocent but standing in responsible relation to a public danger. *United States* v. *Balint*, 258 U. S. 250. And so it is clear that shipments like those now in issue are "punished by the statute if the article is misbranded [or adulterated], and that the article may be misbranded [or adulterated] without any conscious fraud at all. It was natural enough to throw this risk on shippers with regard to the identity of their wares . . ." *United States* v. *Johnson*, 221 U. S. 488, 497–98.

The statute makes "any person" who violates § 301 (a) guilty of a "misdemeanor." It specifically defines "person" to include "corporation." § 201 (e). But the only way in which a corporation can act is through the individuals who act on its behalf. *New York Central & H. R. R. Co.* v. *United States*, 212 U. S. 481. And the historic conception of a "misdemeanor" makes all those responsible for it equally guilty, *United States* v. *Mills*, 7 Pet. 138, 141, a doctrine given general application in § 332 of the Penal Code (18 U. S. C. § 550). If, then, Dotterweich is not subject to the Act, it must be solely on the ground that individuals are immune when the "person" who violates § 301 (a) is a corporation, although from the point of view of action the individuals are the corporation. As a matter of legal development, it has taken time to establish criminal liability also for a corporation and not merely for its agents. See *New York Central & H. R. R. Co.* v. *United States*, *supra*. The history of federal food and drug legislation is a good illustration of the elaborate phrasing that was in earlier days deemed necessary to fasten criminal liability on corporations. Section 12 of the Food and Drugs Act of 1906 provided that, "the act, omission, or failure of any officer, agent, or other person

does not cut down the scope of responsibility of all who are concerned with transactions forbidden by § 301. To be sure, that casts the risk that there is no guaranty upon all who according to settled doctrines of criminal law are responsible for the commission of a misdemeanor. To read the guaranty section, as did the court below, so as to restrict liability for penalties to the only person who normally would receive a guaranty—the proprietor—disregards the admonition that "the meaning of a sentence is to be felt rather than to be proved." *United States* v. *Johnson*, 221 U. S. 488, 496. It also reads an exception to an important provision safeguarding the public welfare with a liberality which more appropriately belongs to enforcement of the central purpose of the Act.

The Circuit Court of Appeals was evidently tempted to make such a devitalizing use of the guaranty provision through fear that an enforcement of § 301 (a) as written might operate too harshly by sweeping within its condemnation any person however remotely entangled in the proscribed shipment. But that is not the way to read legislation. Literalism and evisceration are equally to be avoided. To speak with technical accuracy, under § 301 a corporation may commit an offense and all persons who aid and abet its commission are equally guilty. Whether an accused shares responsibility in the business process resulting in unlawful distribution depends on the evidence produced at the trial and its submission—assuming the evidence warrants it—to the jury under appropriate guidance. The offense is committed, unless the enterprise which they are serving enjoys the immunity of a guaranty, by all who do have such a responsible share in the furtherance of the transaction which the statute outlaws, namely, to put into the stream of interstate commerce adulterated or misbranded drugs. Hardship there doubtless may be under a statute which thus penalizes the transaction though consciousness of wrongdoing be totally wanting.

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Balancing relative hardships, Congress has preferred to place it upon those who have at least the opportunity of informing themselves of the existence of conditions imposed for the protection of consumers before sharing in illicit commerce, rather than to throw the hazard on the innocent public who are wholly helpless.

It would be too treacherous to define or even to indicate by way of illustration the class of employees which stands in such a responsible relation. To attempt a formula embracing the variety of conduct whereby persons may responsibly contribute in furthering a transaction forbidden by an Act of Congress, to wit, to send illicit goods across state lines, would be mischievous futility. In such matters the good sense of prosecutors, the wise guidance of trial judges, and the ultimate judgment of juries must be trusted. Our system of criminal justice necessarily depends on "conscience and circumspection in prosecuting officers," *Nash* v. *United States*, 229 U. S. 373, 378, even when the consequences are far more drastic than they are under the provision of law before us. See *United States* v. *Balint, supra* (involving a maximum sentence of five years). For present purpose it suffices to say that in what the defense characterized as "a very fair charge" the District Court properly left the question of the responsibility of Dotterweich for the shipment to the jury, and there was sufficient evidence to support its verdict.

Reversed.

MR. JUSTICE MURPHY, dissenting:

Our prime concern in this case is whether the criminal sanctions of the Federal Food, Drug, and Cosmetic Act of 1938 plainly and unmistakably apply to the respondent in his capacity as a corporate officer. He is charged with violating § 301 (a) of the Act, which prohibits the introduction or delivery for introduction into interstate commerce of any adulterated or misbranded drug. There is

intent to place corporate officers within the ambit of the Act can they be said to be embraced within the meaning of the words "person" or "individual" as here used.

Nor does the clear imposition of liability on corporations reveal the necessary intent to place criminal sanctions on their officers. A corporation is not the necessary and inevitable equivalent of its officers for all purposes.[4] In many respects it is desirable to distinguish the latter from the corporate entity and to impose liability only on the corporation. In this respect it is significant that this Court has never held the imposition of liability on a corporation sufficient, without more, to extend liability to its officers who have no consciousness of wrongdoing.[5] Indeed, in a closely analogous situation, we have held that the vicarious personal liability of receivers in actual charge and control of a corporation could not be predicated on the statutory liability of a "company," even when the policy and purpose of the enactment were consistent with personal liability. *United States* v. *Harris, supra.*[6] It fol-

[4] In *Park Bank* v. *Remsen*, 158 U. S. 337, 344, this Court said, "It is the corporation which is given the powers and privileges and made subject to the liabilities. Does this carry with it an imposition of liability upon the trustee or other officer of the corporation? The officer is not the corporation; his liability is personal, and not that of the corporation, nor can it be counted among the powers and privileges of the corporation."

[5] For an analysis of the confusion on this matter in the state and lower federal courts, see Lee, "Corporate Criminal Liability," 28 Col. L. Rev. 1, 181.

[6] In that case we had before us Rev. Stat. §§ 4386–4389, which penalized "any company, owner or custodian of such animals" who failed to comply with the statutory requirements as to livestock transportation. A railroad company violated the statute and the government sought to impose liability on the receivers who were in actual charge of the company. It was argued that the word "company" embraced the natural persons acting on behalf of the company and that to hold such officers and receivers liable was within the policy and purpose of

lows that express statutory provisions are necessary to satisfy the requirement that officers as individuals be given clear and unmistakable warning as to their vicarious personal liability. This Act gives no such warning.

This fatal hiatus in the Act is further emphasized by the ability of Congress, demonstrated on many occasions, to apply statutes in no uncertain terms to corporate officers as distinct from corporations.[7] The failure to mention officers specifically is thus some indication of a desire to exempt them from liability. In fact the history

so humane a statute. We rejected this contention in language peculiarly appropriate to this case (177 U. S. at 309):

"It must be admitted that, in order to hold the receivers, they must be regarded as included in the word 'company.' Only by a strained and artificial construction, based chiefly upon a consideration of the mischief which the legislature sought to remedy, can receivers be brought within the terms of the law. But can such a kind of construction be resorted to in enforcing a penal statute? Giving all proper force to the contention of the counsel of the Government, that there has been some relaxation on the part of the courts in applying the rule of strict construction to such statutes, it still remains that the intention of a penal statute must be found in the language actually used, interpreted according to its fair and obvious meaning. It is not permitted to courts, in this class of cases, to attribute inadvertence or oversight to the legislature when enumerating the classes of persons who are subjected to a penal enactment, nor to depart from the settled meaning of words or phrases in order to bring persons not named or distinctly described within the supposed purpose of the statute."

[7] "Whenever a corporation shall violate any of the penal provisions of the antitrust laws, such violation shall be deemed to be also that of the individual directors, officers, or agents of such corporation who shall have authorized, ordered, or done any of the acts constituting in whole or in part such violation," 15 U. S. C. § 24.

"The courts of bankruptcy . . . are hereby invested . . . with such jurisdiction at law and in equity as will enable them to . . . (4) arraign, try, and punish bankrupts, officers, and other persons, and the agents, officers, members of the board of directors or trustees, or other

of federal food and drug legislation is itself illustrative of this capacity for specification and lends strong support to the conclusion that Congress did not intend to impose liability on corporate officers in this particular Act.

Section 2 of the Federal Food and Drugs Act of 1906, as introduced and passed in the Senate, contained a provision to the effect that any violation of the Act by a corporation should be deemed to be the act of the officer responsible therefor and that such officer might be punished as though it were his personal act.[8] This clear imposition of criminal responsibility on corporate officers, however, was not carried over into the statute as finally enacted. In its place appeared merely the provision that "when construing and enforcing the provisions of this Act, the act, omission, or failure of any officer, agent, or other person acting for or employed by any corporation . . . within the scope of his employment or office, shall in every case be also deemed to be the act, omission, or failure of such corporation . . . as well as that of the person."[9] This provision had the effect only of making corporations

similar controlling bodies, of corporations for violations of this Act." 30 Stat. 545.

"Any such common carrier, or any officer or agent thereof, requiring or permitting any employee to go, be, or remain on duty in violation of the next preceding section of this chapter shall be liable to a penalty . . ." 45 U. S. C. § 63.

"A mortgagor who, with intent to defraud, violates any provision of subsection F, section 924, and if the mortgagor is a corporation or association, the president or other principal executive officer of the corporation or association, shall upon conviction thereof be held guilty of a misdemeanor . . ." 46 U. S. C. § 941 (b).

[8] S. 88, 59th Cong., 1st Sess. Senator Heyburn, one of the sponsors of S. 88, stated that this was "a new feature in bills of this kind. It was intended to obviate the possibility of escape by the officers of a corporation under a plea, which has been more than once made, that they did not know that this was being done on the credit of or on the responsibility of the corporation." 40 Cong. Rec. 894.

[9] 34 Stat. 772, 21 U. S. C. § 4.

responsible for the illegal acts of their officers and proved unnecessary in view of the clarity of the law to that effect. *New York Central & H. R. R. Co.* v. *United States*, 212 U. S. 481.

The framers of the 1938 Act were aware that the 1906 Act was deficient in that it failed "to place responsibility properly upon corporate officers." [10] In order "to provide the additional scope necessary to prevent the use of the corporate form as a shield to individual wrongdoers," [11] these framers inserted a clear provision that "whenever a corporation or association violates any of the provisions of this Act, such violation shall also be deemed to be a violation of the individual directors, officers, or agents of such corporation or association who authorized, ordered, or did any of the acts constituting, in whole or in part, such violation." [12] This paragraph, however, was deleted from the final version of the Act.

[10] Senate Report No. 493, 73d Cong., 2d Sess., p. 21.

[11] *Ibid.*, p. 22. This report also stated that "it is not, however, the purpose of this paragraph to subject to liability those directors, officers, and employees, who merely authorize their subordinates to perform lawful duties and such subordinates, on their own initiative, perform those duties in a manner which violates the provisions of the law. However, if a director or officer personally orders his subordinate to do an act in violation of the law, there is no reason why he should be shielded from personal responsibility merely because the act was done by another and on behalf of a corporation."

[12] This provision appears in several of the early versions of the Act introduced in Congress. S. 1944, 73d Cong., 1st Sess., § 18 (b); S. 2000, 73d Cong., 2d Sess., § 18 (b); S. 2800, 73d Cong., 2d Sess., § 18 (b); S. 5, 74th Cong., 1st Sess., § 709 (b); S. 5, 74th Cong., 2d Sess., § 707 (b), as reported to the House, which substituted the word "personally" for the word "authorized" in the last clause of the paragraph quoted above. A variation of this provision appeared in S. 5, 75th Cong., 1st Sess., § 2 (f), and made a marked distinction between the use of the word "person" and the words "director, officer, employee, or agent acting for or employed by any person." All of these bills also contained the present definition of "person" as including "individual, partnership, corporation, and association."

We cannot presume that this omission was inadvertent on the part of Congress. *United States* v. *Harris, supra* at 309. Even if it were, courts have no power to remedy so serious a defect, no matter how probable it otherwise may appear that Congress intended to include officers; "probability is not a guide which a court, in construing a penal statute, can safely take." *United States* v. *Wiltberger, supra* at 105. But the framers of the 1938 Act had an intelligent comprehension of the inadequacies of the 1906 Act and of the unsettled state of the law. They recognized the necessity of inserting clear and unmistakable language in order to impose liability on corporate officers. It is thus unreasonable to assume that the omission of such language was due to a belief that the Act as it now stands was sufficient to impose liability on corporate officers. Such deliberate deletion is consistent only with an intent to allow such officers to remain free from criminal liability. Thus to apply the sanctions of this Act to the respondent would be contrary to the intent of Congress as expressed in the statutory language and in the legislative history.

The dangers inherent in any attempt to create liability without express Congressional intention or authorization are illustrated by this case. Without any legislative guides, we are confronted with the problem of determining precisely which officers, employees and agents of a corporation are to be subject to this Act by our fiat. To erect standards of responsibility is a difficult legislative task and the opinion of this Court admits that it is "too treacherous" and a "mischievous futility" for us to engage in such pursuits. But the only alternative is a blind resort to "the good sense of prosecutors, the wise guidance of trial judges, and the ultimate judgment of juries." Yet that situation is precisely what our constitutional system sought to avoid. Reliance on the legislature to define crimes and criminals distinguishes our form of juris-

prudence from certain less desirable ones. The legislative power to restrain the liberty and to imperil the good reputation of citizens must not rest upon the variable attitudes and opinions of those charged with the duties of interpreting and enforcing the mandates of the law. I therefore cannot approve the decision of the Court in this case.

MR. JUSTICE ROBERTS, MR. JUSTICE REED and MR. JUSTICE RUTLEDGE join in this dissent.

UNITED STATES *v.* PARK

CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FOURTH CIRCUIT

No. 74-215. Argued March 18-19, 1975—Decided June 9, 1975

Acme Markets, Inc., a large national food chain, and respondent, its president, were charged with violating § 301 (k) of the Federal Food, Drug, and Cosmetic Act (Act) in an information alleging that they had caused interstate food shipments being held in Acme's Baltimore warehouse to be exposed to rodent contamination. Acme, but not respondent, pleaded guilty. At his trial respondent conceded that providing sanitary conditions for food offered for sale to the public was something that he was "responsible for in the entire operation of the company," and that it was one of the many phases of the company that he assigned to "dependable subordinates." Evidence was admitted over respondent's objection that he had received a Food and Drug Administration (FDA) letter in 1970 concerning insanitary conditions at Acme's Philadelphia warehouse. Respondent conceded that the same individuals were largely responsible for sanitation in both Baltimore and Philadelphia, and that as Acme's president he was responsible for any result that occurred in the company. The trial court, *inter alia*, instructed the jury that although respondent need not have personally participated in the situation, he must have had "a responsible relationship to the issue." Respondent was convicted, but the Court of Appeals reversed, reasoning that although this Court's decision in *United States* v. *Dotterweich*, 320 U. S. 277, had construed the statutory provisions under which respondent had been tried to dispense with the traditional element of "'awareness of some wrongdoing,'" the Court had not construed them as dispensing with the element of "wrongful action." The Court of Appeals concluded that the trial court's instructions "might well have left the jury with the erroneous impression that [respondent] could be found guilty in the absence of 'wrongful action' on his part," and that proof of that element was required by due process. The court also held that the admission in evidence of the 1970 FDA warning to respondent was reversible error. *Held:*

1. The Act imposes upon persons exercising authority and

supervisory responsibility reposed in them by a business organization not only a positive duty to seek out and remedy violations but also, and primarily, a duty to implement measures that will insure that violations will not occur, *United States* v. *Dotterweich, supra;* in order to make food distributors "the strictest censors of their merchandise," *Smith* v. *California,* 361 U. S. 147, 152, the Act punishes "neglect where the law requires care, or inaction where it imposes a duty." *Morissette* v. *United States,* 342 U. S. 246, 255. Pp. 670–673.

2. Viewed as a whole and in context, the trial court's instructions were not misleading and provided a proper guide for the jury's determination. The charge adequately focused on the issue of respondent's authority respecting the conditions that formed the basis of the alleged violations, fairly advising the jury that to find guilt it must find that respondent "had a responsible relation to the situation"; that the "situation" was the condition of the warehouse; and that by virtue of his position he had "authority and responsibility" to deal therewith. Pp. 673–676.

3. The admission of testimony concerning the 1970 FDA warning was proper rebuttal evidence to respondent's defense that he had justifiably relied upon subordinates to handle sanitation matters. Pp. 676–678.

499 F. 2d 839, reversed.

BURGER, C. J., delivered the opinion of the Court, in which DOUGLAS, BRENNAN, WHITE, BLACKMUN, and REHNQUIST, JJ., joined. STEWART, J., filed a dissenting opinion, in which MARSHALL and POWELL, JJ., joined, *post,* p. 678.

Allan Abbott Tuttle argued the cause for the United States. With him on the briefs were *Solicitor General Bork, Assistant Attorney General Kauper, Howard E. Shapiro,* and *Peter Barton Hutt.*

Gregory M. Harvey argued the cause for respondent. With him on the brief was *Orvel Sebring.**

*Briefs of *amici curiae* urging affirmance were filed by *James F. Rill, Robert A. Collier,* and *John Hardin Young* for the National Association of Food Chains; by *H. Thomas Austern, H. Edward Dunkelberger, Jr.,* and *Geoffrey Richard Wagner Smith* for the

MR. CHIEF JUSTICE BURGER delivered the opinion of the Court.

We granted certiorari to consider whether the jury instructions in the prosecution of a corporate officer under § 301 (k) of the Federal Food, Drug, and Cosmetic Act, 52 Stat. 1042, as amended, 21 U. S. C. § 331 (k), were appropriate under *United States* v. *Dotterweich,* 320 U. S. 277 (1943).

Acme Markets, Inc., is a national retail food chain with approximately 36,000 employees, 874 retail outlets, 12 general warehouses, and four special warehouses. Its headquarters, including the office of the president, respondent Park, who is chief executive officer of the corporation, are located in Philadelphia, Pa. In a five-count information filed in the United States District Court for the District of Maryland, the Government charged Acme and respondent with violations of the Federal Food, Drug, and Cosmetic Act. Each count of the information alleged that the defendants had received food that had been shipped in interstate commerce and that, while the food was being held for sale in Acme's Baltimore warehouse following shipment in interstate commerce, they caused it to be held in a building accessible to rodents and to be exposed to contamination by rodents. These acts were alleged to have resulted in the food's being adulterated within the meaning of 21 U. S. C. §§ 342 (a) (3) and (4),[1] in violation of 21 U. S. C. § 331 (k).[2]

National Canners Assn.; by *Robert C. Barnard* and *Charles F. Lettow* for the Synthetic Organic Chemical Manufacturers Assn.; and by *Frederick M. Rowe, Paul M. Hyman,* and *Jonathan W. Sloat* for the Grocery Manufacturers of America, Inc.

[1] Section 402 of the Act, 21 U. S. C. § 342, provides in pertinent part:

"A food shall be deemed to be adulterated—

"(a) . . . (3) if it consists in whole or in part of any filthy, putrid,

[*Footnote 2 is on p. 661*]

Acme pleaded guilty to each count of the information. Respondent pleaded not guilty. The evidence at trial [3] demonstrated that in April 1970 the Food and Drug Administration (FDA) advised respondent by letter of insanitary conditions in Acme's Philadelphia warehouse. In 1971 the FDA found that similar conditions existed in the firm's Baltimore warehouse. An FDA consumer safety officer testified concerning evidence of rodent infestation and other insanitary conditions discovered during a 12-day inspection of the Baltimore warehouse in November and December 1971.[4] He also related that a

or decomposed substance, or if it is otherwise unfit for food; or (4) if it has been prepared, packed, or held under insanitary conditions whereby it may have become contaminated with filth, or whereby it may have been rendered injurious to health. . . ."

[2] Section 301 of the Act, 21 U. S. C. § 331, provides in pertinent part:

"The following acts and the causing thereof are prohibited:

. . . . . .

"(k) The alteration, mutilation, destruction, obliteration, or removal of the whole or any part of the labeling of, or the doing of any other act with respect to, a food, drug, device, or cosmetic, if such act is done while such article is held for sale (whether or not the first sale) after shipment in interstate commerce and results in such article being adulterated or misbranded."

[3] The parties stipulated in effect that the items of food described in the information had been shipped in interstate commerce and were being held for sale in Acme's Baltimore warehouse.

[4] The witness testified with respect to the inspection of the basement of the "old building" in the warehouse complex:

"We found extensive evidence of rodent infestation in the form of rat and mouse pellets throughout the entire perimeter area and along the wall.

"We also found that the doors leading to the basement area from the rail siding had openings at the bottom or openings beneath part of the door that came down at the bottom large enough to admit rodent entry. There were also roden[t] pellets found on a number of different packages of boxes of various items stored in the base-

second inspection of the warehouse had been conducted in March 1972.[5] On that occasion the inspectors found that there had been improvement in the sanitary conditions, but that "there was still evidence of rodent activity in the building and in the warehouses and we found some rodent-contaminated lots of food items." App. 23.

The Government also presented testimony by the Chief of Compliance of the FDA's Baltimore office, who informed respondent by letter of the conditions at the Baltimore warehouse after the first inspection.[6] There was testimony by Acme's Baltimore division vice president, who had responded to the letter on behalf of Acme and respondent and who described the steps taken to remedy the insanitary conditions discovered by both inspections. The Government's final witness, Acme's vice president for legal affairs and assistant secretary, identi-

ment, and looking at this document, I see there were also broken windows along the rail siding." App. 20–21.

On the first floor of the "old building," the inspectors found:

"Thirty mouse pellets on the floor along walls and on the ledge in the hanging meat room. There were at least twenty mouse pellets beside bales of lime Jello and one of the bales had a chewed rodent hole in the product. . . ." *Id.*, at 22.

[5] The first four counts of the information alleged violations corresponding to the observations of the inspectors during the November and December 1971 inspection. The fifth count alleged violations corresponding to observations during the March 1972 inspection.

[6] The letter, dated January 27, 1972, included the following:

"We note with much concern that the old and new warehouse areas used for food storage were actively and extensively inhabited by live rodents. Of even more concern was the observation that such reprehensible conditions obviously existed for a prolonged period of time without any detection, or were completely ignored . . . .

. . . . . .

"We trust this letter will serve to direct your attention to the seriousness of the problem and formally advise you of the urgent need to initiate whatever measures are necessary to prevent recurrence and ensure compliance with the law." *Id.*, at 64–65.

fied respondent as the president and chief executive officer of the company and read a bylaw prescribing the duties of the chief executive officer.[7] He testified that respondent functioned by delegating "normal operating duties," including sanitation, but that he retained "certain things, which are the big, broad, principles of the operation of the company," and had "the responsibility of seeing that they all work together." *Id.*, at 41.

At the close of the Government's case in chief, respondent moved for a judgment of acquittal on the ground that "the evidence in chief has shown that Mr. Park is not personally concerned in this Food and Drug violation." The trial judge denied the motion, stating that *United States* v. *Dotterweich*, 320 U. S. 277 (1943), was controlling.

Respondent was the only defense witness. He testified that, although all of Acme's employees were in a sense under his general direction, the company had an "organizational structure for responsibilities for certain functions" according to which different phases of its operation were "assigned to individuals who, in turn, have staff and departments under them." He identified those individuals responsible for sanitation, and related that upon receipt of the January 1972 FDA letter, he had conferred with the vice president for legal affairs,

[7] The bylaw provided in pertinent part:

"The Chairman of the board of directors or the president shall be the chief executive officer of the company as the board of directors may from time to time determine. He shall, subject to the board of directors, have general and active supervision of the affairs, business, offices and employees of the company. . . .

"He shall, from time to time, in his discretion or at the order of the board, report the operations and affairs of the company. He shall also perform such other duties and have such other powers as may be assigned to him from time to time by the board of directors." *Id.*, at 40.

who informed him that the Baltimore division vice president "was investigating the situation immediately and would be taking corrective action and would be preparing a summary of the corrective action to reply to the letter." Respondent stated that he did not "believe there was anything [he] could have done more constructively than what [he] found was being done." App. 43–47.

On cross-examination, respondent conceded that providing sanitary conditions for food offered for sale to the public was something that he was "responsible for in the entire operation of the company," and he stated that it was one of many phases of the company that he assigned to "dependable subordinates." Respondent was asked about and, over the objections of his counsel, admitted receiving, the April 1970 letter addressed to him from the FDA regarding insanitary conditions at Acme's Philadelphia warehouse.[8] He acknowledged that, with the exception of the division vice president, the same individuals had responsibility for sanitation in both Baltimore and Philadelphia. Finally, in response to questions concerning the Philadelphia and Baltimore incidents, respondent admitted that the Baltimore problem indicated the system for handling sanitation "wasn't

[8] The April 1970 letter informed respondent of the following "objectionable conditions" in Acme's Philadelphia warehouse:

"1. Potential rodent entry ways were noted via ill fitting doors and door in irrepair at Southwest corner of warehouse; at dock at old salvage room and at receiving and shipping doors which were observed to be open most of the time.

"2. Rodent nesting, rodent excreta pellets, rodent stained bale bagging and rodent gnawed holes were noted among bales of flour stored in warehouse.

"3. Potential rodent harborage was noted in discarded paper, rope, sawdust and other debris piled in corner of shipping and receiving dock near bakery and warehouse doors. Rodent excreta pellets were observed among bags of sawdust (or wood shavings)." *Id.*, at 70.

working perfectly" and that as Acme's chief executive officer he was responsible for "any result which occurs in our company." *Id.*, at 48–55.

At the close of the evidence, respondent's renewed motion for a judgment of acquittal was denied. The relevant portion of the trial judge's instructions to the jury challenged by respondent is set out in the margin.[9] Respondent's counsel objected to the instructions on the ground that they failed fairly to reflect our decision in *United States* v. *Dotterweich, supra,* and to define "'responsible relationship.'" The trial judge over-

[9] "In order to find the Defendant guilty on any count of the Information, you must find beyond a reasonable doubt on each count . . . .

. . . . . .

"Thirdly, that John R. Park held a position of authority in the operation of the business of Acme Markets, Incorporated.

"However, you need not concern yourselves with the first two elements of the case. The main issue for your determination is only with the third element, whether the Defendant held a position of authority and responsibility in the business of Acme Markets.

. . . . . .

"The statute makes individuals, as well as corporations, liable for violations. An individual is liable if it is clear, beyond a reasonable doubt, that the elements of the adulteration of the food as to travel in interstate commerce are present. As I have instructed you in this case, they are, and that the individual had a responsible relation to the situation, even though he may not have participated personally.

"The individual is or could be liable under the statute, even if he did not consciously do wrong. However, the fact that the Defendant is pres[id]ent and is a chief executive officer of the Acme Markets does not require a finding of guilt. Though, he need not have personally participated in the situation, he must have had a responsible relationship to the issue. The issue is, in this case, whether the Defendant, John R. Park, by virtue of his position in the company, had a position of authority and responsibility in the situation out of which these charges arose." *Id.*, at 61–62.

ruled the objection. The jury found respondent guilty on all counts of the information, and he was subsequently sentenced to pay a fine of $50 on each count.[10]

The Court of Appeals reversed the conviction and remanded for a new trial. That court viewed the Government as arguing "that the conviction may be predicated solely upon a showing that . . . [respondent] was the President of the offending corporation," and it stated that as "a general proposition, some act of commission or omission is an essential element of every crime." 499 F. 2d 839, 841 (CA4 1974). It reasoned that, although our decision in *United States* v. *Dotterweich, supra,* at 281, had construed the statutory provisions under which respondent was tried to dispense with the traditional element of "'awareness of some wrongdoing,'" the Court had not construed them as dispensing with the element of "wrongful action." The Court of Appeals concluded that the trial judge's instructions "might well have left the jury with the erroneous impression that Park could be found guilty in the absence of 'wrongful action' on his part," 499 F. 2d, at 841–842, and that proof of this element was required by due process. It held, with one

[10] Sections 303 (a) and (b) of the Act, 21 U. S. C. §§ 333 (a) and (b), provide:

"(a) Any person who violates a provision of section 331 of this title shall be imprisoned for not more than one year or fined not more than $1,000, or both.

"(b) Notwithstanding the provisions of subsection (a) of this section, if any person commits such a violation after a conviction of him under this section has become final, or commits such a violation with the intent to defraud or mislead, such person shall be imprisoned for not more than three years or fined not more than $10,000, or both."

Respondent's renewed motion for a judgment of acquittal or in the alternative for a new trial, one of the grounds of which was the alleged abuse of discretion in the initiation of the prosecution against him, had previously been denied after argument.

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dissent, that the instructions did not "correctly state the law of the case," *id.*, at 840, and directed that on retrial the jury be instructed as to "wrongful action," which might be "gross negligence and inattention in discharging . . . corporate duties and obligations or any of a host of other acts of commission or omission which would 'cause' the contamination of food." *Id.*, at 842. (Footnotes omitted.)

The Court of Appeals also held that the admission in evidence of the April 1970 FDA warning to respondent was error warranting reversal, based on its conclusion that, "as this case was submitted to the jury and in light of the sole issue presented," there was no need for the evidence and thus that its prejudicial effect outweighed its relevancy under the test of *United States* v. *Woods*, 484 F. 2d 127 (CA4 1973), cert. denied, 415 U. S. 979 (1974). 499 F. 2d, at 843.

We granted certiorari because of an apparent conflict among the Courts of Appeals with respect to the standard of liability of corporate officers under the Federal Food, Drug, and Cosmetic Act as construed in *United States* v. *Dotterweich*, *supra*, and because of the importance of the question to the Government's enforcement program. We reverse.

I

The question presented by the Government's petition for certiorari in *United States* v. *Dotterweich*, *supra*, and the focus of this Court's opinion, was whether "the manager of a corporation, as well as the corporation itself, may be prosecuted under the Federal Food, Drug, and Cosmetic Act of 1938 for the introduction of misbranded and adulterated articles into interstate commerce." Pet. for Cert., No. 5, O. T. 1943, p. 2. In *Dotterweich*, a jury had disagreed as to the corporation, a jobber purchasing drugs from manu-

facturers and shipping them in interstate commerce under its own label, but had convicted Dotterweich, the corporation's president and general manager. The Court of Appeals reversed the conviction on the ground that only the drug dealer, whether corporation or individual, was subject to the criminal provisions of the Act, and that where the dealer was a corporation, an individual connected therewith might be held personally only if he was operating the corporation "as his 'alter ego.'" *United States* v. *Buffalo Pharmacal Co.*, 131 F. 2d 500, 503 (CA2 1942).[11]

In reversing the judgment of the Court of Appeals and reinstating Dotterweich's conviction, this Court looked to the purposes of the Act and noted that they "touch phases of the lives and health of people which, in the circumstances of modern industrialism, are largely beyond self-protection." 320 U. S., at 280. It observed that the Act is of "a now familiar type" which "dispenses with the conventional requirement for criminal conduct—awareness of some wrongdoing. In the interest of the larger good it puts the burden of acting at hazard upon a person otherwise innocent but standing in responsible relation to a public danger." *Id.*, at 280–281.

Central to the Court's conclusion that individuals other than proprietors are subject to the criminal provisions of the Act was the reality that "the only way in which a corporation can act is through the individuals who act on its behalf." *Id.*, at 281. The Court

[11] The Court of Appeals relied upon § 303 (c) of the Act, 21 U. S. C. § 333 (c), which extended immunity from the penalties provided by § 303 (a) to a person who could establish a guaranty "signed by, and containing the name and address of, the person residing in the United States *from whom he received* in good faith the article . . . ." (Emphasis added.) The court reasoned that where the drug dealer was a corporation, the protection of § 303 (c) would extend only to such dealer and not to its employees.

also noted that corporate officers had been subject to criminal liability under the Federal Food and Drugs Act of 1906,[12] and it observed that a contrary result under the 1938 legislation would be incompatible with the expressed intent of Congress to "enlarge and stiffen the penal net" and to discourage a view of the Act's criminal penalties as a " 'license fee for the conduct of an illegitimate business.' " 320 U. S., at 282–283. (Footnote omitted.)

At the same time, however, the Court was aware of the concern which was the motivating factor in the Court of Appeals' decision, that literal enforcement "might operate too harshly by sweeping within its condemnation any person however remotely entangled in the proscribed shipment." *Id.*, at 284. A limiting principle, in the form of "settled doctrines of criminal law" defining those who "are responsible for the commission of a misdemeanor," was available. In this context, the Court concluded, those doctrines dictated that the offense was committed "by all who . . . have . . . a responsible share in the furtherance of the transaction which the statute outlaws." *Ibid.*

The Court recognized that, because the Act dispenses with the need to prove "consciousness of wrongdoing," it may result in hardship even as applied to those who share "responsibility in the business process resulting in" a violation. It regarded as "too treacherous" an attempt "to define or even to indicate by way of illustration the class of employees which stands in such a responsible relation." The question of responsibility, the Court said, depends "on the evidence produced at the trial and its submission—assuming the evidence warrants it—to the jury under appropriate guidance." The Court added: "In such matters the good sense of prosecutors, the wise guidance of trial judges, and the ulti-

[12] Act of June 30, 1906, c. 3915, 34 Stat. 768.

mate judgment of juries must be trusted." *Id.*, at 284–285.[13] See 21 U. S. C. § 336. Cf. *United States* v. *Sullivan*, 332 U. S. 689, 694–695 (1948).

II

The rule that corporate employees who have "a responsible share in the furtherance of the transaction which the statute outlaws" are subject to the criminal provisions of the Act was not formulated in a vacuum. Cf. *Morissette* v. *United States*, 342 U. S. 246, 258 (1952). Cases under the Federal Food and Drugs Act of 1906 reflected the view both that knowledge or intent were not required to be proved in prosecutions under its criminal provisions, and that responsible corporate agents could be subjected to the liability thereby imposed. See, *e. g.*, *United States* v. *Mayfield*, 177 F. 765 (ND Ala. 1910). Moreover, the principle had been recognized that a corporate agent, through whose act, default, or omission the corporation committed a crime, was himself guilty individually of that crime. The principle had been applied whether or not the crime required "consciousness of wrongdoing," and it had been applied not only to those corporate agents who themselves committed the criminal act, but also to those who by virtue of their managerial positions or other similar relation to the actor could be deemed responsible for its commission.

In the latter class of cases, the liability of managerial officers did not depend on their knowledge of, or personal participation in, the act made criminal by the statute.

[13] In reinstating Dotterweich's conviction, the Court stated: "For present purpose it suffices to say that in what the defense characterized as 'a very fair charge' the District Court properly left the question of the responsibility of Dotterweich for the shipment to the jury, and there was sufficient evidence to support its verdict." 320 U. S., at 285.

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Rather, where the statute under which they were prosecuted dispensed with "consciousness of wrongdoing," an omission or failure to act was deemed a sufficient basis for a responsible corporate agent's liability. It was enough in such cases that, by virtue of the relationship he bore to the corporation, the agent had the power to prevent the act complained of. See, *e. g., State* v. *Burnam,* 71 Wash. 199, 128 P. 218 (1912); *Overland Cotton Mill Co.* v. *People,* 32 Colo. 263, 75 P. 924 (1904). Cf. *Groff* v. *State,* 171 Ind. 547, 85 N. E. 769 (1908); *Turner* v. *State,* 171 Tenn. 36, 100 S. W. 2d 236 (1937); *People* v. *Schwartz,* 28 Cal. App. 2d 775, 70 P. 2d 1017 (1937); Sayre, Criminal Responsibility for the Acts of Another, 43 Harv. L. Rev. 689 (1930).

The rationale of the interpretation given the Act in *Dotterweich,* as holding criminally accountable the persons whose failure to exercise the authority and supervisory responsibility reposed in them by the business organization resulted in the violation complained of, has been confirmed in our subsequent cases. Thus, the Court has reaffirmed the proposition that "the public interest in the purity of its food is so great as to warrant the imposition of the highest standard of care on distributors." *Smith* v. *California,* 361 U. S. 147, 152 (1959). In order to make "distributors of food the strictest censors of their merchandise," *ibid.,* the Act punishes "neglect where the law requires care, or inaction where it imposes a duty." *Morissette* v. *United States, supra,* at 255. "The accused, if he does not will the violation, usually is in a position to prevent it with no more care than society might reasonably expect and no more exertion than it might reasonably exact from one who assumed his responsibilities." *Id.,* at 256. Cf. Hughes, Criminal Omissions, 67 Yale L. J. 590 (1958). Similarly, in cases decided after *Dotterweich,* the

Courts of Appeals have recognized that those corporate agents vested with the responsibility, and power commensurate with that responsibility, to devise whatever measures are necessary to ensure compliance with the Act bear a "responsible relationship" to, or have a "responsible share" in, violations.[14]

Thus *Dotterweich* and the cases which have followed reveal that in providing sanctions which reach and touch the individuals who execute the corporate mission—and this is by no means necessarily confined to a single corporate agent or employee—the Act imposes not only a positive duty to seek out and remedy violations when they occur but also, and primarily, a duty to implement measures that will insure that violations will not occur. The requirements of foresight and vigilance imposed on responsible corporate agents are beyond question demanding, and perhaps onerous, but they are no more stringent than the public has a right to expect of those who voluntarily assume positions of authority in business enterprises whose services and products affect the health and well-being of the public that supports them. Cf. Wasserstrom, Strict Liability in the Criminal Law, 12 Stan. L. Rev. 731, 741–745 (1960).[15]

The Act does not, as we observed in *Dotterweich,* make criminal liability turn on "awareness of some wrong-

[14] See, *e. g., Lelles* v. *United States,* 241 F. 2d 21 (CA9), cert. denied, 353 U. S. 974 (1957); *United States* v. *Kaadt,* 171 F. 2d 600 (CA7 1948). Cf. *United States* v. *Shapiro,* 491 F. 2d 335, 337 (CA6 1974); *United States* v. *3963 Bottles,* 265 F. 2d 332 (CA7), cert. denied, 360 U. S. 931 (1959); *United States* v. *Klehman,* 397 F. 2d 406 (CA7 1968).

[15] We note that in 1948 the Senate passed an amendment to § 303 (a) of the Act to impose criminal liability only for violations committed "willfully or as a result of gross negligence." 94 Cong. Rec. 6760–6761 (1948). However, the amendment was subsequently stricken in conference. *Id.,* at 8551, 8838.

doing" or "conscious fraud." The duty imposed by Congress on responsible corporate agents is, we emphasize, one that requires the highest standard of foresight and vigilance, but the Act, in its criminal aspect, does not require that which is objectively impossible. The theory upon which responsible corporate agents are held criminally accountable for "causing" violations of the Act permits a claim that a defendant was "powerless" to prevent or correct the violation to "be raised defensively at a trial on the merits." *United States* v. *Wiesenfeld Warehouse Co.*, 376 U. S. 86, 91 (1964). If such a claim is made, the defendant has the burden of coming forward with evidence, but this does not alter the Government's ultimate burden of proving beyond a reasonable doubt the defendant's guilt, including his power, in light of the duty imposed by the Act, to prevent or correct the prohibited condition. Congress has seen fit to enforce the accountability of responsible corporate agents dealing with products which may affect the health of consumers by penal sanctions cast in rigorous terms, and the obligation of the courts is to give them effect so long as they do not violate the Constitution.

III

We cannot agree with the Court of Appeals that it was incumbent upon the District Court to instruct the jury that the Government had the burden of establishing "wrongful action" in the sense in which the Court of Appeals used that phrase. The concept of a "responsible relationship" to, or a "responsible share" in, a violation of the Act indeed imports some measure of blameworthiness; but it is equally clear that the Government establishes a prima facie case when it introduces evidence sufficient to warrant a finding by the trier of the facts that the defendant had, by reason of his position in the

corporation, responsibility and authority either to prevent in the first instance, or promptly to correct, the violation complained of, and that he failed to do so. The failure thus to fulfill the duty imposed by the interaction of the corporate agent's authority and the statute furnishes a sufficient causal link. The considerations which prompted the imposition of this duty, and the scope of the duty, provide the measure of culpability.

Turning to the jury charge in this case, it is of course arguable that isolated parts can be read as intimating that a finding of guilt could be predicated solely on respondent's corporate position. But this is not the way we review jury instructions, because "a single instruction to a jury may not be judged in artificial isolation, but must be viewed in the context of the overall charge." *Cupp* v. *Naughten*, 414 U. S. 141, 146–147 (1973). See *Boyd* v. *United States*, 271 U. S. 104, 107 (1926).

Reading the entire charge satisfies us that the jury's attention was adequately focused on the issue of respondent's authority with respect to the conditions that formed the basis of the alleged violations. Viewed as a whole, the charge did not permit the jury to find guilt solely on the basis of respondent's position in the corporation; rather, it fairly advised the jury that to find guilt it must find respondent "had a responsible relation to the situation," and "by virtue of his position . . . had . . . authority and responsibility" to deal with the situation. The situation referred to could only be "food . . . held in unsanitary conditions in a warehouse with the result that it consisted, in part, of filth or . . . may have been contaminated with filth."

Moreover, in reviewing jury instructions, our task is also to view the charge itself as part of the whole trial. "Often isolated statements taken from the charge, seemingly prejudicial on their face, are not so when considered

in the context of the entire record of the *trial*." *United States* v. *Birnbaum*, 373 F. 2d 250, 257 (CA2), cert. denied, 389 U. S. 837 (1967). (Emphasis added.) Cf. *Cupp* v. *Naughten*, *supra*. The record in this case reveals that the jury could not have failed to be aware that the main issue for determination was not respondent's position in the corporate hierarchy, but rather his accountability, because of the responsibility and authority of his position, for the conditions which gave rise to the charges against him.[16]

We conclude that, viewed as a whole and in the context of the trial, the charge was not misleading and contained an adequate statement of the law to guide the jury's determination. Although it would have been better to give an instruction more precisely relating the legal issue to the facts of the case, we cannot say that the failure to provide the amplification requested by respondent was an abuse of discretion. See *United*

[16] In his summation to the jury, the prosecutor argued:

"That brings us to the third question that you must decide, and that is whether Mr. John R. Park is responsible for the conditions persisting. . . .

. . . . . .

"The point is that, while Mr. Park apparently had a system, and I think he testified the system had been set up long before he got there—he did say that if anyone was going to change the system, it was his responsibility to do so. That very system, the system that he didn't change, did not work in March of 1970 in Philadelphia; it did not work in November of 1971 in Baltimore; it did not work in March of 1972 in Baltimore, and under those circumstances, I submit, that Mr. Park is the man responsible. . . .

. . . . . .

"Mr. Park was responsible for seeing that sanitation was taken care of, and he had a system set up that was supposed to do that. This system didn't work. It didn't work three times. At some point in time, Mr. Park has to be held responsible for the fact that his system isn't working . . . ." App. 57, 59, 60.

States v. *Bayer*, 331 U. S. 532, 536–537 (1947); *Holland* v. *United States*, 348 U. S. 121, 140 (1954). Finally, we note that there was no request for an instruction that the Government was required to prove beyond a reasonable doubt that respondent was not without the power or capacity to affect the conditions which founded the charges in the information.[17] In light of the evidence adduced at trial, we find no basis to conclude that the failure of the trial court to give such an instruction *sua sponte* was plain error or a defect affecting substantial rights. Fed. Rule Crim. Proc. 52 (b). Compare *Lopez* v. *United States*, 373 U. S. 427, 436 (1963), with *Screws* v. *United States*, 325 U. S. 91, 107 (1945) (opinion of DOUGLAS, J.).

IV

Our conclusion that the Court of Appeals erred in its reading of the jury charge suggests as well our disagreement with that court concerning the admissibility of evidence demonstrating that respondent was advised by the FDA in 1970 of insanitary conditions in Acme's Philadelphia warehouse. We are satisfied that the Act imposes the highest standard of care and permits conviction of responsible corporate officials who, in light of this standard of care, have the power to prevent or correct violations of its provisions. Implicit in the Court's admonition that "the ultimate judgment of juries must be trusted," *United States* v. *Dotterweich*, 320 U. S., at 285, however, is the realization that they may demand more than corporate bylaws to find culpability.

[17] Counsel for respondent submitted only two requests for charge: (1) "Statutes such as the ones the Government seeks to apply here are criminal statutes and should be strictly construed," and (2) "The fact that John Park is President and Chief Executive Officer of Acme Markets, Inc. does not of itself justify a finding of guilty under Counts I through V of the Information." 1 Record 56–57.

Respondent testified in his defense that he had employed a system in which he relied upon his subordinates, and that he was ultimately responsible for this system. He testified further that he had found these subordinates to be "dependable" and had "great confidence" in them. By this and other testimony respondent evidently sought to persuade the jury that, as the president of a large corporation, he had no choice but to delegate duties to those in whom he reposed confidence, that he had no reason to suspect his subordinates were failing to insure compliance with the Act, and that, once violations were unearthed, acting through those subordinates he did everything possible to correct them.[18]

Although we need not decide whether this testimony would have entitled respondent to an instruction as to his lack of power, see *supra,* at 676, had he requested it,[19] the testimony clearly created the "need" for rebuttal evidence. That evidence was not offered to show that respondent had a propensity to commit criminal acts, cf. *Michelson* v. *United States,* 335 U. S. 469, 475–476 (1948), or, as in *United States* v. *Woods,* 484 F. 2d 127, that the crime charged had been committed; its purpose

[18] In his summation to the jury, counsel for respondent argued:

"Now, you are Mr. Park. You have his responsibility for a thousand stores—I think eight hundred and some stores—lots of stores, many divisions, many warehouses. What are you going to do, except hire people in whom you have confidence to whom you delegate the work? . . .

. . . . . .

". . . What I am saying to you is that Mr. Park, through his subordinates, when this was found out, did everything in the world they [*sic*] could." 3 Record 201, 207.

[19] Assuming, *arguendo,* that it would be objectively impossible for a senior corporate agent to control fully day-to-day conditions in 874 retail outlets, it does not follow that such a corporate agent could not prevent or remedy promptly violations of elementary sanitary conditions in 16 regional warehouses.

was to demonstrate that respondent was on notice that he could not rely on his system of delegation to subordinates to prevent or correct insanitary conditions at Acme's warehouses, and that he must have been aware of the deficiencies of this system before the Baltimore violations were discovered. The evidence was therefore relevant since it served to rebut respondent's defense that he had justifiably relied upon subordinates to handle sanitation matters. Cf. *United States* v. *Ross,* 321 F. 2d 61, 67 (CA2), cert. denied, 375 U. S. 894 (1963); E. Cleary, McCormick on Evidence § 190, pp. 450–452 (2d ed. 1972). And, particularly in light of the difficult task of juries in prosecutions under the Act, we conclude that its relevance and persuasiveness outweighed any prejudicial effect. Cf. *Research Laboratories, Inc.* v. *United States,* 167 F. 2d 410, 420–421 (CA9), cert. denied, 335 U. S. 843 (1948).

Reversed.

MR. JUSTICE STEWART, with whom MR. JUSTICE MARSHALL and MR. JUSTICE POWELL join, dissenting.

Although agreeing with much of what is said in the Court's opinion, I dissent from the opinion and judgment, because the jury instructions in this case were not consistent with the law as the Court today expounds it.

As I understand the Court's opinion, it holds that in order to sustain a conviction under § 301 (k) of the Federal Food, Drug, and Cosmetic Act the prosecution must at least show that by reason of an individual's corporate position and responsibilities, he had a duty to use care to maintain the physical integrity of the corporation's food products. A jury may then draw the inference that when the food is found to be in such condition as to violate the statute's prohibitions, that condition was "caused" by a breach of the standard of care imposed upon the

responsible official. This is the language of negligence, and I agree with it.

To affirm this conviction, however, the Court must approve the instructions given to the members of the jury who were entrusted with determining whether the respondent was innocent or guilty. Those instructions did not conform to the standards that the Court itself sets out today.

The trial judge instructed the jury to find Park guilty if it found beyond a reasonable doubt that Park "had a responsible relation to the situation . . . . The issue is, in this case, whether the Defendant, John R. Park, by virtue of his position in the company, had a position of authority and responsibility in the situation out of which these charges arose." Requiring, as it did, a verdict of guilty upon a finding of "responsibility," this instruction standing alone could have been construed as a direction to convict if the jury found Park "responsible" for the condition in the sense that his position as chief executive officer gave him formal responsibility within the structure of the corporation. But the trial judge went on specifically to caution the jury not to attach such a meaning to his instruction, saying that "the fact that the Defendant is pres[id]ent and is a chief executive officer of the Acme Markets does not require a finding of guilt." "Responsibility" as used by the trial judge therefore had whatever meaning the jury in its unguided discretion chose to give it.

The instructions, therefore, expressed nothing more than a tautology. They told the jury: "You must find the defendant guilty if you find that he is to be held accountable for this adulterated food." In other words: "You must find the defendant guilty if you conclude that he is guilty." The trial judge recognized the infirmities in these instructions, but he reluctantly concluded that he was required to give such a charge under *United States* v. *Dotterweich*, 320 U. S. 277, which, he thought, in declining to define "responsible relation" had declined to specify the minimum standard of liability for criminal guilt.[1]

As the Court today recognizes, the *Dotterweich* case did not deal with what kind of conduct must be proved to support a finding of criminal guilt under the Act. *Dotterweich* was concerned, rather, with the statutory definition of "person"—with what kind of corporate employees were even "subject to the criminal provisions of the Act." *Ante*, at 670. The Court held that those employees with "a responsible relation" to the violative transaction or condition were subject to the Act's criminal provisions, but all that the Court had to say with respect to the kind of conduct that can constitute criminal guilt was that the Act "dispenses with the conventional requirement for criminal conduct—awareness of some wrongdoing." 320 U. S., at 281.

In approving the instructions to the jury in this case—instructions based upon what the Court concedes was a misunderstanding of *Dotterweich*—the Court approves a conspicuous departure from the long and firmly established division of functions between judge and jury in the administration of criminal justice. As the Court put the matter more than 80 years ago:

> "We must hold firmly to the doctrine that in the courts of the United States it is the duty of juries

[1] In response to a request for further illumination of what he meant by "responsible relationship" the District Judge said:

"Let me say this, simply as to the definition of the 'responsible relationship.' Dotterweich and subsequent cases have indicated this really is a jury question. It says it is not even subject to being defined by the Court. As I have indicated to counsel, I am quite candid in stating that I do not agree with the decision; therefore, I am going to stick by it."

in criminal cases to take the law from the court and apply that law to the facts as they find them to be from the evidence. Upon the court rests the responsibility of declaring the law; upon the jury, the responsibility of applying the law so declared to the facts as they, upon their conscience, believe them to be. Under any other system, the courts, although established in order to declare the law, would for every practical purpose be eliminated from our system of government as instrumentalities devised for the protection equally of society and of individuals in their essential rights. When that occurs our government will cease to be a government of laws, and become a government of men. Liberty regulated by law is the underlying principle of our institutions." *Sparf* v. *United States,* 156 U. S. 51, 102–103.

More recently the Court declared unconstitutional a procedure whereby a jury, having acquitted a defendant of a misdemeanor, was instructed to impose upon him such costs of the prosecution as it deemed appropriate to his degree of "responsibility." *Giaccio* v. *Pennsylvania,* 382 U. S. 399. The state statute under which the procedure was authorized was invalidated because it left "to the jury such broad and unlimited power in imposing costs on acquitted defendants that the jurors must make determinations of the crucial issue upon their own notions of what the law should be instead of what it is." *Id.,* at 403. And in *Jackson* v. *Denno,* 378 U. S. 368, the Court found unconstitutional a procedure whereby a jury was permitted to decide the question of the voluntariness of a confession along with the question of guilt, in part because that procedure permitted the submergence of a question of law, as to which appellate review was constitutionally required, in the general deliberations of a jury.

These cases no more than embody a principle fundamental to our jurisprudence: that a jury is to decide the facts and apply to them the law as explained by the trial judge. Were it otherwise, trial by jury would be no more rational and no more responsive to the accumulated wisdom of the law than trial by ordeal. It is the function of jury instructions, in short, to establish in any trial the objective standards that a jury is to apply as it performs its own function of finding the facts.

To be sure, "the day [is] long past when [courts] . . . parsed instructions and engaged in nice semantic distinctions," *Cool* v. *United States,* 409 U. S. 100, 107 (REHNQUIST, J., dissenting). But this Court has never before abandoned the view that jury instructions must contain a statement of the applicable law sufficiently precise to enable the jury to be guided by something other than its rough notions of social justice. And while it might be argued that the issue before the jury in this case was a "mixed" question of both law and fact, this has never meant that a jury is to be left wholly at sea, without any guidance as to the standard of conduct the law requires. The instructions given by the trial court in this case, it must be emphasized, were a virtual nullity, a mere authorization to convict if the jury thought it appropriate. Such instructions—regardless of the blameworthiness of the defendant's conduct, regardless of the social value of the Food, Drug, and Cosmetic Act, and regardless of the importance of convicting those who violate it—have no place in our jurisprudence.

We deal here with a criminal conviction, not a civil forfeiture. It is true that the crime was but a misdemeanor and the penalty in this case light. But under the statute even a first conviction can result in imprisonment for a year, and a subsequent offense is a felony

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carrying a punishment of up to three years in prison.[2] So the standardless conviction approved today can serve in another case tomorrow to support a felony conviction and a substantial prison sentence. However highly the Court may regard the social objectives of the Food, Drug, and Cosmetic Act, that regard cannot serve to justify a criminal conviction so wholly alien to fundamental principles of our law.

The *Dotterweich* case stands for two propositions, and I accept them both. First, "any person" within the meaning of 21 U. S. C. § 333 may include any corporate officer or employee "standing in responsible relation" to a condition or transaction forbidden by the Act. 320 U. S., at 281. Second, a person may be convicted of a criminal offense under the Act even in the absence of "the conventional requirement for criminal conduct—awareness of some wrongdoing." *Ibid.*

But before a person can be convicted of a criminal violation of this Act, a jury must find—and must be clearly instructed that it must find—evidence beyond a reasonable doubt that he engaged in wrongful conduct amounting at least to common-law negligence. There were no such instructions, and clearly, therefore, no such finding in this case.[3]

For these reasons, I cannot join the Court in affirming Park's criminal conviction.

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[2] See *ante*, at 666 n. 10.

[3] This is not to say that Park might not be found guilty by a properly instructed jury in a new trial. But that, of course, is not the point. "Had the jury convicted on proper instructions it would be the end of the matter. But juries are not bound by what seems inescapable logic to judges." *Morissette* v. *United States*, 342 U. S. 246, 276.

Mr. RAIKIN. The responsible relationship test, that's the Supreme Court's doctrine which is spelled out at great length in these decision, that corporate managers are employees who have a responsible share—and the Court described in detail what that means—in the furtherance of a transaction, which the statute designed to protect public health and safety is subject to the criminal provisions of the act.

It is the intention that reference would be made in report language cross-referencing the Court's language from *Park* and *Dotterweich,* which is distinguishable on other grounds, it is not a strict liability case, that is true; but the doctrine of significant responsibility is one which has received much treatment from the highest Court in the land.

In terms of the suggestion of the ambiguity with regard to what happens if someone in the company has already made a report, again, the amended bill makes it clear that there is an exemption from reporting requirements in the case of the manager who has actual knowledge that the employee or the appropriate Federal agency have already been so informed.

Once any report is made, that exempts the necessity for further reporting by the managers who have actual knowledge that the report has already been made.

With regard to the question of Mr. Leonard a few minutes ago about whether or not more than one Federal agency needs to be informed, in the original draft of the bill the requirement called for notification of each appropriate Federal agency; and the agencies were not specified.

As I recall, Mr. Houser, at a meeting that we had a couple of months ago, we took your suggestion very seriously that it would be helpful in making it clear to a potential defendant that we spell-out in a subsequent draft, which we now have done, which are the specific potential appropriate Federal agencies.

We have done that. And we have also in the new draft changed the word "each" to "any" so that a report to any appropriate Federal agency would suffice.

Mr. HOUSER. Does that mean "any" of the agencies named?

Mr. RAIKIN. That is right, and if none of the eight are appropriate, then there is no duty to report.

Again, that was a good-faith attempt on the part of staff and Justice Department to sufficiently narrow the reach of the bill, so that potential defendants would be on notice as to what they would be expected to do.

Mr. GUDGER. Could I have one further question?

Perhaps this gets at the question last presented in a little closer context. The typical industrial management structure would call for someone at a fairly low level to be acquainted with the features of the product being manufactured, that might be dangerous. All right, if he has management authority, and has significant responsibility for the safety of the product or business practice, then he has a need to report—all right?

Now, his duty to report is defined by the bill. But, let us say, that because he has been working for this company for 20 years, and has had the usual discipline of management accountability, he

reports what he knows or has learned or discovered to the next-higher official in authority.

That person in turn does not act by way of report, but proceeds to the next-highest person in the chain of command.

Now, are we requiring different persons to be criminally liable for this hazard, as it goes up the chain of command, all the way to the president of the corporation?

Mr. HOUSER. Perhaps counsel can answer that question.

Mr. CONYERS. Let me just say to my colleague that hearsay is not a basis. It is actual knowledge. So once the knowledge is known by another person, it can not be spread by someone else telling him; and especially if the report is made, that relieves everyone else from making the report.

So it does not just spread as the word spreads on some kind of suspicious basis.

I remind my colleague this is based on the cases that we have before us in the hearings, the PCB case, the asbestos case, the *Pinto* case, the *Firestone* radial case, were all cases in which there was clear knowledge and nonreporting. And it did not turn on some tremendously complex matter of suspicion or probability. I do not think that those were the kinds of cases that come within the ambit of this bill.

Mr. GUDGER. Mr. Chairman, if I may respond?

I do not disagree at all with the Chairman's observations concerning suspicions versus discovery; but when you are dealing with some of these substances that we have referred to, which are chemical in nature, it is going to be the chemist who finds out; and he may have no management authority.

But if he reveals his knowledge to one of his management authorities, this is hearsay. Would not that person in management the authority, who had that knowledge, then be obligated to act?

Quite sincerely, I do disagree about hearsay in that context, at least. What I am saying is that so much of our hazard is going to exist in areas where chemical compounds, germicides, fungicides, agricultural-type chemical compounds, pharmaceutical-type compounds, are involved; and, certainly, the chemist has no managerial authority. He would be the only one who really knows the chemical properties of the hazardous product.

Do you see the point I make?

Mr. CONYERS. If I could refer my colleague to the new bill, we tried to pick up that provision in 1822(c), subsection (d), in which we point out that the scientific knowledge reporting would constitute, would come under the ambit of management. By using this language, the individual has significant responsibility for the safety of the product or business practice or the conduct of research or testing in connection with a product or business practice. So that that would specifically pick up your case of the chemist or the scientist to report.

Mr. HOUSER. Mr. Chairman, I would like to make one final comment, because I am not sure even your intent, as I understood your answer to the Congressman about going up the line of management, as the report goes up there may be a danger, of whether or not all of them are subject to being penalized under this law.

I think your answer was no. But I am not sure that is reflected in this bill, because counsel in his opening comments perfectly equated managers in business entities; a business entity is everything. It is not just managers. He said managers and business entities.

Arguably, that means everybody in the business entity who finds out by way of report that there is a danger in the workplace.

Mr. CONYERS. Let us not use counsel's discussion. Let us use the language in the bill, which is very, very limiting.

We define the manager and attempt to make clear that that is not to be the case. So if you are trying to limit that, I quite agree; that is, I think, what we do.

The term manager means a person having management authority in or as a business entity; and of course, that refers to the section I just mentioned.

Mr. HOUSER. As a business entity having authority?

Mr. CONYERS. Knowledge as well as mangement.

Mr. HOUSER. And if the word goes up the line to the president, everybody in that line of command is responsible under this act?

Mr. CONYERS. Not if he doesn't have knowledge.

Mr. HOUSER. If he finds out the chemist reports to the supervisor which is brought to the vice president to the president and chairman, they are all responsible.

Mr. CONYERS. No, that is different. We have just created two different hypotheticals on that point.

Mr. GUDGER. Mr. Chairman, I want to commend counsel for this excellent summary in question and answer form dealing with some of the various subtle and complex points in this bill, and dealing with them very effectively, I would like to add.

I thank you for giving me the opportunity to question these gentlemen. I apologize that I had to depart.

Mr. CONYERS. let me welcome our newest colleague to the subcommittee, Billy Lee Evans of Georgia. We welcome you to the hearings in subcommittee and full commitee. We welcome any questions or comments you may have.

Mr. EVANS. Thank you, Mr. Chairman.

I would first like to commend the chairman and the committee on the work that has already been done on this bill. Obviously a great deal of work has been done, and the bill has been amended to deal with a number of complaints that might have existed prior to this time.

I would first like to state, so I would not be un-American, that I do agree with the intent of the bill.

I do have some questions, however, as to how this bill would be administered, because it has been my experience in dealing with legislation that the intent of the legislation often is not reflected by the way that the bill is administered by the appropriate agencies once it becomes law.

I would first like to ask about who can report a suspected practice that might result in danger or death to consumers or employees? May an employee who is not a manager report to the appropriate agency of the Government that he suspects that a practice exists?

If he does report such a practice, is it the responsibility of the Justice Department to investigate that?

If the Justice Department is required to investigate it, does the Justice Department have any responsibility to check out the person reporting to determine the validity or potential validity of that report?

As a member of the Small Business Committee, I anticipate a great deal of instances which have nothing to do with hazardous practices, or very questionable hazardous practices, being reported; not only from the standpoint of actual, sincere suspicions by that employee, but also from a number of other things, ranging from dissatisfaction with the job to suspected discrimination on some other basis.

If you gentlemen would deal with that format first, I would appreciate it, as to your interpretation?

I, like you, have seen this bill for the first time this morning; so I have some serious questions as to how it will work.

Mr. HOUSER. I would first say, Mr. Congressman, if you permit people in the workplace who are knowledgeable to report then you've got to make them also responsible under this law, and force them to report. Otherwise, you run smack into the equal protection clause of the 14th amendment.

Mr. EVANS. Is it your interpretation of the bill that they can report, or they are required to report?

Mr. HOUSER. They certainly are not required to report. It is unclear as to whether they can report.

I am saying you run into a serious constitutional question if you permit a knowledgeable person in the workplace to report and not hold him to the standards of this act; I really consider that a very serious breach of the Constitution.

Mr. LEONARD. Congressman Evans, my experience which is now I guess some 8 years old, but I was in the Justice Department some 8 years ago. The procedure would be that any employee who believed that the law was being violated, whether it be this specific statute or some other prohibition with respect to the way the workplace or the product is being manufactured, or the workplace is being kept—report that to the Department of Justice, FBI, and an investigation would take place.

Mr. EVANS. What would be the first step in that investigation?

Mr. LEONARD. The first step would be under ordinary circumstances, the matter would be referred to the FBI for investigation to determine the truthfulness of the allegations made by the employee.

During the course of that investigation the employer and the individuals who were involved in the alleged violation would be interviewed, as would be the complainant, or the individual who lodged the complaint.

Now, with respect to your concern, if there were questions being raised as to the sincerity of that complaint or the individual making it, if there was any hint that it might have been lodged for some vindictive reason, that would come out during the course of the investigation; and might or might not affect the Department's view with respect to the credibility of the complainant.

Assuming that there is no independent evidence, all those decisions, I am afraid, in this kind of a case, however, would probably be made by an assistant U.S. attorney in some local U.S. attorney's office.

Mr. EVANS. Well, my concern is, I think in small business hearings that we have held, and I agree with the testimony previously, that this bill could affect almost any small businessman in the country, whether it is intended to or not; because of the reference to the agencies including OSHA, which has jurisdiction over about every small business in the country, what we are dealing with here is the possibility of a great many investigations.

It has been my experience in listening to business people talk of the expense involved in investigations, they are already investigated by almost every Government agency that exists. What would be the result or what would be the effect on the business community of the numerous investigations—if I am right in anticipating that there will be such investigations which result in no case being made?

Mr. HOUSER. I indicated in my direct testimony, Mr. Evans, that there could be a halt and a slowing up of production based on investigations and reviews, either well-founded complaints or ill-founded complaints—production often gets stopped while an investigation is being made.

And as I pointed out, also, in modern plants today the production lines are very complex, and often very long. At some point in the production line, a consumer product could contain a hazard, yet, as it goes along it is eliminated by the time it comes out for distribution; it is a safe product, in fact.

But this unit manager up here in the front of the line would not necessarily know that, and he would be required to report that, which could create a hell of a lot of chaos.

Mr. EVANS. Of course, I heard your testimony. I appreciate what was pointed out.

Going further, what would be the remedy, if any, to the small businessman who is operating on a marginal basis, or an investigation which cost him a great deal of money, and in the event the complaint proved to be ill founded, how would that small businessman recoup his losses?

Are there any provisions under this bill as you see it that will allow him to recoup his losses?

Mr. LEONARD. Congressman Evans, he not only cannot recoup his losses, but I would dare say that there are many small businesses today that are going to take advantage of the new expanded, more liberal, provisions of the Federal Bandruptcy Act because of Government regulations, its costs, investigations by Government agencies, retention of lawyers, and retention of experts have simply driven them from being marginal to being submarginal; and they cannot stay in business.

Mr. EVANS. How would you change this bill that we could reach the people we are talking about, which is, generally speaking, the large corporate manager who deliberately conceals flaws that might result in danger to the public or the employee working in a particular situation and yet, not expand into the small business community to the extent that we would wind up not only with

having to double the size of the Justice Department to administer it, but put 20 or 30 percent of the small businesses out of business where a complaint is filed without justification?

Mr. HOUSER. Mr. Evans——

Mr. EVANS. Could you eliminate one or two of these agencies that might have to be reported to? That would restrict the application to those people that we are after.

Mr. HOUSER. You ask how we can salvage this bill, and I am not really sure we can.

There are bad apples both in the business barrel as there are in every walk of life. But by and large, most businessmen do their very best to protect the working environment. Yet, the legislation tries to reach everybody for the sake of a few bad apples. You have got that situation to begin with. Aside from that, all the things that we have talked about with respect to constitutional questions, vagueness, due process, self-incrimination, the 14th amendment—I am not sure you can save this bill.

There may be other ways of improving what the present authority of the Federal agencies is to get the job done.

Mr. EVANS. All right.

Would there be allowance or a requirement that the Justice Department grant a quick probable cause hearing to the employer, the manager, so that they could shorten the time of the investigation to reduce or minimize such an investigation where the manager feels it is clearly an unjustified complaint?

Mr. LEONARD. There is no such provision in the bill.

Mr. EVANS. Let me ask you if there has to be an actual injury or death before a case could be brought or before an investigation could be made?

Mr. LEONARD. No.

Mr. HOUSER. No.

Mr. EVANS. So it could be made at any time and the actual evidence in the case would have to indicate that there was a certain potential for harm?

Mr. HOUSER. Part of the problem, Mr. Evans, is the burden this places on the prosecutors who have to go after someone who fails to file. It is often not known.

Mr. EVANS. Is it your understanding that they will have to investigate every case, even if they receive an anonymous tip that there was a practice being followed, would it then be incumbent upon the Justice Department to check that out?

Mr. LEONARD. Congressman Evans, the Department, in my experience, does not investigate every complaint. It is, at least it was and I trust it still is, somewhat distrustful of anonymous complaints because there is little way to test the credibility of the complainant.

That is not to say that anonymous complaints have not been investigated. Indeed they have in certain situations.

Mr. EVANS. It is my understanding that the practice of the law in the criminal justice system is that the anonymous tip is the most valuable tool that law enforcement has to break cases.

So would you say that an anonymous tip would not be routinely checked out by the Criminal Justice Section, by the Justice Department?

Mr. LEONARD. I would not say that. I do say I do not think every anonymous tip is checked out. I think it depends upon who is the subject of the complaint.

As an example, if an anonymous postcard came in saying, "I was in Mr. and Mrs. Smith's grocery store the other day—a mom-and-pop grocery store—and one of the apples in the bag was sour, and I developed a stomach problem from it," I doubt that the Justice Department would get very excited over that.

Mr. EVANS. I certainly understand we can get to the ridiculous but I am talking about in the anticipation here of an operating business where there is a possibility that a complaint could be valid, if you'd normally check that out?

Mr. LEONARD. That's correct.

I could only give you an opinion. I do have an opinion about this piece of legislation.

Mr. EVANS. I think I have already heard that partially.

Mr. LEONARD. It will generate thousands upon thousands of investigations of at least complaints that should be investigated.

Mr. EVANS. How much increase would you think the Justice Department would need in this particular department for this?

Mr. LEONARD. That far, Mr. Evans, I won't go.

Mr. EVANS. Would it be substantial?

Mr. LEONARD. Without hedging, let me try to answer your question in this way:

In my view, this piece of legislation is a substantial new area of Federal criminal law for the Department of Justice to get into. Now, let me further comment:

If you eliminate three of these eight agencies, I would suggest that you would reduce the volume. How much, I couldn't tell you. But if you took out (B) the Environmental Protection Agency; (D) the Occupational Safety and Health Administration, and (F) the Consumer Product Safety Commission——

Mr. EVANS. Those were the three I had in mind.

Mr. HYDE. Would the gentleman yield to me for a second?

Mr. EVANS. Yes.

Mr. HYDE. The more I listen to debate on and think about this bill, it seems to me that we may be taking the wrong approach. Perhaps we should consider criminalizing the knowing concealment of the dangerous condition that results in some serious harm, rather than having a flood of complaints about something that might happen. The current approach would have a substantial personnel impact, not only on the Department of Justice, but on every one of these affected agencies. They would be criminally negligent if they did not investigate to determine whether or not there is any substance to the complaints.

This is "Big Brother" gone berserk here: Employees will be reporting on managers who, in turn, will report on directors—all to what end? The final result will be a blizzard of reports.

Let us recognize that big business is no more pristine than anyone else, and is capable of cutting corners to make a profit. Let us consider criminalizing that activity where it is serious and where people have knowledge, whether labor or management. If they have knowledge of a serious condition and they don't disclose it or take

steps to correct it, that perhaps should be a criminal activity. We can do this without requiring a mountain of reports.

With respect to the significant responsibility test, which we were discussing earlier, this would necessitate putting bilingual placards all over the workplaces throughout the country explaining whether or not someone has a management responsibility

Noble as the intent is, it just will not work.

Another question that arises is: What is the funding and the personnel impact on these agencies, the Department of Justice, and the courts?

I just had to get that off my chest, Mr. Chairman. Thank you.

Mr. EVANS. Just one question—I know I am over my time, Mr. Chairman.

There have been examples of governmental agencies putting out regulations that resulted in industry using chemical agents—and I am thinking about Tris in the treatment of sleepwear, because that was the only thing that met all the Government regulations.

Then a few years later, they discovered that this was very flammable, and all the sleepwear resulted in unusable stock for the industry. We tried to pass a bill—I don't know the status of it, I think it passed a couple of times through the House—to pay back the companies for the money they lost as a result of the Government agencies being involved and requiring that Tris be used.

There is also at the present time a certain substance in furniture which, if you put a burning cigarette on it for 10 minutes, it will catch fire; and there is a move to require that that be done away with. It will increase the cost to the consumer to protect those people who are so negligent as to keep buring cigarettes on furniture.

I am just wondering where we are going with this type of legislation if we allow it to be applied so broadly, and not restrict it so as to deal with the things that we are most concerned about, like the *Hooper* case and the other cases in which a substantial number of consumers were subjected to the possibility of serious bodily injury as a result of coverups.

Thank you, Mr. Chairman.

Mr. CONYERS. We want to thank George Leonard and Mr. Houser for coming. We appreciate your comments. Your constructive criticisms will be acted upon; others will be taken in the spirit in which they were presented.

Mr. HOUSER. Thank you, Mr. Chairman.

Mr. LEONARD. Thank you.

[The prepared testimony of Mr. Houser follows:]

STATEMENT OF

THE NATIONAL ASSOCIATION OF MANUFACTURERS

BEFORE THE

SUBCOMMITTEE ON CRIME

OF THE

HOUSE JUDICIARY COMMITTEE

H.R. 7040

April 22, 1980

Good Morning, Mr. Chairman. My name is Thomas J. Houser. I am the General Counsel of the National Association of Manufacturers (NAM). I am accompanied today by Howard A. Vine, Associate Director of the Government Regulation & Competition Department of the NAM. The NAM is a voluntary organization of over 12,000 business firms of all sizes and members of every part of the nation. The NAM is affiliated with an additional 158,000 companies through the National Industrial Council and its Association Department. I would like to thank you, sir, for the invitation to appear here today and testify on behalf of the manufacturing companies which we represent on H.R. 7040, a matter of great importance to many of them.

Mr. Chairman, we believe that your intentions can be best summed up in the following quote from your opening statement in a hearing on this bill's predesessor (H.R. 4973). In that

statement, you quoted with approval the conviction of Mr. John W. Hanley, Chairman and President of the Monsanto Company (a member company of the NAM), wherein he stated:

> ...Individual managers who knowingly and recklessly conceal clear and ongoing conditions of serious worker and consumer dangers should be recognized as the villians they are... What has to be stopped are the cases of deliberate and flagrant practices that seriously endanger public health. (emphasis added).

The legislation before this Committee, however, does not accurately reflect this statement. This bill deals with matters in the criminal law arena. Despite the emotional appeal of this issue, it would be unwise to lose sight of the restrictions that the Constitution imposes on the criminal law. Since this proposal would amend Title 18, the Criminal Code, the Constitution mandates that vague and unclear language--that fails to give adequate notice of the precise type of conduct that is prohibited--must be struck down.

Before addressing NAM's specific concerns relative to this bill, I must make a disclaimer. The issues that we will discuss are only those that we consider to be the most apparent inadequacies and Constitutionally suspect provisions of this bill. NAM believes that it is important to note, in this regard, that this bill, which is significantly different than its predesessor, was introduced only one week ago. An important legislative proposal such as this cannot be fully and adequately addressed and considered in such a short period of time. Therefore, at the request of the Subcommittee, we will provide a more detailed statement at a later date.

REPORTING RESPONSIBILITY

The language of H.R. 7040 imposes on managers an affirmative duty to report their suspicions of a "serious concealed danger" in a product or business practice of which he/she has "significant responsibility". The failure to perform this duty to report to one of the several agencies delineated in the bill would subject this individual to criminal liability.

The use of the term "manager" in conjunction with the phrase "significant responsibility" raises some points of ambiguity. Companies of varying sizes often have vastly different internal management structures; this bill, as written, fails to take cognizance of this fact. In this regard, it is not unlikely to encounter corporate structures wherein several individuals have the type of management authority this bill addresses; indeed, the management authority of these individuals may well overlap. Who, then, among them, must do the reporting this bill requires and what is the liability of those that do not? Moreover this legislation fails to provide those managers of similar or identical capacity and responsibility with clear guidance as to whom is responsible for effecting the mandate of this bill. This is an especially important concept since H.R. 7040 imposes personal criminal liability on the individual.

DISCOVERY BY THE MANAGER

The term "discovers" is defined in this bill under a civil law standard, i.e., the obtaining of information that would "convince a reasonable person" that the serious concealed danger exists. Traditionally, criminal liability has been premised on

scienter, that is, actual "guilty knowledge", which is something more than the traditional tort standard of the "reasonable man". We believe that to impose criminal liability for failure to adhere to a constructive knowledge standard is questionable policy and law at best.

Further, this bill charges a manager with the duty to report his discovery of a "serious concealed danger". Major questions of meaning must be resolved. For instance, does the measure mean dangers in products or processes that are "actively concealed by management"? Or does it mean dangers that are "undetectable by the ordinary user"? Are we talking about products or processes that are "unreasonably unsafe for their intended use"? Beyond this, and perhaps most important, it does not address the question of an inherently dangerous product. As is increasingly being recognized in tort law, many products are inherently dangerous but are not unreasonably unsafe for their intended use. How does the Committee intend to deal with this element of civil law which is so much a part of the criminal law questions we are addressing? Because so many questions remain unresolved, it appears that the drafter's emotional perspective of this bill's concept has outweighed his ability to fully consider the Constitutional ramifications of its language.

In addition, the bill does not specify what quantum of information must be obtained to convince this "reasonable man" that a danger exists. Does this definition include undocumented heresay? Oral opinion? A known technical report? Personal observation? A feeling of belief? How much questioning or soul searching must the individual manager undertake before he

must be convinced that a reportable danger exists? If impartial or expert varification of the suspect danger cannot be obtained in 15 days, must the undocumented suspicion be reported nonetheless? This bill, in its present form, simply does not address these concerns and could lead to a fear to act operating in tandem with a fear of inaction; and result in paralysis.

OTHER CONCERNS

There are a variety of other problems with this bill that I will only dwell on briefly. The basic thrust of this bill rests on what NAM believes to be a mistaken and faulty premise, i.e., that our corporations and their managers are heartless scofflaws whose behavior requires drastic measures to correct. Such is simply not true. Even those who are in favor of this bill have admitted that the vast majority of corporations and business managers are law abiding and compassionate and would not purposely and deliberately expose their employees and customers to the potential loss of life or limb by constant close contact with a known and serious danger as defined in this bill. There are exceptions; rotten apples exist in every barrel, but I suggest that this legislation has a sweep broader than is required to solve whatever problem does exist. There already exists laws to punish and correct the problems which are the target of the bill. The Consumer Product Safety Act, OSHA, and TOSCA are but a few examples.

It is our view that this bill would tend to set up an undesirable adversary relationship between a manager and his employing corporation, making either liable to criminal penalties

for failure to make the proper report to the proper agency in the requisite period of time. We have considered the effect this bill could have on the process of production and are distressed. Have the drafters of this bill consider the chaos and loss of growth in the gross national product that would occur as the product lines throughout the country are shut down for a plethora of reviews and inspections based on the potentially unfounded or ill-considered suspicions of line managers? The members of this Subcommittee should be aware that in a modern plant, many managers are only familiar with one small part of the long process of production. Consequently, the manager may well see a danger in a product that does not exist when the manufacturing process is completed.

Another concern is the difficulties that this bill would cause in the efforts of industry to attract and retain good and competent managers.

Finally, we are concerned over the protracted litigation that could well arise under this legislation. Because it is not issue-specific, legal questions arise from the definitions. This will be particularly true in determining whether a product or process is actually a "serious concealed hazard" but will also arise in questions of the chain of authority, i.e., reporting responsibility. The measure is further encumbered by the prohibitions against employee discrimination--prohibitions that are legally managable in narrowly defined law but potentially unwieldly in such a sweeping measure as H.R. 7040. Most important, it should be noted here as well that the application of criminal penalties in the realm of discrimination is unprecedented.

These are but a few of our concerns. We would, as stated earlier, be pleased to provide the Subcommittee with a more detailed statement at a later date. More importantly, the NAM looks forward to working with the Subcommittee in an effort to further uncover the problems that exist and will arise from the passage of H.R. 7040, as it effects individual and corporate rights and responsiblities.

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NEWS from NAM
NATIONAL ASSOCIATION OF MANUFACTURERS • 1776 F Street N.W., Washington, D.C. 20006 • (202) 331-3700

NAM 80-34

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NAM CITES MILLER-CONYERS BILL AS VAGUE, UNNECESSARY AND COUNTER-PRODUCTIVE

WASHINGTON--The general counsel of the National Association of Manufacturers charged today that H.R. 7040, a bill which would impose criminal penalties on mangers who fail to act on suspicions of a health or safety problem perceived in a product, is vague, unneeded, and potentially counter-productive.

Thomas J. Houser testified before the House Judiciary Subcommittee on Crime for the NAM, whose more than 12,000 member companies produce over 75 percent of the nation's industrial output. The proposed legislation is sponsored by Reps. George Miller (D.-Calif.) and John Conyers (D.-Mich.).

Houser observed that many protions of the bill would probably be ruled unconstitutional on the basis of vagueness. He suggested that the emotion that surrounds the issue of workplace and product safety had caused the bill's drafters to lose sight of legal necessities.

According to Houser, "the vast majority of corporations and business managers are law-abiding, compassionate, and would not purposely and deliverately expose employees and/or customers to . . . close contact with a known and serious danger." He noted that laws already exist to punish those few "rotten apples" who do not act to correct problems.

The NAM fears that this legislation would, in fact, be counter-productive, creating "chaos" on the production line by making line managers excessively overcautious. Houser noted that many line managers are often not aware of steps taken later in the production process to ensure the safety of the final product. An unfortunate adversary relationship between line managers and their employers could also result.

Houser offered NAM's full cooperation to more fully analyze the potential impact of the bill and to explore a more comprehensive response.

Mr. CONYERS. Our next witness is Prof. Louis Seidman, who has worked for the Honorable J. Skelly Wright. He has also served as a clerk for a member of the Supreme Court, and has been a practicing attorney and a member of the Public Defenders Service in the District of Columbia for a number of years. He is also with the Georgetown University Law Center.

We welcome you, Professor.

Many of the comments in your prepared statement have been preliminarily discussed, and so we will place your entire prepared statement into the record. Please proceed as you desire.

TESTIMONY OF PROF. LOUIS SEIDMAN, GEORGETOWN LAW CENTER, WASHINGTON, D.C.

Professor SEIDMAN. Thank you, Mr. Chairman, members of the committee.

Let me say, first, I appreciate the opportunity to come here and give my views on H.R. 7040.

I would also like to say at the outset that I am neither a proponent nor an opponent of H.R. 7040. I am not an expert on the issues of public policy raised by the bill, and I don't intend to comment on them.

My point is rather a narrow one, and that concerns the legality of H.R. 7040; and with regard to legality, I am convinced that there is nothing in either the fifth amendment self-incrimination clause, nor in anything else in the Constitution; nor, indeed in our tradition of common law limitations on what ought to be considered criminal which precludes the enactment of this legislation.

Now, since my prepared testimony comments at some length on the fifth amemdment aspect of this, I think what I will do, with the chairman's permission, is simply summarize that, and then, perhaps, address myself to some of the other points that were made earlier this morning.

With regard to the fifth amendment self-incrimination clause, the argument, as I understand it, is that there are some criminal statutes in this area, and that the information which this bill requires to be disclosed might conceivably be utilized in some future criminal prosecution—those points are absolutely correct.

However, those observations are the beginning rather than the conclusion of the fifth amendment analysis.

The first point with regard to the fifth amendment self-incrimination clause—and I think this is really dispositive—is that even if it is true that the fifth amendment attaches to this area, that means at very most that there are some individuals who might have a privilege not to report the information which the bill would otherwise require be reported.

But that fact neither invalidates the statute as a constitutional matter, nor provides an argument against its passage.

To take an obvious everyday sort of example, within the last few days people have been going around asking millions of citizens questions for the census. And I think it may be entirely possible, indeed, probable, that when those questions are directed to some individuals, those individuals may have a fifth amendment privilege not to answer some of those questions.

And certainly that privilege ought to be recognized, but no one would suggest, therefore, that the census is unconstitutional, or that we ought not to have a census because there are some individuals who would be free not to respond to some of the questions because of the fifth amendment privilege.

In that regard, since the case of *Ward* v. *Coleman,* 10th circuit case was mentioned, I believe; by Congressman Hyde earlier—I would like to direct the committee's attention to the court's opinion in *Ward* on page 1192 of 598 F. 2d, the court expressly says, "We do not strike down the self-reporting requirement of section 3121(b)(5)."

All the court did was to recognize that one who did not report might have a fifth amendment privilege not to do so.

Furthermore, I think there are some very strong arguments to be made here for why the fifth amendment does not attach at all in this area.

There are really two arguments, two interrelated points.

The first is that the fifth amendment is normally thought of as a restriction on the way that the Government proves a crime after the crime has occurred.

But H.R. 7040 is designed to regulate ongoing conduct. It concerns not proof that social harm already occurred; but prevention of social harm which is about to occur. And that makes it different from any other fifth amendment case that I know of.

It's never been thought that when one sets in motion forces which are about to cause serious injury to someone, like distributing a product which is liable to cause death or serious injury, that the fifth amendment gives one the privilege to sit on one's hands and take no action to prevent that injury from occurring.

And, indeed, the law is full of requirements that a person in that position take action in order to notify others of the risk, and to attempt in some way to mitigate the danger.

To take just an obvious sort of example, it is the law in many, many jurisdictions that if you are an accomplice to criminal activity that the only way to avoid liability for that activity is to report to law enforcement officials the existence of that activity.

No one has ever suggested that that requirement would violate the fifth amendment. And I think if someone did make that argument, that it would be rather quickly disposed of.

Finally, I think this case is squarely governed by the Supreme Court's decision in the case of *Byers* v. *California,* decided some 8 years ago.

In that case the Court upheld a California criminal statute which required a driver involved in an accident to report to the police his name and address; a hit-and-run statute.

What the Court said was that where a statute is directed to the public at large, and it serves a civil, regulatory purpose, even if there was some self-incrimination risk in complying with it, that nonetheless the clause was not violated by insisting on compliance.

And in doing so the Court distinguished the prior cases which had dealt with circumstances like membership in the Communist Party, and people who were involved in illegal gambling activities; it said that those cases were different because they involved people engaged in inherently criminal conduct. If you were asking questions of those people, the fifth amendment would attach; whereas if you were asking questions of a broader group of people, like everybody in an accident, that the fifth amendment did not attach.

It seems to me clear that any fair analysis of the *Byers* case indicates which side of the line this legislation is on. No one has yet suggested that managers of businesses are in the category of gamblers and members of the Communist Party. They are engaged in ordinary, lawful, conduct. The purpose of this bill is not to get them to incriminate themselves, but to stop ongoing social harm; and, therefore, under Mr. Justice Burger's analysis in the *Byers* case I think it's clear that the statute would be upheld.

And, indeed, as I indicated in my prepared testimony, laws which are indistinguishable from this one have almost uniformly been upheld in the lower courts.

Now, with regard to some of the other arguments that have been made today, there are several of them I'd like to address.

The first, as I understand it, is that there is a difficulty with the definition of the person who has a responsibility to report under this statute, that, somehow, that definition is unconstitutionally vague.

Let me say, it's always difficult to make a judgment about how the Supreme Court or how a lower court is going to react to a piece of legislation. And I certainly would not say with certainly what would happen to this bill if it ever did reach that stage.

But here we are in an unusual position to know with much more certainty that one would normally, because the fact is, that the definition of "managers"—as counsel pointed out earlier—comes directly from Supreme Court authority. It is a definition from a Supreme Court opinion, and it, therefore, seems rather odd to suggest that a definition which the Court itself formulated could subsequently be struck down as being overly vague.

The relevant authority is *United States* v. *Parks* 421 U.S. 658; that case concerned whether a person connected with a drug company could be held criminally liable under the Federal Food, Drug, and Cosmetic Act for putting contaminated food into interstate commerce.

And the Court, again speaking through Mr. Chief Justice Burger, said, and I am now quoting from the opinion:

> The principle has been recognized that a corporate agent through whose acts, defaults or omission the corporation committed a crime is himself guilty individually of that crime . . . [I]t had been applied not only to those corporate agents who themselves committed the criminal act, but also to those who by virtue of their managerial positions or other similar relation to the action could be deemed responsible for its commission.

The Court in reaching that conclusion relied on Mr. Justice Frankfurter's opinion again for the Court in a case called *United States* v. *Dotterweich,* decided some 30 years ago, in which the Court expressly addressed itself to the contention that the definition of manager was unconstitutionally vague; and expressly rejected that claim.

So that I think it is rather late in the day to argue that the definition that has twice been upheld by the Supreme Court—indeed, formulated by the Court—would not pass constitutional muster.

Second, it's been argued that the bill inappropriately uses a civil law standard of liability, rather than a criminal liability standard. That it makes some innocent persons liable despite the absence of the knowledge that we normally require in the criminal context.

Again, that argument is somewhat ironic, because in both the *Park* and *Dotterweich* cases the Supreme Court expressly upheld convictions in the regulatory area where there was no knowledge by the person convicted of the offense.

This bill in fact does require such knowledge. It goes beyond what the Supreme Court has said is required in the *Park* and *Dotterweich* cases.

In *Park,* for example, defendant claimed that in fact he had no knowledge that the food was contaiminated that was put into interstate commerce. And Mr. Justice Burger said, well, it may be true you didn't know it, but you ought to have known; people with managerial authority ought to know about the food that they distribute.

Ironically enough if the *Park* defendant were prosecuted under this bill, he would be acquitted; because this bill requires actual knowledge. It requires that a person actually know that there is a dangerous defect in the product before he can be held criminally liable for not reporting it.

Now, it's true that what the person has to actually know is simply the information that would put a reasonable person on notice that the defect is a dangerous one; and in that sense, I suppose it's true that a person who knows about the defect, but was unreasonable, and didn't realize that it was dangerous, could be held liable.

But that kind of requirement of knowledge is no different from the way countless criminal statutes operate presently.

For example, to give two sort of commonsense examples:

If you kill someone in self-defense, it is not sufficient for you to allege that you personally believe that the person was threatening you in a way that justified that conduct.

Rather, you have to show that you were reasonable in that belief.

Or if you are defending a rape prosecution on the ground that the victim consented, it's not sufficient for you to have actually believed there was consent, but that there was a reasonable basis for belief.

That's all that this legislation requires.

Finally, the last point that I think was made by the gentlemen who preceded me, was that there was a risk that a manager might be held liable under this bill because he failed to report a hearsay or undocumented report.

Once again, I think the statutory definition really takes care of that problem. The statute requires that the information must convince a reasonable person in the circumstances in which the discoverer is situated that a serious, concealed, danger exists.

If a manager is not reasonably convinced that it actually existed, not even that there was a risk it existed, but that it actually existed then he is under no obligation to report.

Now, I take it that that means that a person is not required to report to a Federal agency mere hearsay, undocumented rumor, or

even a very substantiated claim that there is a risk of a defect causing an injury.

Only if a reasonable person were convinced that the defect actually existed would the reporting requirement be activated.

So, in summary, Mr. Chairman, neither the fifth amendment self-incrimination clause, nor the due process clause, nor, might I add, the equal protection clause, nor the common-law principles that govern criminal responsibility, would invalidate the bill or provide any arguments for Congress not adopting it.

Mr. Conyers. Thank you very much.

So what we have here is a situation that even if there were a certain case in which the Court found that disclosure prevented the defendant from being prosecuted because of the fifth amendment, that would in no way operate to invalidate the law, itself?

Professor SEIDMAN. That's exactly right, Congressman.

To give you another example, the Supreme Court has held that a person has a constitutional right not to answer certain questions on one's income tax return, if the questions are incriminating. Yet no one has ever suggested that that invalidates the income tax.

Rather, a person has to claim the privilege, and then can refuse to answer those questions to which the privilege is applicable.

Mr. CONYERS. Mr. Hyde, do you have some questions?

Mr. HYDE. Yes.

But could I yield to counsel, and let her ask them?

Ms. OWEN. Thank you, Mr. Chairman.

I really only have one question. I was interested in your interpretation of the *Byers* case and I would like to explore that situation further.

It is my understanding that that case involved a hit-and-run statute. Basically, people subject to that law merely had to report their name and address and that they were involved in an accident, whether they were negligent or not.

Professor SEIDMAN. That's correct, counsel.

Ms. OWEN. That is correct?

Professor SEIDMAN. On the facts of the case, that is accurate.

Ms. OWEN. The Supreme Court distinguished that sort of "neutral" reporting, as I believe they called it, from the other situation illustrated by the *Marchetti* and *Albertson* cases, where there was more than a neutral reporting requirement involved.

One of the types of statutes that the Court mentioned, in addition to the "highly selective group inherently suspect of criminal activities," was whether the area regulated was "an area permeated with criminal statutes."

The problem I have with the use of the *Byers* precedent here is that this legislation does involve an area that is highly permeated with criminal statutes, such as criminal penalties under OSHA and the Food and Drug Act.

It seems to me that there is a big difference between the *Byers* case, where there was not such a permeation, and this case, where the person is not only required to report his name and address, which was all he had to report in *Byers*, but he is also required to report the fact he is manufacturing a defective product, or that he is maintaining a dangerous working situation.

Isn't this different? Doesn't it really fall more in the second category of cases described by the Supreme Court?

Professor SEIDMAN. Well, counsel, I think that the best way to analyze what the case means is to look at the language of the case, itself.

Ms. OWEN. I did, I quoted directly from it.

Professor SEIDMAN. Well, allow me to quote from some more of it.

If we look at what Mr. Justice Burger said, and I am quoting now from pages 427 and 428 of the Court's opinion.

An organized society imposes many burdens on its constituents.

I won't go through the whole list here, but I'll quote selectively:

* * * it requires producers and distributors of consumer goods to file informational reports on the manufacturing process and the content of products, on the wages, hours, and working conditions of employees. * * * industries must report periodically the volume and content of pollutants discharged into our waters and atmosphere. Comparable examples are legion.

In each of these situations there is some possibility of prosecution—often a very real one—for criminal offenses disclosed by or derived from the information that the law compels a person to supply. * * * But under our holdings the mere possibility of incrimination is insufficient to defeat the strong policies in favor of a disclosure called for by statutes like the one challenged here.

It seems to me that in that quote the Court is dealing with cases very much like the cases that would be dealt with in this statute; and yet the Court makes it rather clear that self-reporting would be upheld in those instances.

I might make one additional point:

This case in one respect is a stronger case than the *Byers* case, because in *Byers,* the accident had already happened. That was over with, and there was no way of preventing it. And the only issue was, what techniques could the Government use to prove that a person was liable for that accident?

Here we are dealing with ongoing social harm. We are not dealing with an accident that has happened, but an accident that, if you will, is waiting to happen.

And the fifth amendment has never been thought to preclude the Government from preventing social harm which has not already occurred.

And I know of no case, no case, in which a statute that requires a person, who sets in motion a series of events that will really hurt someone, to mitigate that damage has been held invalid under the fifth amendment.

Ms. OWEN. I think the record should reflect that the language you cited would be considered dictum. The Court was not addressing that factual situation; it was a mere observance.

Professor SEIDMAN. You are absolutely right, counsel. If one were to restrict the case to holding, it concerned only hit-and-run accidents. Nonetheless the reasons why the Court reached that conclusion are somewhat relevant to the determination of how the Court might regard some future case.

Ms. OWEN. The Court says that there must be more than a "mere possibility of self-incrimination" created by the statute. It seems to me that under the situation we have here, there is certainly far more than a "mere possibility."

Doesn't this seem to be very similar to the *Ward* case, where someone discloses something to the Government agency, which takes that information and immediately uses it in the criminal prosecution? In the *Ward* case, one agency simply handed the report to another, and that was the full basis for the prosecution.

Professor SEIDMAN. Well, the odd thing about the *Ward* decision is that in that case the lower court nowhere referred to *Byers;* and insofar as one can tell from the opinion was unaware of the *Byers* doctrine.

The whole argument in *Ward* was whether the use of the information was in a civil or criminal proceeding. I can't read the Supreme Court's mind, but I have an inkling that the reason why the Court granted certioriari in that case was because the 10th circuit had completely overlooked the *Byers'* doctrine.

Furthermore, I think once again it's worth pointing out that even in *Ward* the Court went out of its way to say it was not invalidating the statute. They said the statute is fine, the only thing they had to do was to recognize a fifth amendment privilege against using information disclosed by the statute in a subsequent criminal prosecution.

Ms. OWEN. I think this situation can be distinguished from the other situation because the criminal act in *Byers* was complete. In this case, it is a continuing or future criminal act.

There still would be a problem in the situation where a criminal act had already occurred; would there not? I think that this is the main concern of some of the Members who have expressed themselves on the self-incrimination issue.

Professor SEIDMAN. Counsel, let me give you another example of what I am talking about:

Suppose a thief steals a piece of property. It is the law in every jurisdiction that I know of, that the thief has an obligation to mitigate that damage by returning the property which he has stolen.

Now, it's true that the crime has already occurred, the theft. And it's also true that by returning the property the thief risks self-incrimination.

If you go back and return it, that increases the chances of being caught, and also being punished.

Nonetheless, it's never been suggested that once having stolen the property, the thief has a fifth amendment privilege to retain it, and not to return it, in order to mitigate the damage he's caused.

By a parity of reasoning, here if someone manufactures a dangerous product, and wrongfully inserts it into interstate commerce, it seems to me it would be an extravagant—if I may say so—interpretation of the fifth amendment to suggest that person having done that, can sit on his or her hands, and allow that dangerous instrumentality to do its work.

Ms. OWEN. In the thief case, it really would be difficult to distinguish between the information that would incriminate him in the prior act of stealing and the information that would incriminate him in the continuing act of not returning it.

Practically speaking, the assertion of the fifth amendment privilege in the first situation would effectively result in assertion in the second situation.

Professor SEIDMAN. Well, and by the same token, it may be that after, for example, a drug has been disseminated in interstate commerce, that the only way to prevent, to mitigate the damage of the drug inflicting the injury, would be to report that fact to the Food and Drug Administration.

So I guess—perhaps I am missing your point?

Ms. OWEN. In the thief situation, I do not think anybody would argue that you that could assert the fifth amendment with respect to the prior act just because——

Professor SEIDMAN. Well, the thief's argument would be that by refusing to return the property, he was asserting his fifth amendment right with regard to the prior act of theft. And the argument is not completely frivolous. It is true that if you give property back, that does tend to incriminate you. You sort of wonder how he got the property in the first instance. [Laughter.]

But no one would suggest, I assume, that one has a fifth amendment right to continue inflicting that injury by keeping the property.

And so here, when one first causes the problem by inserting a dangerous instrumentality into interstate commerce, I would maintain, you don't have a fifth amendment right to do nothing, and wait until people are maimed and hurt and killed.

Ms. OWEN. Thank you, Mr. Chairman.

Mr. CONYERS. Thank you for a very interesting comment. Staff counsel Raikin, do you have further questions?

Mr. RAIKIN. Yes; thank you, Mr. Chairman.

Do you see any element of this bill, through definition contained therein or aspect, which could render the statute unconstitutional and invalid for any reason in any court, including the Supreme Court?

Professor SEIDMAN. Well, counsel, the ingenuity of constitutional lawyers is infamous.

But I have studied the bill carefully. I think I know something about the Constitution. And as far as I can see, there is nothing in this bill which would—to which even a nonfrivolous argument could be made concerning its constitutionality.

Mr. RAIKIN. Thank you, Mr. Chairman.

Mr. CONYERS. Thank you very much, your comments were very helpful indeed.

[The full statement follows:]

TESTIMONY OF LOUIS SEIDMAN ON H.R. 4973

I would like to thank the Committee for affording me this opportunity to comment on H.R. 4973. I intend to limit my comments to the contention that the Bill would violate the Fifth Amendment privilege against compelled self-incrimination.

If adopted, H.R. 4973 would require a manager who discovers a serious concealed danger in a product or business practice that is subject to the regulatory authority of specified government agencies to inform those agencies or the affected employees of the danger. The constitutional argument against the Bill, as I understand it, is that such compelled disclosure violates the Fifth Amendment privilege because of the risk that the information disclosed might be utilized in a subsequent criminal prosecution of the manager.

I am a supporter of the privilege against self-incrimination. I firmly believe that the privilege plays a vital role in our constitutional system, both by protecting the privacy and integrity of the individual and by mandating an adversary, rather than inquisitorial, system of criminal justice.

It is clear, however, that the privilege against self-incrimination does not include a limitless license to withhold any information from the government which the

individual does not wish to disclose. I am persuaded that neither the language of the privilege, nor the policies lying behind it, nor the interpretation which courts have given it, prevents the government from forcing disclosure of dangerous defects in products or practices subject to government regulation. This is true for three separate and independent reasons, which I intend to discuss seriatim. First, the privilege has been held not to outlaw non-criminal, regulatory, self-reporting schemes so long as the schemes are designed to accomplish objectives unrelated to enforcement of criminal laws and are not directed at selective groups inherently suspect of criminal activity.

Second, while the privilege restricts the government in the method by which it proves guilt after a crime has occurred, it does not afford the individual the right to continue committing the crime. Consequently, when an individual sets in motion a chain of events likely to inflict social harm, the privilege does not prevent the government from insisting that the same individual take appropriate steps to prevent the harm from eventuating.

Finally, even if some persons could claim a Fifth Amendment privilege against disclosures mandated by H.R. 4973, that fact neither makes the Bill unconstitutional nor provides an argument against its passage. At most, the Fifth Amendment would excuse some individuals from compliance with the statutory command in cases where disclosure would risk self-incrimination. Even if one were prepared to assume, arguendo, that such a privilege might exist in some cases, there is no reason why Congress should not insist on disclosure in the many other cases where the privilege is not claimed or is not applicable.

In *Byers* v. *California,* 402 U.S. 424 (1971), the Supreme Court upheld a conviction under a California "hit and run" statute which required a driver to stop at the scene of an accident and give his name and address. Byers argued that the statute violated his privilege against self-incrimination because of the substantial hazard that the information provided might be used in a subsequent criminal prosecution against him growing out of the accident. Although there was no opinion for the Court, five Justices agreed that the Fifth Amendment did not bar such non-criminal, regulatory schemes not directed at a group inherently suspect of criminal activity. Speaking for the plurality, Chief Justice Burger rejected Byers' Fifth Amendment contentions in language which seems directly applicable to this case:

"An organized society imposes many burdens on its constituents. It commands the filing of tax returns for income; *it requires producers and distributors of consumer good to file informational reports on the manufacturing process and the content of products, on the wages, hours and working conditions of employees.* Those who borrow money in the public market or issue securities for sale to the public must file various information reports; *industries must report periodically the volume and content of pollutants discharged into our waters and atmosphere.* Comparable examples are legion.

"In each of these situations there is some possibility of prosecution—often a very real one—for criminal offenses disclosed by or derived from the information that the law compels a person to supply. Information revealed by these reports could well be "a link in the chain" of evidence leading to prosecution and conviction. But under our holdings the mere possibility of incrimination is insufficient to defeat the strong policies in favor of a disclosure called for by statutes like the one challenged here." 402 U.S. at 427–428 (italics added; footnotes omitted).

Similarly, Justice Harlan, who provided the fifth vote for the judgment, reasoned that: "* * * [i]f the privilege is extended to the circumstances of this case, it must, I think, be potentially available in every instance where the government relies on self-reporting.

"And the considerable risks to efficient government of a self-executing claim of privilege will require acceptance of, at the very least, a use restriction of unspecified dimensions. Technological progress creates an ever expanding need for governmental information about individuals. If the individual's ability in any particular case to perceive a genuine risk of self-incrimination is to be a sufficient condition for imposition of use restrictions on the government in all self-reporting contexts, then the privilege threatens the capacity of the government to respond to society's needs with a realistic mixture of criminal sanctions and other regulatory devices." 402 U.S. at 451–452.

To be sure, the *Byers* doctrine does not leave the government free to insist on self-reporting whenever it can advance a regulatory, non-criminal reason for seeking the information. In circumstances where information is demanded from a "highly selective group inherently suspect of criminal activities" or in "an area permeated with criminal statutes," 424 U.S. at 430, a Fifth Amendment privilege attaches even if the government seeks the information for non-criminal purposes. Thus, in *Albertson* v. *SACB,* 382 U.S. 70 (1965), the Court upheld the refusal of a "communist-front"

organization to register with the Attorney-General under the Subversive Activities Control Act of 1950. The Court noted that Albertson's Fifth Amendment claim was "not asserted in an essentially non-criminal regulatory area of inquiry, but against an inquiry in an area permeated with criminal statutes, where response to any of the form's questions in context might involve the petitioners in the admission of a crucial element of a crime." 382 U.S., at 79.

Similarly, in *Marchetti* v. *United States* 390 U.S. 39 (1968), the Court held that there was a Fifth Amendment privilege against paying a federal occupational tax on gambling and registering as a person engaged in the business of wagering. The Court conceded that the tax and registration requirements had non-criminal purposes. See 390 U.S., at 57. But noting that the taxpayer faced "a comprehensive system of federal and state prohibitions against wagering activities," 390 U.S. at 49, the Court held that wagering "is 'an area permeated with criminal statutes,' and those engaged in wagering are a group 'inherently suspect of criminal activities.'" 390 U.S. at 47. See also, *Grosso* v. *United States,* 424 U.S. 648, 651 (1976) (no Fifth Amendment privilege against filing ordinary tax return because requirement directed to public at large).

On any fair analysis, it seems clear that the reporting requirement in H.R. 4973 falls on the *Byers* side of the *Byers-Albertson* line. To be sure, a manager reporting a product defect may in some circumstances run some risk of criminal prosecution, just as a driver involved in a car accident may sometimes be criminally liable. But we have not yet reached the point where those managing industries subject to government regulation are, like gamblers and communists, "inherently suspect of criminal activities." Nor can it be maintained that manufacturers of consumer products, managers of nuclear reactors, and sellers of prescription drugs face, in the words of the *Marchetti* court, "a comprehensive system of federal and state prohibitions against [their] activities," 390 U.S. at 49. Indeed, although there are some criminal statutes in this area, see, e.g., 21 U.S.C. §301 et seq. (outlawing the introduction into interstate commerce of any food, drug, medical device, or cosmetic that it is adulterated or misbranded), it is striking how few criminal prohibitions govern the conduct to which H.R. 4973 relates.

It is not surprising, therefore, that the lower federal courts which have considered self-reporting schemes closely analogous to H.R. 4973 have all but uniformly upheld them against Fifth Amendment challenge. In *United States* v. *Sterling,* 571 F.2d 708 (2d Cir. 1978), for example, the Court sustained a requirement that corporate officers report certain information to the Securities Exchange Commission despite the fact that by reporting the information, the defendants risk self-incrimination. The court noted that: "* * * the sale of stock and maintenance of peaceful labor relations are quite obvious, and quite necessary, lawful activities. Appellants chose to engage in a lawful activity in an unlawful manner. That unlawfulness cannot now be used to excuse them from regulatory disclosure requirements, even though such disclosure could lead to criminal prosecution under other statutory schemes." 571 F.2d, at 728. See also *United States* V. *Pacente,* 449 F.Supp. 905 (1978) (self-reporting for tax on retail liquor dealers upheld over Fifth Amendment challenge); *United States* v. *San Juan,* 405 F.Supp 685 (1975) (compulsory disclosure by those transporting over $5,000 in monetary instruments across U.S. border upheld over Fifth Amendment challenge); *United States* v. *Resnick,* 488 F.2d 1165 (1974) (firearm record keeping upheld over Fifth Amendment challenge); *15,844 Welfare Recipients* v. *King,* 474 F.Supp. 1374 (1974) (welfare verification requirement upheld over Fifth Amendment challenge).

In contrast, the lower courts have recognized Fifth Amendment claims only when a self-reporting requirement is directed narrowly at specific individuals who are already under suspicion. See, e.g., *United States* v. *Lubus,* 370 F.Supp. 695 (1974) (enforcement of IRS summons directed at specific taxpayers to testify subject to Fifth Amendment privilege); *United States* v. *Thevis,* 469 F. Supp 490 (1979) (FBI request of name and address for investigative purposes).

I have been able to locate only a single case decided by any federal court in which a Fifth Amendment privilege was upheld in the context of a general self-reporting scheme similar to that proposed in H.R. 4973. In *Ward* v. *Coleman,* 598 F.2d 1187 (10th Cir. 1979), cert. granted sub nom. *United States* v. *Ward,* 48 U.S.L.W. 3308 (1979), the Court reversed a judgment under the Federal Water Pollution Control Act for damages in connection with an oil spill because the government had utilized information which the defendant was required to report in connection with the spill. It must be conceded that the reporting requirement in *Ward* is closely analogous to that proposed in H.R. 4973. However, several factors reduce the force of the *Ward* precedent. First, the *Ward* court nowhere cites *Byers* and appears to have overlooked the *Byers* doctrine in reaching its decision. Instead, the Court directed its attention exclusively to whether the damage action for the oil spill could be considered "criminal" for purposes of the Fifth Amendment. Upon concluding that the action was criminal in nature, the Court immediately applied the privilege without pausing to consider whether the reporting requirement was part of a regulatory, non-criminal statutory scheme. Second, the result in *Ward* is contrary to decisions in every other circuit which has considered the constitutionality of self-reporting schemes. Finally, it is worthy of note that the Supreme Court has granted certiorari in the *Ward* case. There is, of course, no way of knowing with certainty whether the *Ward* holding will ultimately survive. But unless the Supreme Court undertakes to reverse *Byers* and rewrite the law of self-incrimination, it seems probable that H.R. 4973 would withstand constitutional attack.

II

Moreover, in one important respect, there is a stronger case for the validity of H.R. 4973 than for the California hit-and-run statute upheld in *Byers. Byers,* like virtually all Fifth Amendment cases, arose after the fact. The social harm imposed by the automobile accident had already occurred, and the issue was what techniques the Government could use to prove its case concerning the completed event. In contrast, H.R. 4973 concerns not the proof of social harm which has already occurred, but the prevention of social harm which is about to occur. It requires an extraordinary reading of the Fifth Amendment to suggest, for example, that a person who has introduced a lethal drug into the stream of commerce in constitutionally privileged to sit on his hands and take no action to avoid the deaths which are certain to result from his conduct. The Fifth Amendment contains a privilege against helping the government prove that a crime has occurred. But it has never been thought to privilege the commission of a crime. Consequently, the Fifth Amendment does not prevent the government from insisting that one who sets in motion forces about to impose an injury take action to prevent that injury—even if that section makes a subsequent criminal conviction more likely.

The law is full of such requirements. For example, it is hornbook law that a person who misappropriates property of another is under a continuing duty to return the property. See W. Prosser, Law of Torts, 89–91, (4th ed. 1964). It has never been suggested that this duty can be avoided by the claim that returning it might assist the government in proving that a larceny occurred. Similarly, the law holds an accomplice liable for all crimes committed by the principal unless he terminates his complicity by, inter alia, giving timely warning to law enforcement authorities. See Model Penal Code § 2.06(6)(c)(ii). The law can impose this obligation because the accomplice has a duty to mitigate the damage caused by his own prior misconduct.

Imposition of this duty is also common in the regulatory field. For example, the Federal Food, Drug, and Cosmetic Act requires a manufacturer to report to the Secretary information necessary for the Secretary to determine whether approval for a drug should be withdrawn because it is unsafe. See 21 U.S.C. § 355(i)(1). The National Traffic and Motor Vehicle Safety Act requires car manufacturers to report any defect which he discovers in a motor vehicle to the purchasers and the Secretary of Transportation. See 15 U.S.C. § 1402 (a), (c). And the Consumer Product Safety Act requires every manufacturer of a consumer product who discovers that the product contains a defect which could create a substantial hazard to inform the Consumer Product Safety Commission of that fact. See 15 U.S.C. § 2064(b).

A holding that H.R. 4973 was invalidated by the Fifth Amendment would presumably require invalidation of each of the statutes and common law rules discussed above. It is simply inconceivable that a court would adopt such a sweeping and unprecedented reading of the Fifth Amendment which would leave society defenseless against serious, yet wholly avoidable, risks of imminent injuries and deaths.

III

Each of the arguments made above suggest that the Fifth Amendment is simply inapplicable to the reporting requirement mandated by H.R. 4973. Yet even if these arguments were incorrect and if a Fifth Amendment privilege did attach, that fact neither invalidates the statute nor provides an argument against its adoption. At most, recognition of a Fifth Amendment privilege would mean that individual persons could raise the privilege in defense to an action under the statute in those cases where compliance would risk self-incrimination. But the fact that some managers might advance the privilege is no reason not to insist on the reporting of defects in those cases where there is not a serious risk of self-incrimination or where the manager elects not to invoke the privilege.

Thus, it is significant that while recognizing that individual taxpayers had a privilege not to comply, the *Marchetti* Court was careful to: "* * * emphasize that we do not hold that these wagering tax provisions are as such constitutionally

impermissible; we hold only that those who properly assert the constitutional privilege as to these provisions may not be criminally punished for failure to comply with their requirements. If, in different circumstances, a taxpayer is not confronted by substantial hazards of self-incrimination, or if he is otherwise outside the privilege's protection, nothing we decide today would shield him from the various penalties prescribed by the wagering tax statute. 390 U.S. at 612. Similarly, in *Ward* v. *Coleman,* supra, the Court of Appeals reversed the judgment against the defendant because the government had utilized information gained pursuant to the self-reporting scheme. The Court stated explicitly, however, that: * * * we do not * * * strike down the self-reporting requirements of § 1321(b)(5) or the statute requiring imposition of civil penalties under 1321(b)(6). In our view, it is permissible to assess civil penalties based on a discharge of oil or other hazardous substances under the Act, provided that the evidence used to establish the discharge is derived from a source wholly independent of the compelled disclosure required by § 1321(b)(5)." 598 F. 2d at 1192.

In summary, then, there is no serious constitutional obstacle to enactment of H.R. 4973. The Fifth Amendment privilege does not attach to the self-reporting mandated by the Bill, both because the scheme is non-criminal and regulatory in nature and because it is directed at avoiding on-going social harm. Moreover, even if the Fifth Amendment privilege did apply, that fact would not invalidate the statutory scheme, but would, at most, excuse some managers from compliance in those cases where there was serious risk of self-incrimination.

Mr. CONYERS. Our next witnesses are Mr. Thomas Wardrop and Mr. Roy Eno, who are from Cianbro Corp., Maine, and H. B. Zachry Co., San Antonio, Tex., respectively.

TESTIMONY OF THOMAS WARDROP, PERSONNEL DIRECTOR, CIANBRO CORP., PITTSFIELD, MAINE, ACCOMPANIED BY ROY H. ENO, SAFETY DIRECTOR, H. B. ZACHRY CO., SAN ANTONIO, TEX.; JOHN C. ELLIS, ASSISTANT EXECUTIVE DIRECTOR, THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA; AND ARTHUR SCHMUHL, DIRECTOR, SAFETY AND HEALTH SERVICES, THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA

Mr. WARDROP. Thank you.

Mr. CONYERS. I see you have others with you, would you please identify them by name for the committee and the reporter?

Mr. ELLIS. I am John Ellis, on the staff of the association.

Mr. CONYERS. That is the Associated General Contractors?

Mr. WARDROP. Yes, sir.

Mr. ELLIS. And on the far side of the table is Mr. Arthur Schmuhl.

Mr. CONYERS. How do you spell the last name?

Mr. SCHMUHL. S-C-H-M-U-H-L.

Mr. CONYERS. Are you counsel?

Mr. SCHMUHL. No; I am the safety director.

Mr. CONYERS. All right.

Mr. CONYERS. We have the testimony of Mr. Wardrop. Is there any other prepared testimony you would like to submit?

Mr. WARDROP. No.

Mr. CONYERS. All right. We appreciate your patience as our witnesses today ran longer than expected.

We will incorporate your statement into the record, and welcome you to proceed.

[The statement follows:]

TESTIMONY OF THOMAS W. WARDROP FOR THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA

Mr. Chairman, my name is Thomas W. Wardrop, Personnel Director of the Cianbro Corporation of Pittsfield, Maine. We are general contractors performing building, highway, heavy, and municipal-utilities construction operations. The Cianbro Corporation is a member of the Associated General Contractors of America and I appear today on behalf of the association as a member of the AGC Safety and Health Committee.

I am accompanied today by Mr. Roy H. Eno, Safety Director of the H. B. Zachry Company, San Antonio, Texas and members of the AGC Washington Staff.

This industry has expended a great deal of effort, time and resources in making job site safe practices a practical reality in construction. AGC has been particularly active in the safety movement. For example:

(a) AGC's Manual of Accident Prevention in Construction was first published in 1927, 44 years before OSHA. it is now in its sixth revised edition.

(b) AGC's Safety Training Course for Construction Supervisors was first published in 1964, 7 years before OSHA. Approximately 6,700 construction supervisors have completed the course, 2,500 by correspondence.

On January 26, 1973, AGC initiated the call for a single or vertical standard for the construction industry. The association financed a study pointing out the shortcomings, overlaps and voids between the general industry and the construction series of OSHA standards. The recent first step in "verticalization" of the Safety and Health Standards for Construction (Federal Register, February 9, 1979) is, at least in part, a result of our long term efforts toward cooperation with OSHA and our dedication to the goal of safety with practicality.

Our opposition to this legislation is partly based on concern over the wide range of possible interpretations which Federal agencies and the courts could give to H.R. 7040 in actual situations. As you probably know, contractors engaged in Federal or Federal aid work are blessed with inspections from all levels of government. Each of these inspectors makes his own determination as to violations of rules and regulations. I can best illustrate by giving the following example:

Situation.—A contractor is placing a water line in a trench. The terrain is questionable as to its type, such as rock, unclassified, etc. It is not only possible but probable that the project will be inspected by the city, the Environmental Protection Agency, and the Occupational Safety and Health Administration. The city engineer could state that the soil requires shoring. However, the EPA official and the OSHA inspector may not indicate any need for shoring. At this point, the contractor must decide who to believe and may call in a soil analysis consultant to make proper determination. However, since one of the three inspectors has stated that the material should be shored, if the contractor fails to notify all his employes that they are working under hazardous conditions, and a cave-in occurs, H.R. 7040 would subject the contractor to fines of up to $250,000 or imprisonment for up to 5 years.

In our industry, there is often a wide difference of expert opinion on what is safe practice. Industrial safety, and especially safety on construction sites, is frequently a very subjective determination. Willfull failure to disclose a concealed danger is an extremely vague and difficult standard to apply and the imposition of criminal penalties on such a standard could lead to gross miscarriages of justice.

A review of the frequency of OSHA citations that have been reversed would clearly indicate the vast difference of opinion as to what is an unsafe working condition. We urge that the committee obtain from OSHA, statistics on the total number of decisions by Administrative Law Judges, the OSHA Review Commission and the courts which have resulted in reversing or overturning of OSHA Compliance Officer judgements.

We are greatly concerned about situations such as:

(*a*) A contractor is engaged to remodel an existing structure requiring extensive interior demolition. Without specifically investigating the composition of the materials used to fabricate the original interior of the structure, he could release asbestos fibers into the atmosphere. What is the contractor expected to know in a situation such as this?

(*b*) A contractor engages in a trenching operation. He inspects the excavation walls, photographing and recording the conditions several times daily, using the services of a registered professional engineer. A city inspection sample, improperly taken from the overburden, could lead to a citation and lengthy criminal litigation unless the contractor warns all of his employees in writing, causing a needless scare and perhaps a walk-out from the project.

(*c*) A contractor excavates for a sewer line and at the juncture for a bell-hole is cited by the city for his failure to shore in an area where a recognized soils engineer

states that it would require a major earthquake to dislodge the walls. Again, long expensive litigation ensues and the contractor would under the terms of H.R. 7040 be required to unnecessarily frighten his employees.

With the foregoing in mind, a proposal to burden industry beyond the penalties already provided by OSHA and MSHA is both unreasonable and a form of double jeopardy.

H.R. 7040 should apply, if it is passed, to labor unions, for their refusal to subject their membership to physical examinations. The teamster who operates a vehicle despite his being subject to epileptic seizures can wreak havoc, as could the operating engineer with vision problems such as tunnel vision, loss of sight in one eye or diplopia (double vision). Labor organizations should be subject to H.R. 7040 penalties for subjecting not only the individual, but every person on the job site to the frailties of the man whom they consider work-wise and send out to our jobs.

Another example of the need for responsibility on the part of labor involving the lack of pre-placement physical examinations would be the sending out of a "work-wise" member (who was industrially deaf) to act as a "spotter" for trucks in a dump area. He could turn his back and fail to hear the truck's back-up alarm and be crushed by an end-dump vehicle.

Government too should be held responsible, including the awarding agencies which oversee construction of their facilities by construction firms. H.R. 7040 does not address this source of concealed danger. For example:

The AEC resident safety officer turning a deaf ear to construction management requests for radiation exposure detection badges for construction workers working adjacent to operating personnel who are provided with badges to protect them from potential contamination; plus, ignoring construction personnel when releases of alpha, beta and gama contaminants occurred (and then making provision for evacuation and medical inspection for operating personnel only).

The same AEC resident safety officer ignored established procedures for purging hydrogen filled rotary converters by permitting the utilization of oxygen (without explosion proof vent fans) instead of carbon dioxide gas as a purge. This caused an explosion, resulting in the death of the engineer assigned to the purge operation.

Another example of federal agency ineptness is the refusal to disclose the weight of a container being placed on site by the contractor. Because the government insisted the weight was classified information, the installing contractor turned over a crane being used to move the container. Fortunately, there were no injuries to personnel.

Another important concern is the meaning of the term "manager" in H.R. 7040. A clean-cut, clear definition is needed. In our industry we have foremen, general foremen, craft superintendents, superintendents, general superintendents, project mangers, office managers, comptrollers, vice-presidents, executive vice presidents, chief executive officers, and board chairmen. How far down the line is H.R. 7040 intended to reach? In the absence of such a definition you may well leave all of industry without lower, mid-level and even upper levels of management, because no reasonable man will accept a "managerial" position with the fines proposed in H.R. 7040 hanging constantly over his head.

We understand there are more legal issues that are likely to entangle this legislation in the courts. The level of employed who can create criminal exposure for the corporation, and the treatment of situations where an employee acts in violation of company policy, are two examples.

At the very least this proposed legislation needs a great deal more serious study to provide specificity and eliminate the vagueness, which will be interpreted as many ways as there are lawyers and judges in these United States. Until the needs for it can be spelled out in detail and the application of it can be specified clearly, H.R. 7040 must ge regarded as very bad legislation.

Thank you, Mr. Chairman and members of the subcommittee for permitting this opportunity to present the views of AGC.

Mr. WARDROP. Thank you.

Good morning, Mr. Chairman. My name is Thomas W. Wardrop, personnel director of the Cianbro Corp. of Pittsfield, Maine. We are general contractors performing building, highway, heavy, and municipal-utilities construction operations.

The Cianbro Corp., is a member of the Associated General Contractors of America, and I appear today on behalf of the association as a member of the AGC safety and health committee.

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Our opposition to the H.R. 7040 legislation is partly based on concern over the wide range of possible interpretations which Federal agencies and courts could give to H.R. 7040 in actual situations.

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I can best illustrate by giving the following example:

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The city engineer could state that the soil requires shoring.

However, the EPA official and the OSHA, or other regulatory agencies may not indicate any need for shoring.

At this point, the contractor must decide who to believe, and may call in a soil analysis consultant to make proper determination.

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Labor organizations should be subject to H.R. 7040 penalties for subjecting not only the individual, but every person on the job site to the frailties of the man whom they consider workwise, and send out to our jobs.

Mr. HYDE. Excuse me.

You do not give the workers physicals? The unions send them out and you take them? Is that it?

Mr. WARDROP. Yes.

Mr. HYDE. All right, thank you.

Mr. WARDROP. Another example of the need for responsibility on the part of labor involving the lack of preplacement physical examinations would be sending out a workwise member who was industrially deaf to act as a spotter for trucks in a dump area. He

could turn his back and fail to hear the truck's backup alarm, and be crushed by an end-dump vehicle.

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In our industry we have leadmen, foremen, general foremen, craft superintendents, trade superintendents, superintendents, general superintendents, project managers, office managers, comptrollers, vice presidents, executive vice presidents, chief executive officers, and board chairmen.

How far down the line is H.R. 7040 intended to reach?

In the absence of such a definition, you may well leave all of industry without lower, midlevel and even upper-levels of management; because no reasonable man will accept a managerial position with the fines proposed in H.R. 7040 hanging constantly over his head.

We understand there are more legal issues that are likely to entangle this legislation in the courts. The level of employee who can create criminal exposure for the corporation, and the treatment of situations where an employee acts in violation of company policy, are two examples.

At the very least, this proposed legislation needs a great deal more serious study to be adequately specific and eliminate the vagueness, which will be interpreted in as many ways as there are lawyers and judges in these United States.

Until the need for it can be spelled out in detail, and the application of it can be specified clearly, H.R. 7040 must be regarded as very bad legislation

Thank you, Mr. Chairman, and members of the subcommittee for permitting this opportunity to present the view of AGC.

Mr. CONYERS. Well, first of all, we thank you for coming a great distance to present your testimony at this hearing. We appreciate your concern.

You are aware that the Miller bill would not create any additional liability than is now already existing in the law for negligence or faulty conduct that already would obtain in your industry?

In other words, the bill only adds to existing law an affirmative duty to report hazardous conditions, if they are actually in existence all it would do is create that there was a breach in not reporting it; and reporting might eliminate the accident or dangerous worksite, or the hazardous product.

We are not adding to the burden of Federal laws except to insure the reporting of accidents or dangerous worksites, which may, hopefully, in most cases not involve the person that is making the report. It could be an observation made by almost anyone in the managerial field.

I was wondering, in connection with the collapse of the Rosemont Stadium near Chicago in August 1979 where five workers were killed and there were OSHA penalties for willful violations by the contractor, had the Miller bill been in operation, maybe the reporting would have precluded the accident itself from happening.

Do you suppose that that might have been worth the anguish and the extra concern being visited upon managers in your industry?

Mr. WARDROP. I am not familiar with the specifics of that example that you mention.

Mr. CONYERS. Well, in cases where we have a construction collapsing, that are later determined to be due to negligence, it would seem to me that if we had a reporting statute, in addition to penalizing those who permit it, which is what ultimately the agency seeks to do; we might be able to preclude this. A reporting requirement, which is merely reporting that which you know, is all that is necessary to be relieved of any liability, at least under the proposed bill that we have in front of us today.

We see it as an important precondition to the other regulations under which your industry works.

Mr. HYDE. Excuse me.

What about judgment calls made by architects? If the architect at Rosemont Stadium thought a certain design was going to hold, and the judgment was faulty, there would have been no report. No one would have known enough to report.

I do not know what happened at Rosemont. Maybe the materials were faulty, but it was a latent defect.

Mr. CONYERS. How do you feel about these matters?

Mr. WARDROP. It's my understanding that the penalties are available through OSHA and other Federal agencies, the same as the penalties that this bill would propose to have, if it is a willful violation or a repeated type violation, these penalties already exist.

Mr. ELLIS. Mr. Chairman, if I may, one of the points that we're trying to address in our testimony is that in the industrial environment, particularly in construction where there are so many inspections made by a variety of people acting on behalf of a particular level of government, there is still a great deal of difference of opinion as to what constitutes safe and unsafe practices.

And to add another layer of concern, another opportunity for the "vengeful employee"—that's the term of art I heard this morning—for that sort of employee to disrupt the worksite, is rather frightening to an industry that already considers itself pretty heavily regulated in this very area.

Mr. CONYERS. Well, it's my view, of course, that the individual employee doesn't have the opportunity to trigger the operation of this bill. If he's not a manager, I can't imagine all these agencies being worried about all of the nonusual complaints that may or may not be filed with it. It probably will be overwhelmed with the complaints that are strictly within the purview, that is, from managers or people in a managerial capacity, or that are experts in some scientific realm that will make the report to management itself.

So I don't add on to your worries, I hope, by or dissuade you from some of them by having you have to worry about every employee who feels like making a report, would have this as an outlet.

I doubt if the regulatory agency would for a minute consider bucking those over to an overloaded Department of Justice that frequently has trouble getting around to all of the things that are clearly within the terms of the regulations.

My colleague has raised the question of what if there are architectural defects, or something that was not even responsible—was not even created in the work environment.

Very, very clearly under the operation of this proposal there would be no liability, as there would be no opportunity for a manager to perceive something that's usually invisible like an architectural defect.

In one of these cases we had the failure to insert the right amount of bolts, and they found a huge percentage that were missing; and that allowed for the problem. And the work had been detected and known and reported.

It seems to me that especially in the construction industry legislation of this kind could be of great help to you in warding off incredible additional costs of compensation, civil suits, and all the litigation that later occurs when these accidents occur.

In your industry there is a great deal of injury and there is some attendant danger. I seem to recall some report where in some lines of construction work it is more dangerous than police duty, for example; which means that there is an inherent danger involved in the construction industry which all we can do is work with as we can to minimize.

And so I would just suggest that this may be a positive—especially for your kind of work—for those reasons, that it would merely create where there is knowledge for managers to make a report, which could be done with the filing of a postcard.

Mr. SCHMUHL. Mr. Chairman, for your information—I assume you are already aware of the fact—the Occupational Safety and Health Act does provide for such disclosure on the part of any employee, be he manager or craftsman. It is absolutely provided for.

It is also covered by an exemption from any prosecution and any persecution, if you will, by an employer for disclosure.

Mr. CONYERS. Has there ever been a criminal prosecution under OSHA?

Mr. SCHMUHL. Yes, sir.

Mr. CONYERS. I see, you are probably right. Well, let me rephrase the question.

We are talking about a criminal prosecution for nondisclosure, a record of any prosecution in that direction?

What we have done is to add this liability and require that all managers do this reporting.

It seems to me that it may, in the long run, be far more helpful than it would be harmful. If any manager does not know of the dangerous defect, he or she is excluded from any liability under the bill.

In other words, a manager wouldn't be held responsible to have known, but where they do know, there should be disclosure.

Now, there are others who suggest that we should make gross negligence a part of it; there ought to be a requirement where the manager ought to have known. That, at this point, is not in the legislation.

No criminal penalty results unless that results. So, you don't get any deterrent or prevention in most of those kinds of cases. That is not the object, as we see it in terms of the OSHA bill; and that's the reason for this additional new piece of legislation we are attempting to add at this point.

Mr. SCHMUHL. Mr. Chairman, there are criminal penalties for those guilty of willful acts or willful negligence under OSHA.

Mr. CONYERS. Yes, that is true.

Mr. SCHMUHL. It's not necessarily death.

Mr. CONYERS. Yes, but it does not involve failure to disclose, and that is the only thing this bill would add that would be different; and it would impose it upon those that would probably be in the most likely place to know about it.

Mr. HYDE. Would the chairman yield?

Mr. CONYERS. Yes.

Mr. HYDE. If the purpose of this bill is to protect the workers, and the public and consumers, why do we just penalize management? Why not the union stewards as well?

In order to get the bill passed, I expect that no one wants opposition from labor. To best achieve the purposes of this legislation, anybody who has knowledge should be penalized, including, for instance a workman who discovers a rotten board. Why do we just penalize management?

Mr. CONYERS. Because from my reading of the matter, all of the cases that have been examined which brought the proposal into creation were cases where management or someone in management, knew about it.

As a matter of fact, we searched the cases examples of other failures to disclose on the part of Government, unions, or third-party; we found none.

Mr. HYDE. Labor and government disclose these things when they know above them, but management does not without these sanctions? It is only management that is recalcitrant?

Mr. CONYERS. I don't think that's quite it, although sometimes it seems to add up to that.

We do not have any cases where recalcitrant union officials failed to disclose; as a matter of fact, normally, their aggressiveness about these matters are usually on the other side.

Mr. HYDE. So there would be no problem in including them?

Mr. CONYERS. There would be no problem, but there would also be no point, except to say that maybe——

Mr. HYDE. Aren't union and government people lazy, negligent, and tired sometimes? Don't they ever say: "I don't want to get into that; it is not my responsibility; so what if they're using bad wood?" That is human nature.

Mr. CONYERS. Well, have you any cases, or can you cite any references?

Mr. HYDE. I am sure that there are cases where the scaffolding was negligently erected by the workmen, and another workman got injured. I suspect that every scaffolding case in the negligence law involved scaffold erection by other workmen.

Mr. CONYERS. Well, we don't happen to have any in the litany of cases.

Mr. HYDE. I will try to find some. I know management did not erect the scaffold.

Mr. CONYERS. Yes, that may create the liability, but in the kinds of cases we have been researching, we have not found where union representatives were faulty in reporting.

Mr. HYDE. I am just trying to bring out the commonsense point of view, which is to compel disclosure by those who have knowledge, whoever they are.

Mr. CONYERS. Of course, the major line of cases we have run into are large corporation cases in which the decisions have been major decisions; they were not made by people at the working level.

As a matter of fact, as we now have been advised, everybody can file an OSHA complaint; but it seems to me, in the course of these hearings, the kinds of cases we have run into really have not created the necessity to hold open this reporting liability to everybody, employee and employer, alike.

It seems to me it would dilute the effect of the bill. I think it is really impractical to compel additional people to report, and all these judgment calls, subjective as they are to every employee. I am not suggesting that.

Perhaps we can find some reasonable range in which to operate, a limitation; I thought we had accomplished that by leaving it within a broadly defined managerial scope, and those who render technical or scientific reports, so that they, too, would have that.

Mr. HYDE. Mr. Chairman, do you think the agencies that get these reports will have a duty to investigate them? For instance, if management reports to OSHA under this bill, would OSHA be required to investigate?

Mr. CONYERS. Absolutely not. There would be no point in us legislating if we would go through all of this and create managers and scientific assistants as the reporting parties, and then everybody and anybody report—I do not think we put any obligation.

Mr. HYDE. What do they do with the report? What obligation?

Mr. CONYERS. I think it would not specifically put an obligation on them.

You see, under their operations now, most of these agencies are seriously overburdened, I think we can agree on that.

Mr. HYDE. That is my concern.

Mr. CONYERS. I doubt if they would elect to take random, anonymous, employee, or third-party reports which are not contemplated in the law.

Mr. HYDE. What if there is a walkway between one work space and another work space, which is seen by an assistant manager or management trainee? He thinks that it is too narrow, and is therefore dangerous and reports it to the agency—all of the agencies listed in the bill.

What obligation does the agency have once they have received that report?

Furthermore what if he shows it to his employer who says: "You are crazy, that's the way it has been done for 30 years and it is not dangerous"?

Mr. CONYERS. They would conduct the investigation.

Mr. HYDE. That is what I'm getting at.

Mr. CONYERS. Of course.

Mr. HYDE. So the agency must investigate?

Mr. CONYERS. Yes.

Mr. HYDE. Is it reasonable to ask staff to prepare an impact statement with respect to the additional personnel and cost which would be required by these agencies if this bill becomes law?

Specifically, I would like to know what it is going to cost and how many people will be needed?

If we really want to pass this bill, we ought to know what it is going to cost.

Mr. CONYERS. I will make that request to staff and hope that we can get it relatively soon. I think it is a reasonable request.

Gentlemen, are there any other questions or comments you would like to put in the record before we adjourn?

Mr. WARDROP. I would just like to mention in regard to the investigations, in the northern New England area, if the area office for OSHA is in Concord and Augusta—Concord, N.H. and Augusta, Maine—are directed to investigate any complaint from an employee, or in some cases, other people, if it's a phone call or a letter, if it implies any degree of seriousness. The area directors have indicated to contractors on numerous occasions they will send people out to investigate the complaint, regardless of whether or not it's frivolous or if it's even signed.

Mr. CONYERS. Is it correct to say that the majority of OSHA's decisions are sustained and found to be valid?

Mr. Eno. I would like to answer that, sir; my name is Roy Eno. I am a safety professional.

No. I think that you will find that there is quite a bit of controversy through the courts of what is unsafe and safe; and as far as the Occupational Health and Safety Act is concerned, there's probably as many or more overturned than there are substantiated in the courts or in administrative hearings.

Mr. CONYERS. Well, our information is just the reverse, that the majority of OSHA decisions are overwhelmingly sustained.

Mr. ENO. I have not found it to be that way in my limited area.

There is one thing that I think that we may have overlooked in this whole thing as far as getting it into the record, is under the Occupational Safety and Health Act, under the Mine Safety and Health Act—you are required to report anything like this to them; and if you do, then you will be sanctioned with fines and penalties.

Under the Mine Safety and Health Act especially, it's mandatory, that they fine and penalize you. There's no room for consulting or so forth.

So what happens to the safety professional in the field? Of all people he should be the one that is out there trying to prevent this.

Mr. CONYERS. Once he makes the report, he is relieved of any liability. He doesn't have an obligation to correct this. This is merely reporting, as required under this legislation. All he has to do is note the danger to the workplace, and make a routine report, which he would probably do in the course of his duties, anyway.

He would be the last person I think that would be additionally burdened under this legislation Normally, he would be the one to spot problems before the average workman or the average manager, whichever is the case.

Mr. ENO. Yes, but would he correct them? Or would he report them?

Mr. CONYERS. This bill doesn't have anything to do with the corrective action. It only deals with reporting. We've had many cases where there have been management decisions not to do anything about a danger, which means that agency involved never hears about it to get it to what the required correction would be.

What we are saying here is that your liability under the Miller provisions would end if you merely made the report, which you are already doing, and for safety people, there would be very little new that would be required.

What happens in terms of how the situation is corrected would of course come under different agency regulations, but not under this act. It would be limited to a reporting bill, solely; and nothing else.

Mr. ENO. Well, if you're hamstrung by labor, and not able to do some of the things like physical examinations, and I just mentioned a while ago the absolute refusal to allow that to occur—and you have knowledge that a person maybe has sight deficiencies or something of that nature, and then are you to report it to the Justice Department? Because you have no control over it.

Mr. CONYERS. This legislation really doesn't get into the question of the physical or mental abilities of employees or their defects. It really looks to the conditions of the workingplace, so you would not be held liable for an employee who had an ear or sight disability. Those kinds of disabilities are not intended to be covered under the provisions of this bill.

Mr. ENO. Even if he caused a train accident and killed several employees?

Mr. CONYERS. Nobody would be liable under the Miller bill for that, because that would be covered by other agency regulations. The reporting goes to an injurious product or a dangerous defect that is concealed. It does not go to a disability of an employee who may in turn cause another accident or cause danger to those in the workplace.

There would be no way we could guarantee against the imperfectability of human beings.

Gentlemen, we are being summoned for a vote. If there are further comments you wish to make, we will continue after the vote.

Mr. WARDROP. I think we are finished.

Mr. CONYERS. If there are other comments you wish to add, you may submit them in writing. Once again, I am glad that you came, and we appreciate your testimony. Thank you very much.

The subcommittee will stand in recess for approximately 12 minutes.

[Recess.]

Mr. CONYERS. The subcommittee will come to order.

Our final witnesses are attorney Richard Lowe, a corporate lawyer having served with the firm of Wilmer, Cutler and Pickering. He has served with the Equal Employment Opportunity Commission and is currently associate director for the Institute for Public Representation at Georgetown Law Center. Accompanying Mr. Lowe is Ms. Shelby Green, a third-year law student at the Georgetown Center and the Institute, as well.

We thank you very much for your patience and your prepared remarks, which will be included in the record. We will now recognize you for any additional comments you wish to make.

TESTIMONY OF RICHARD LOWE, ASSOCIATE DIRECTOR, INSTITUTE FOR PUBLIC REPRESENTATION, GEORGETOWN LAW CENTER, ACCOMPANIED BY SHELBY GREEN

Mr. LOWE. Thank you, Mr. Chairman.

[The full statement follows:]

STATEMENT OF SHELBY D. GREEN AND RICHARD LOWE, INSTITUTE FOR PUBLIC REPRESENTATION

I. INTRODUCTION

The Institute for Public Representation is a public interest law firm affiliated with the Georgetown University Law Center. The Institute's principal objective has been to provide representation of viewpoints which have been traditionally underrepresented before courts as well as administrative bodies. Our work has included projects in the area of corporate accountability, such as our petition to the Securities and Exchange Commission to promulgate a rule requiring a corporations lawyer to report illegal corporate conduct to the corporation's board of directors.[1] We also submitted a shareholder proxy proposal on behalf of the Project for Corporate Responsibility to the General Motors Corporation urging the General Motors board to adopt a policy of disclosure of corporate political activity to shareholders. After a period of negotiations, General Motors has adopted most of the proposal. Our actions in these areas has been premised on the view that corporations can only be held accountable when their activities are adequately disclosed. Accordingly, we are currently seeking other avenues to ensure that reporting and solicitation activities of political action committees are closely watched and the relevant laws scrupulously obeyed.

We appreciate the opportunity to comment on H.R. 7040. This bill makes important changes in the perception of corporations' responsibilities with respect to health and environmental dangers associated with corporate activity, and redefines the role of the courts in holding corporations legally accountable. It is in keeping with our commitment to corporate responsiveness that we support this bill.

In recent years, the problem of corporate irresponsibility has become the concern of many. One sociologist has noted that:

[1] 44 Federal Register 44881 (July 26, 1979).

"* * * [t]he nation's leading corporations appear to be committing destructive acts systematically and repeatedly; not randomly and occasionally, but as a standard operating procedure. To ensure profits at a minimum of expenses, these corporations are willfully engaging in crime. As legal entities, they and some of their corporate officials who make decisions, are criminal."[2]

Vast social harm is a consequence of this corporate criminal conduct. Obvious examples are air and water pollution, manufacture and distribution of dangerous consumer products such as mislabeled drugs and contaminated foods and consumer frauds. Less obvious, but no less injurious are economic harms such as monopolistic practices, restraint of trade, unfair trade practices, and improper use of corporate funds.[3] Despite injury which results from these types of corporate activities the legal system as well as the business community refused until quite recently to recognize such conduct as criminal. During a congressional committee hearing concerning the electrical companies' massive price-fixing conspiracy of 1961, an executive of an electrical equipment manufacturing company was asked by the committee's attorney if he knew that his meetings with his co-conspirators were illegal. The executive replied:

"Illegal? Yes, but not criminal. I didn't find that out until I read the indictment. . . . I assumed that criminal action meant damaging someone, and we did not do that."[4]

We believe that such imperviousness to societal interests by many corporations in the areas of health and safety is becoming an even more serious problem. The system of reporting envisaged by H.R. 7040 alters the perceived duty of corporations and holds them accountable for corporate activity and is both achievable and useful.

H.R. 7040 provides that a manager[5] who discovers a serious concealed danger associated with the corporation's product or business practice that is subject to the regulatory authority of an appropriate federal agency and knowingly fails to inform that federal agency and warn affected employees within 15 days (or if there is imminent risk of serious bodily injury or death, immediately) shall be criminally liable. It is important to note that this bill does not establish any novel concepts with respect to corporate criminal liability, but in fact is entirely consistent with prevailing law. It is universally held today under federal law, that a corporation may be criminally liable for crimes which its agents (i.e. directors, officers, employees, and agents) are capable of committing on its behalf,[6] and that corporate agents can also be held criminally liable for illegal conduct in furtherance of a corporate purpose.[7]

The preeminent Supreme Court case on corporate criminal liability is *United States* v. *Dotterweich*.[8] There the president of a drug company was convicted of shipping misbranded and adulterated drugs in violation of the Food, Drug, and Cosmetic Act,[9] which imposed liability on "any person" who caused the introduction of illegal drugs into commerce. The Court stated that a corporation acts through the individuals who act on its behalf and that all persons having a "responsible share" in the furtherance of the transaction which the statute outlaws would be criminally liable under the Act.[10] In *United States* v. *Park*,[11] the Court reaffirmed the Dotterweich principle of liability. The corporation, a national retail food chain and its president, Park, who was also chief executive officer, were convicted of violating the Food, Drug, and Cosmetic Act[12] for selling adulterated food caused by exposure to rodents in their warehouses. The Court characterized the *Dotterweich* standard of liability as holding criminally accountable, persons who have failed to exercise the authority and supervisory responsibility reposed in them by the business organization and have thus committed a violation. The Court interpreted the Act to impose "not only a positive duty to seek out and remedy violations when they occur but, also, and primarily, a duty to implement measures that will insure that violations

[2] Richard Quinney, "Criminology, Analysis and Critique of Crime in America," 2d ed. (1975) at 136.

[3] See James R. Elkins, "Corporations and the Criminal Law: An Uneasy Alliance" 65 Kentucky Law Journal 70, 72 (1977).

[4] John E. Conklin, "Illegal, but not Criminal" (1977) at 1.

[6] *United States* v. *Wise*, 370 U.S. 405 (1962); *Boise Dodge, Inc.* v. *United States*, 406 F.2d 771, 772 (9th Cir. 1969); W. Fletcher, Cyclopedia of the Law of Private Corporations (rev. perm. ed. 1975) § 4942.

[7] *United States* v. *Dotterweich*, 320 U.S. 277 (1943), reh. den. 320 U.S. 815 (1943); Fletcher, *supra* at § 1348.

[8] Id.

[9] 21 U.S.C. § 331.

[10] 320 U.S. 277 at 284.

[11] 421 U.S. 658 (1975).

will not occur. [13] Thus, *Dotterweich* and *Park* provide ample precedent for the kind of reporting requirement envisaged in H.R. 7040.

II. COMMENTS ON SPECIFIC PROVISIONS OF THE BILL

The Institute for Public Representation supports the overall policy and purposes of H.R. 7040. However, we do make some comments and suggestions which we feel will enhance the effectiveness of this reporting requirement.

(1) The committee should lower the standard of culpability in the bill to recklessness. This will encourage prompt reporting of serious dangers associated with products by a broader range of individuals.

(2) The bill should include a provision for mandatory imprisonment for persons convicted of violating the act. Mandatory imprisonment is likely to have a greater deterrent effect than the imposition of fines or other penalties.

A. The standard of culpability

As we read H.R. 7040, actual knowledge or information leading to knowledge of a serious concealed danger associated with the corporation's product and a knowing decision not to notify the appropriate regulatory agency is required for a finding of criminal liability. We think that a recklessness standard is a more effective level of culpability for achieving the purposes of the proposed act.[14] A recklessness standard would eliminate the problem of proving that agents actually know of dangers associated with their products, by holding agents legally responsible for failing to be aware of or make necessary inquiries into potentially hazardous circumstances. Culpability under this standard could be established by showing that a corporation's product was dangerous and that the corporate agent through recklessness failed to be aware of and report such defect from information that was readily discoverable with reasonable inquiry and was within the corporate agent's sphere of authority. Because such objectively measured, non-reckless responses to hazardous situations would be required to avoid criminal liability, corporate agents would be forced to act responsibly and establish systems to provide them with proper information in order to avert health and environmental disasters.[15]

Although we believe that recklessness is the better standard, if this Committee is unwilling to change the standard, defining "discovers" so as to allow the imputation of knowledge from facts and circumstances is the next best alternative. This is consistent with prevailing criminal law.[16] It has been held that willful blindness is equivalent to knowledge, and that one who willfully and intentionally remains ignorant of a fact, important and material to his conduct, can be held liable for a specific intent offense.[17] However, despite the prevalence of this rule throughout the criminal law, absent explicit statutory authorization, many courts have been reluctant to impute knowledge to challenge established business practices on the basis of abstract notions of desirable social goals. Articulation of this rule into the bill will eliminate the discretion of the courts, since they will be bound to apply the standard prescribed in this explicit declaration of a desirable social end. A prescribed standard to impute knowledge will also lend certainty to the sanction by providing guidance to courts and avoid disparate results in factually similar cases.

B. Mandatory imprisonment

One important function of criminal law and punishment is deterrence. We think that a provision requiring imprisonment upon conviction for violating the reporting requirement would serve as a general deterrent to corporate officials. General deterrence is the prevention of crimes by other potential offenders because they fear punishment similar to that which is meted out to another.[18] This theory of deterrence postulates that men and women are rational persons who make careful calculations of possible gains and losses before deciding upon their actions, and they are able to control their behavior.[19] As large corporations are characterized by their

[13] Id. at 672. Although the FDA had informed President Park by letter of unsanitary conditions at the corporation's warehouses, the Court seem not to rely on Park's actual notice of violations of the law within the corporation.

[14] Recklessness involves the concious disregard of a substantive risk, where such disregard constitutes a gross deviation from the standard of care that a reasonable person would exercise under circumstances involving danger to life and safety to others. G. Hall, *Principles of Criminal Law* at 232.

[15] See Note, "Developments in Corporate Crime" 92 Harv. L. Rev. 1272–1275 (1979).

[16] G. Williams, "Criminal Law: The General Part" (2d ed., 1961) § 284 at 866–67.

[17] Id. at § 57, p. 157–59; see also *Griego* v. *United States* 298 F.2d 845, 849 (19th Cir. 1962); *United States* v. *Jewell*, 532 F.2d 697, 700–04 (9th Cir.), cert. den. 426 U.S. 951 (1976); see "Developments in Corporate Crime" supra note 14 at 1227.

[18] Law Reform Commission of Canada, "Fear of Punishment" (1976) at 13–14.

[19] Id. See also T. Honderich, "Punishment: the Supposed Justifications" (1969).

rational decisionmaking processes, individuals within these corporations plan their actions and execute them with the possible consequences in mind.[20] Thus according to this theory of deterrence, criminal conduct by these individuals is deterrable. Furthermore, as business offenders probably do not have a high committment to their illegal behavior, that is, they could easily give up their law violating tactics, this behavior can be deterred.

The effectiveness of a deterrent however depends on a number of variables. Among these are the applicability and credibility of apprehension and punishment—i.e. certainty and celerity.[22] A number of empirical studies have found that greater certainty of punishment is associated with lower offender rates.[23] Mandatory imprisonment would add the certainty necessary for effective deterrence.

Another important variable affecting the effectiveness of a deterrent is the knowledge of sanctions and sanction outcomes and how these sanctions and the risks of incurring them are perceived.[24] Results of empirical studies demonstrate that the more punishment is perceived as a certain and inevitable consequence of the criminal act the less is the likelihood that the person will engage in this criminal behavior.[25] Thus it appears that businessmen are not likely to be deterred by the threat of punishment if they are rarely detected committing an offense, infrequently convicted, or punish in a lenient manner.[26] The mere existence of a provision for mandatory imprisonment in this bill would therefore seem to further the objectives of this reporting requirement.

These two variables—certainty of sanctions and the perception of sanction—are complementary. Absent certainty of sanction the law will not affect the risk-reward calculation of businessmen, because a small risk of a weak sanction will be regarded as an acceptable risk by businessmen with something to gain by violating the law.[27] Mandatory imprisonment, by adding a degree of certainty, would act as a significant constant in this formula, altering the businessman's calculation of risks and rewards, and would thus deter criminal actions.

Finally, social class is also important in measuring the effectiveness of a deterrent. There is strong evidence that points to the existence of a certain association between deterrability and social class.[28] If the fear of punishment is a deterrent, then it is natural that this fear should be stronger among those who enjoy high socio-economic status (and thus have much to lose) than among those with low socio-economic status (and thus have nothing to lose).[29] The personal costs of a criminal sanction like imprisonment (e.g. loss of job, social stigma, loss of community and family esteem, etc.) would be particularly high among business executives. The clearest evidence of the deterrent value of imprisonment came in the wake of the electrical equipment antitrust conspiracy case of 1961. Some of the executives who went to jail apparently felt their imprisonment so degrading that they refused to have visitors at the prison. Others made statements to the effect that poverty was preferable to conduct that might ultimately lead to imprisonment.[30]

Thus as mandatory imprisonment would alter illegal and irresponsible behavior by prompting a consideration of likely adverse consequences, such a provision in this bill seems warranted.

D. Indemnification

As certainty of imposition of punishment affects the behavior of individuals generally, actually suffering the punishment deters futher criminal conduct by the same offender. The efficacy of imposing sanctions would be totally frustrated if corporations were allowed to indemnify executives for fines and other penalties imposed for violting the act. Accordingly, to guard against any such diluting effects, this bill wisely prohibits any indemnification by the corporation or business entity for fines paid by persons convicted of violating the provision of the act. Similar provisions are already found in other federal regulatory statutes such as Rule 460 of

[20] Id. supra note 4 at 137.

[23] George Antunes and A. Lee Hunt, "The Deterrent Impact of Criminal Sanctions: Some Implications for Criminal Justice Policy," 51 Journal of Urban Law 145, 158–161 (1973); C.R. Tittle, "Crime Rates and Legal Sanctions," Social Problems, Vol. 16 (4) pp. 409–422 (1969).

[24] "Fear of Punishment," supra note 20.

[25] Id. at 79; see also G.F. Jensen, "Crime Doesn't Pay: Correlater of a Shared Misunderstanding". *Social Problems*, Vol. 17, pp. 189–201 (1969); G. Waldo, G. and T. Chiricos "Perceived Penal Sanctions and Self-Reported Criminality: A Neglected Approach to Deterrence Research, "Social Problems," Vol. 19 pp. 522–540. (1972).

[26] Conklin, supra note 4 at 137.

[27] Id.

[28] "Fear of Punishment," supra note 16 at 89.

[29] Id. See also E.E. Zimring and J.G. Hawkins, "Deterrence: The Legal Threat in Crime Control," (1973); H.L. Packer, "The Limits of the Criminal Sanction" (1968).

[30] Conklin, supra note 4 at 137.

the Securities Act of 1933.[31] In *Globus* v. *Law Research Service,* Inc.[32] The court in interpreting the rule, concluded that one of the purposes of the federal securities laws is to protect investors by requiring issuers and underwriters to provide truthful and accurate information in the company's prospectus. If an underwriter were permitted to escape liability for its own misconduct by obtaining indemnity from the issuers, there would be less incentive to conduct a thorough investigation and to be truthful in the prospectus distributed under its name, than it would be if the indemnity was unenforceable under such circumstances.[33] Accordingly, it was held that indemnification is prohibited where a defendant violted the provisions of the securities laws with actual knowledge of the falsity of its statements or reckless disregard for truth.[34]

A prohibition against indemnification is also found under the Employment Retirement Security Act[35] as well as the Foreign Corrupt Practices Act.[36] As there is ample support for a public policy statement against indemnification, the objectives of this bill will be better accomplished with the inclusion of this provision.

IV. Conclusion

The Institute for Public Representation applauds the courage of this committee in assuming the task of addressing the problems of corporate irresponsibility. Measures which reflect the policy and purposes of H.R. 7040 are long overdue, as health and environmental disasters such as at Love Canal are no longer the exceptional stories. As this bill imposes a duty upon the corporation and individuals within the corporation to report dangers associated with its products and provides criminal penalties for failure to do so, it is an important guidepost for corporations in meeting their legal and ethical responsibilities to society.

Mr. LOWE. I think we will just make very brief comments, because most of the things that we wanted to say were responded to this morning.

I just wanted to note that I guess from the public's, from the Institute's point of view, we see this bill really as a deterrent factor more than anything else.

I note the testimony almost all fell on the punishment aspect of it. But our sense is that prevention is what this is all about.

Congressman Hyde, for one, noted that we might make this a criminal concealment bill, so that you go after the person after the fact comes out that it's been concealed. Our views at the Center are such as to encourage the people to come forward and disclose, rather than wait until after the harm has occurred.

This bill, it seems to me, helps not just the public; it also works toward corporations. If the Miller bill was law during the Hooker disaster, and the information that came to the Hooker officials in 1958 had been disclosed, the public harm would have stopped at that point. People would have been on notice that they should not come into the area.

Those people then who came into the area after that time would have no action in tort against Hooker. They, themselves, the company, would have benefited; Hooker would have benefited. And, indeed, the cost for cleanup of the site was $50 million. At that time it was $4 million.

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[31] 17 C.F.R. § 239, 460 note (supp. 1962): ". . . in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act . . . where a claim for indemnity is asserted (other than for a successful legal defense) the issuer will litigate the validity of the agreement in the courts".

[32] 287 F. Supp. 188, ALR Fed 988 SDNY (1968), mod. 418 F.2d 1276 (2d Cir. 1969), cert. den. 39 U.S. 913 (1970).

[33] Id. at 287 F. Supp. at 199.

[34] 418 F.2d at 1288; see generally Knepper, "Liability of Officers and Directors," (1978) § 19.

[35] Sept. 2, 1974, 29 U.S.C. § 1001, 1110. This provision nullifies "any provision in an agreement or instrument which purports to relieve a fiduciary from responsibility or liability for any responsibility, obligation, or duty under this part of the law."

[36] 15 U.S.C.A. § 78 dd-2(b)(4) (Supp. 1978).

I see this bill being really good for not just the public only, but also corporations.

The hour is late, but I think we will rest on the material we have filed.

I would like to turn this over to my colleague, Ms. Shelby Green, to make some remarks on specific attributes of the bill.

Ms. GREEN. Thank you.

Mr. CONYERS. We welcome you, Ms. Green.

Ms. GREEN. Thank you. We appreciate this opportunity to comment on H.R. 7040. We view this bill as making very important changes in the perception of corporations' responsibilities with respect to health and environmental dangers associated with corporate activities.

This bill is important in that it redefines the role of the courts in holding corporations legally accountable. The bill is a clear declaration of a desirable social goal which should serve as a guidepost for corporations as well as the courts.

Our activities in this area of corporate liability have been premised on the view that corporations can only be held accountable when their activities are adequately disclosed. And it is in keeping with this commitment to corporate responsiveness that we support this bill.

Mr. CONYERS. I am very glad that the Institute for Public Representation is following our activities here. There are many difficult issues being raised, and we would invite you to follow along with us; and, where necessary or appropriate, any additions you would like to submit would be welcome. It would probably be helpful to all the members of the subcommittee.

You may be assured that every member of the subcommittee will receive a copy of anything you submit.

Does counsel have any questions?

Ms. OWEN. No.

Ms. GREEN. I just wanted to bring your attention to our suggestion in our written testimony that perhaps the reckless supervision standard might be a more effective standard for holding individuals within a corporation liable, as opposed to an actual knowledge requirement.

We think that the criminal law has traditionally recognized recklessness as reflecting the degree of moral culpability sufficient for the imposition of criminal penalties. Indeed, given the nature of the complex organizational structure of corporations, a reckless standard may be the only appropriate remedy.

A reckless standard works this way: a superior or manager would be held accountable for corporate crime by a subordinate when he or she knew in fact or there was a substantial likelihood that the criminal conduct was occurring, and that it was reckless for him or her to fail to make inquiries. Knowledge of the hazardous condition which, if unchecked, is apt to produce criminal violations would subject the superior to liability if he or she fails to take remedial action.

We think that this standard would go far in obtaining the objectives of the bill and averting other health and environmental disasters.

Mr. CONYERS. I think you are quite correct in your view that a reckless or a negligent standard would probably reach out and affect more in the corporate sector than actual knowledge.

We have a problem of whether there are a sufficient number of members on the committee and in the Congress who would be supportive of that expansion of liability. However, it is being explored, and that theory will be given continuing, careful, consideration.

Once again, we thank you both for joining us here today. I express on behalf of the subcommittee our appreciation to your organization for all the work that they have done in following and preparing for this testimony. Thank you very much.

The subcommittee will now stand adjourned.

[Whereupon at 1:02 p.m., the hearing was adjourned.]

APR 02 1980

ST. JOE
LEAD COMPANY
7733 FORSYTH BOULEVARD
CLAYTON, MISSOURI 63105

JOHN A. WRIGHT
PRESIDENT
314-726-9505

April 2, 1980

The Honorable John Conyers, Jr.
Chairman
Subcommittee on Crime
House Judiciary Committee
207E Cannon House Office Building
Washington, D.C. 20515

Dear Mr. Chairman:

Testimony was presented before your Subcommittee on 14 March 1980 which was highly critical of St. Joe Minerals Corporation and which grossly misrepresented the occupational health program at St. Joe's Herculaneum, Missouri, lead smelter. The testimony criticizing St. Joe's occupational health program was presented by Mr. David A. Sweeney, Director of Legislation and Political Education of the International Brotherhood of Teamsters, and was taken in part from similar inaccurate testimony presented by the Teamsters before OSHA on 25 March 1977 at the time of hearings on OSHA's then-proposed standard for occupational exposure to inorganic lead.

Mr. Sweeney's testimony, though written in the past tense, leaves the impression that the events he alleges are taking place now. In fact, none is occurring now and some never occurred. It may be of interest to your Subcommittee to learn that when informed of Mr. Sweeney's testimony, a representative of the Teamsters Local Union 688 (representing St. Joe's Herculaneum employees) said that he was unaware that the testimony was being presented.

In the interest of accuracy, I am writing to set the record straight, and I request that this letter be included in the Record of your Subcommittee's hearings on H.R. 4973. Below is a reply to each of the allegations contained in Mr. Sweeney's testimony.

ALLEGATION: St. Joe "withheld from the employees the information concerning the results of examinations made by company doctors."

FACT: Prior to the November 1978 promulgation of OSHA's regulations governing occupational exposure to lead, St. Joe's policy was to give an employee's blood lead report to a physician retained by the company as an independent contractor and, at the employee's request, to the

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employee's private physician. Since promulgation of OSHA's lead regulations, it has been St. Joe's policy, as required by those regulations, to give each employee a written report setting forth the result of his blood lead determination.

ALLEGATION: When St. Joe employees "went to a private doctor, the company would challenge the results of such diagnoses and thereby delay any Workmen's Compensation claim for several months."

FACT: To the best of our knowledge, that is completely untrue.

ALLEGATION: "The company doctor used a chelation drug to reduce lead levels in employees' blood ... The use of these injections was commonplace to reduce levels to so-called safe levels or to prevent elevation of lead levels."

FACT: Contrary to the assertion of Mr. Sweeney, chelation has never been practiced at St. Joe as a routine, prophylactic measure. In the years prior to 1976, when chelation was widely regarded as an acceptable medical practice, the physician retained by the company personally administered chelation therapy when, in his medical judgment, such treatment was necessary. In mid-1976, chelation therapy temporarily was suspended pending review of new medical studies which indicated that this therapy had possibly adverse side effects. Since August of 1977 no employee of St. Joe, to our knowledge, has received chelation therapy of any sort (oral or intravenous).

ALLEGATION: St. Joe did not tell its employees "the facts that:

1) They were being exposed to excessive levels of lead..."

FACT: For many years St. Joe monitored levels of lead in air throughout its Herculaneum plant using a network of low volume stationary samplers. Results from these samplers were used primarily to identify areas where engineering controls would be required or to monitor performance of installed control facilities. Sampling results were not reported to employees as these numbers would have been meaningless in terms of an individual employee's air lead exposure. Since promulgation of the OSHA lead standard, St. Joe has been monitoring individually each of its employee's air lead exposure

by using personal exposure monitoring equipment and has been reporting the results of these measurements to its employees.

ALLEGATION: St. Joe did not tell its employees "the facts that:

2) This exposure was harmful to their health and had long-term effects."

FACT: St. Joe has always counseled its employees that they are exposed to a potentially toxic substance and that such exposure could have serious adverse health effects.

ALLEGATION: St. Joe did not tell its employees "the facts that:

3) The exact nature of the treatment the workers were subjected to was concealed as well as the adverse side effects of the treatment."

FACT: St. Joe did inform employees when chelation drugs were being used. As mentioned earlier, physicians retained by St. Joe administered chelation drugs in the belief that they were safe. Acting on information which suggested the possibility of adverse side effects, chelation was discontinued in August, 1977.

Respectfully Submitted,

John A. Wright

John A. Wright

MAY 09 1980

Firestone

PRESIDENT

May 8, 1980

The Honorable John B. Conyers, Jr.
Chairman
Subcommittee on Crime
House of Representatives
Room 207E
Cannon House Office Building
Washington, D.C. 20515

Dear Mr. Chairman:

Supporters of Corporate Criminal Liability Legislation (HR 7040) have on a number of occasions suggested that The Firestone Tire & Rubber Company's actions with respect to the Firestone 500 tire represented an example of the kind of business conduct that should be proscribed by legislative action.

It has been alleged that Firestone's management had reason to believe that Firestone 500 tire failures would cause an unreasonable number of automobile accidents and accident-related injuries, but that Firestone's management nonetheless failed to act effectively to protect the public.

Firestone's management at no time considered the Firestone tire to constitute a safety hazard. Firestone agreed to a negotiated recall of the tire with NHTSA, in addition to continuing consumer satisfaction efforts under its warranty and adjustment programs, because of the intensity of the adverse publicity associated with controversies over the tire.

While Firestone's management has long been persuaded and has long maintained that the 500 tire was not unsafe, it is now able to demonstrate that cars equipped with the Firestone 500 tire were significantly less likely to have been involved in accidents than were identical vehicles equipped with other manufacturers' steel belted radial tires.

In a paper titled "An Engineering Safety Analysis of the Steel Belted Radial Tire" delivered February 25, 1980, at a meeting of the Society of Automotive Engineers, Dr. Roger McCarthy, quoting from a study conducted by Dr. B. J. Campbell, concluded that:

> "In sum, while original equipment manufacturers' tires performed well and demonstrated a significant improvement

> in safety over the past decade, Firestone's recalled 500 tire proved safer than the average of all other original equipment manufacturers' tires combined in the largest tire accident survey ever conducted."

Dr. B. J. Campbell is the Director of the Highway Safety Research Center at the University of North Carolina. Dr. Roger McCarthy is Manager, Design Analysis Group, Failure Analysis Associates. Failure Analysis Associates is widely recognized as a leader in the field of accident causation and risk analysis and quantification. Both Dr. Campbell and Dr. McCarthy have served as consultants to the NHTSA. Their credentials as experts in the field of accident causation and risk are unassailable.

The conclusions reached by Doctors McCarthy and Campbell were based on a detailed review of nearly one-half million accidents in six states. With respect to accident frequency, they concluded that .20% of the cars equipped with recalled Firestone tires had been involved in "tire associated" accidents. The calculated rate for cars equipped with other tires was .31%. With respect to injury accidents, Firestone 500 equipped cars showed an incidence of 0.09% compared with an incidence of 0.12% for other vehicles.

The McCarthy-Campbell study is extensive and carefully documented. Its conclusion that the Firestone 500 was safer than other original equipment tires on the road at the time is virtually impossible to refute. The McCarthy-Campbell study is, to our knowledge, the only extensive and competent study of the Firestone 500 tire's safety record ever made.

Approximately 60,000 men and women are employed by Firestone in the United States and approximately 57,000 persons own Firestone stock. Several thousand other Americans have invested in and/or earn their livelihoods in independent tire dealerships that market Firestone products. The economic welfare of all of these people is unfairly affected by the unsupported allegations that continue to be directed at Firestone.

I am enclosing a copy of the report "An Engineering Safety Analysis of the Steel Belted Radial Tire." I respectfully request that you incorporate this letter and the attached report in the record of the Subcommittee proceedings with respect to HR 7040.

Very truly yours,

John J. Nevin

JJN:pr
Enclosure

cc: The Honorable John M. Ashbrook

AN ENGINEERING SAFETY ANALYSIS OF THE STEEL BELTED RADIAL TIRE

Roger L. McCarthy
FAILURE ANALYSIS ASSOCIATES
750 Welch Road
Palo Alto, California 94304

ABSTRACT

Recent highly publicized recalls of radial tires brought about by the National Highway Traffic Safety Administration (NHTSA) raise a question as to the reliability of steel belted radial tire technology. The risk posed by such tires will be examined in the context of changing tire technologies, and their positive safety impact will be discussed in connection with the recently recalled Firestone "500" steel belted radial tire.

AN ENGINEERING SAFETY ANALYSIS OF THE STEEL BELTED RADIAL TIRE

RECENT HIGHLY PUBLICIZED recalls of radial tires brought about by the National Highway Traffic Safety Administration (NHTSA) raise a question as to the reliability of steel belted radial tire technology. The risk posed by such tires will be examined in the context of changing tire technologies, and their positive safety impact will be discussed in connection with the recently recalled Firestone "500" steel belted radial tire.

Safety engineers in many countries quantify risk or safety in terms of fatalities per 100 million miles of any given mode of transportation. One reason for this is that fatalities are the hardest form of accident data. Fatalities, unlike injury or property damages, cannot be falsified for insurance purposes, and are significant events in any society. It is estimated that over 98% of all fatalities in all developed countries are reported and find their way into statistical data bases (1)*.

Based on this criterion, the United States represents one of the safest passenger car driving environments in all reporting countries, having 3.3 fatalities per 100 million miles from all causes. Perhaps the worst country is Belgium having 10.4 fatalities per 100 million miles, or three times the rate of the United States. A summary of various national driving fatality rates is shown in Figure 1.

Studies have also shown that mechanical defects in vehicles (including tires) represent a very minor contribution to accident causation (3, 4). The results of one study performed by the University of Indiana for the NHTSA are shown in Figure 2.

The same study attributes all tire accident involvement to two user-controlled factors: inadequate tread depth and underinflation, as shown in Figure 3.

The involvement of tires as a factor in automobile accidents may be traced historically. Studies conducted by several leading universities and transportation safety authorities during the middle to late 1960's indicate that tires were related to approximately 0.4% to 1.5% of all passenger vehicle accidents (5, 6, 7, 8). Some of these studies indicated less than 1%. Indeed, one study (5) concluded that tires were "associated" with fewer accidents than deer colliding with vehicles in fenced portions of the Illinois Tollway. For discussion purposes, the 1% figure

*Numbers in parentheses refer to references at the end of the text.

will be used (9).

It was these studies which led the Seventh Circuit Court of Appeals in H&H Tire Company v. United States Department of Transportation, Docket No. 71-1935 (Seventh Circuit, 1972) to conclude that: "(I)t appears to be a fair statement from the record that, except for excessive wear (bald or thin tires), tires in general, retreaded tires included, pose no significant highway safety problem." (Opinion, at page 7.)

In any event, the earlier referred to 1% represents an "upper bound" of tire associated accidents. More specifically, vehicle accident reports and studies can involve judgments made at four different levels of investigation. Drivers are most likely to place blame for an accident on tires. Police officers are more likely to indicate "tire associated" than the third level of investigation, which is some form of scientific accident investigation team. The fourth or least likely to find tire association are laboratory studies where an in-depth analysis of the component is conducted. In the latter laboratory type of investigation, tire defect is virtually eliminated as being responsible for an accident (3, 6).

It is further important to note that the 1% figure does not refer to accidents determined to have been "caused" by a tire manufacturing defect, but rather only to tire "associated" accidents. Those studies which have considered causation indicated that approximately 85% of all tire associated accidents (i.e., still less than 1% of all accidents) were attributable to tires which had been run underinflated, bald, or were otherwise damaged by driving abuse. The remaining 0.15% were "undeterminative" of tire causation (5, 9).

Tire technology has not been stagnant. Most of the studies referred to above report tire performance as it stood around the end of the 1960's. Industry performance during the next decade, from 1968 through 1978, is addressed by a study by Dr. B. J. Campbell, Professor and Director of the North Carolina University's Highway Safety Research Center. North Carolina can be viewed as a microcosm of driving environments throughout the United States. The state has long stretches of high-speed driving in high ambient temperatures in summer, and mountainous regions with snow and ice in winter. It also has roads representative of driving surfaces throughout the United States.

North Carolina has a computerized police report accident data base representing in excess

of 2.5 million vehicle accidents. This accident data base is kept with sufficient specificity to permit interrogation for discrete information. The data base was interrogated for tire associated accidents by year of occurrence during the period 1968 through 1978 for vehicles less than one year old. This had the effect of concentrating on tires during the first year of tire life when the effects of tire defects, if present, would most likely appear. The percentage of all tire related accidents on OEM tires declined, as shown in Figure 4.

In absolute terms, tire associated accidents dropped from 671 in 1968 to 204 in 1977. At the same time, miles driven in the nation increased 50%, from 1 to 1.5 trillion miles (10). In other words, while tires were subjected to an increased exposure, they nonetheless enjoyed a decreased accident related rate.

The declining trend in relative frequency of tire associated accidents is also consistent with the tire industry's experience with Federal Motor Vehicle Safety Standard 109 testing (11). FMVSS 109 is an indoor laboratory test consisting of plunger energy, bead push-off, dimensional tolerances for load carrying capacity, and two indoor laboratory National Bureau of Standards wheel tests. The first wheel test is for "endurance" and is equivalent to driving at 130% overload at 65 miles per hour across the United States non-stop. The second is "high speed" which correlates to driving at full load in 100° F ambient temperature at speeds approximating 105 to 110 miles per hour. In 1968 when these tests were first introduced as compulsory for the industry, the industry experienced a failure rate on FMVSS 109's laboratory wheel tests of up to 8%. During the subsequent ten year period, the industry's failure rate on indoor laboratory wheel tests was reduced to under 0.5%.

The preceding discussion of various safety studies relates to the performance of the tire industry as a whole. In view of the highly publicized recall of the Firestone 500 it is worth inquiring how the recalled 500 tire performed in relationship to the rest of the industry. That question was addressed in a further study by Dr. B. J. Campbell, in which tire related accident rates of vehicles equipped with Firestone's recalled steel belted radial tires were compared with rates experienced by the same vehicles equipped with all other original equipment manufacturers' tires. To eliminate vehicle variation exact conort or comparison vehicles were used for

the study. Some 36 vehicle types with Firestone steel belted radial tires as original equipment were used in the comparison. The data source for vehicles equipped with Firestone recalled tires included some 1.7 million vehicle identification numbers (VIN's) provided by R. J. Polk & Company. Comparison vehicles for model years 1975, 1976, and 1977 were used. As the recall did not take place until February 1979, actual exposure was considered during calendar years 1975, 1976, 1977, and 1978. The six states whose data bases could be interrogated were North Carolina, South Carolina, New York (the second largest vehicle registration state), Alabama, Maryland, and Colorado.

In the six states surveyed, vehicles equipped with recalled Firestone tires had a total of 45,952 accidents during the four-year period mentioned. Ninety-one of them were indicated by the reporting officer to be "tire associated." This is an incidence rate of .20%. Comparison vehicles not equipped with recalled Firestone tires had 1,275 tire related accidents out of some 407,820 total accidents for a higher rate of 0.31%. This differential is statistically significant (12).

The computer then scanned the police report data bases to determine the number of Firestone equipped and comparison vehicle accidents which involved injuries or fatalities. Vehicles equipped with recalled Firestone 500 tires experienced 40 tire related accidents involving injuries out of a total of 45,952 accidents, or an incidence of 0.09%. Comparison vehicles experienced 462 injury accidents out of a total of 407,820 accidents. This represents a higher incidence rate of 0.12%. Vehicles equipped with Firestone recalled original equipment tires experienced one fatal accident, whereas identical vehicles equipped with non-Firestone original equipment tires experienced 25 fatal accidents.

Model year 1976 was the most complete year of comparison (13). The overall data for model year 1976 show that vehicles equipped with recalled Firestone 500's had 59 tire related accidents out of 34,448 total accidents, or a ratio of 0.17%. Comparison vehicles, on the other hand, had 565 tire related accidents out of a total of 191,171 accidents, or a significantly higher ratio of 0.30%.

Finally, when the results of the survey are examined by each of the four accident years (1975-1978), the comparison tires experienced a higher ratio of tire related accidents than the recalled Firestone 500's in every year. The data are depicted in Tables 1 and 2.

The study involved detailed review of nearly one-half million accidents. To insure that any error in the data base was random (and given the volume of data, the effects of random errors can be ignored), the data were subjected to three sensitivity checks. First, a comparison was made between the upper bound police reports of 41 injuries and fatalities and Firestone's relevant in-house records. Second, a check was conducted for accident similarity. There was reasonable similarity in both drivers and types of accidents between the two compared groups. Finally, an individual cohort to cohort vehicle check was made. The vehicles represented two homogeneous groups with the only significant divisor between the groups the tire. An industry accident rate for each vehicle was computed, and in virtually every case, Firestone tire equipped vehicles were under the industry average per vehicle.

In sum, while original equipment manufacturers' tires performed well and demonstrated a significant improvement in safety over the past decade, Firestone's recalled 500 tire proved safer than the average of all other original equipment manufacturers' tires combined in the largest tire accident survey ever conducted.

With this information, a fraction of all driving risk that is attributable to the tires under study can be established. In the four years studied, which represent the life of a tire generation, there were 453,772 accidents, of which 1,366 were tire related (0.3%) producing 26 fatalities. This means 1.9% of the tire related accidents were fatal. Other research has shown that fatal accidents usually represent 1% to 2% of all accidents; thus tire related accidents pose the same risk of fatality as the average accident. If tire related accidents are 0.3% of all accidents, and represent an upper bound on tire accident contribution, then the upper bound on tire risk is 0.3% of all driving risk, or 3 in a billion chance of fatality per hour of exposure. This represents an upper bound of one fatality every billion miles. When tire defect causation, as opposed to tire association, is factored into the equation, the results are almost unmeasurable.

Consideration can be given to the question What has caused this dramatic improvement in highway safety made by tires? There appear to be at least three reasons. There is necessarily more driving trauma associated with a tire life-ending than there is while the tire is in normal use. Moreover, studies have identified inadequate tire tread depth as the contributing factor in the bulk of tire related accidents. In 1968 the dominant construction was bias-ply tires. The mileage of a bias-ply tire was in the 10,000 to 20,000 mile range. Therefore, over a ten-year period the average driver could have experienced as many as ten tire life-endings, with increased exposure to driving on marginal or inadequate tread depth. The bias-belted tire represented a significant improvement in its mileage which was in the range of 30,000 miles. The radial tire's mileage was in the 40,000 mile plus range. Therefore, over a ten-year period, if one applied exclusively radial technology, one might use two or perhaps two-and-a-half tires for average vehicle driving. Obviously, fewer tire life-endings and better tread depth resulted in less trauma and fewer accidents. Other investigations have addressed the significance of tire failure while in use, and have concluded that drivers cope with this event successfully more than 99% of the time (5). Nevertheless, by making the event less frequent, there is less risk and increased safety.

A second, and perhaps more important, factor is the belted tire's increased resistance to rapid air loss in the face of severe road hazard. The glass belt on the bias belted tire, and especially the steel belt on the radial tire, substantially reduced the chances that a road hazard will damage the tire to the extent that there is a rapid air loss.

The third reason for dramatic improvement in tire safety during the decade 1968 to 1978 is perhaps the improved failure mode of successive tire constructions. More specifically, in 1968 the dominant tire construction was the bias-ply tire. While all tire constructions are prone to tread separations if abused, a bias-ply tire could fail by an upper sidewall flex break or in a mode accompanied by rapid air loss.

The bias-belted construction represented a substantially improved or safer failure mode. The addition of two tread belts put the tire's weakest structural link away from the air integrity plies. The bias-belted tire's natural failure mode was a crack formation between the tread belts. A tire's belt edge is a structural discontinuity that produces high local stress, and a starting point for a crack (14). This natural crack formation and propagation is usually not a problem, since when it progresses inboard 1/4" to 3/8" the stresses are markedly relieved and the separation tends to be self-limiting. In any event, if the tire is not removed, its ulti-

mate disablement does not involve an air loss, since the "weak" structural link is not connected with air integrity. Only in the extremely rare instance where the separation proceeds downward into the carcass or air-holding chamber of the tire is there a possibility of rapid air loss.

Finally, when the pure radial tire became the dominant construction, its failure mode was either again some form of crack between the belts (or "SEPT") or some other benign form of belt disablement, with usually no effect on air integrity. Belt disablements in early radial tires appear to stem from excessive moisture that can enter the tire's belt system from a road hazard puncture, or from factory moisture pickup, or through injection of moisture or water into the tire's air chamber from an improperly maintained air compressor and the permeation of this moisture through the tire's innerliner. In some first generation steel belted radial tires, this excessive moisture could combine with chemicals in the tire's stock to erode the adhesion bond between the steel wires in the belts and their surrounding rubber matrix, resulting in a "tread distort." A tread distort is a fail-safe mode in that the tire holds air and cannot be driven on without extreme vibration of the vehicle.

The increased mileage resulting in fewer tire life-endings and better tread depth, the improved tolerance to road hazards, and the successively safer or more benign failure modes of more advanced constructions, appear to be the sources of significant improvement in tire safety which have been described.

Superimposed upon this record of improved tire safety was the phenomenon of a disproportinate number of tire adjustments which occurred during the mid-1970's. The adjustment rate reached as high as 20% to 30% of production.

The unusually high adjustment rate can be broken down into at least three components. The first component can be regarded as consumer dissatisfaction generated by mass media publicity as shown in Figures 5 and 6. These indicate that the number of consumer complaints and product adjustments increased by an order of magnitude as a result of adverse publicity in one manufacturer's case.

The second segment of the adjustment curve is probably associated with underinflation, overinflation, or mixed inflations on the same axle. A study conducted by Dr. Wolfgang Knauss of the California Institute of Technology in the Los Angeles Tidal Basin indicated that the accuracy

of air tower gages is poor (15). The case of the radial was doubtless compounded by the popular misconception that the tire should appear underinflated when it is properly inflated. Because of the difficulty the average consumer has in telling whether a radial tire is properly inflated from its appearance, undoubtedly more of these tires were run with improper inflation.

The significance of underinflation has been illustrated (14). The fracture rate of tire compounds is expressed as a function of frequency (or miles per hour), stock deformation (associated with underinflation, overload, or both), and temperature (ambient plus head build-up during driving). The impact of these factors is seen as enormous and synergistic. For example, assuming that a vehicle driven at 65 mph in a loaded condition was 10 psi underinflated, a given separation would progress to the same extent in 100 miles as it otherwise would after 40,000 miles had the tire been properly inflated. Underinflation also severely increases heat build-up and reduces overall life.

The third component of the adjustment curve could be attributable to public misunderstanding of a radial tire's high performance characteristics, particularly in the case of SBR tires. For example, radial construction eliminated pantographing (squirm) of the tire on the road and resulted in decreased rolling resistance and improved tread life. However, improved tread life means an opportunity for more cumulative road hazard type damage.

Another performance characteristic of the SBR tire is its cornering capability without squeal. This, however, permitted improper cornering practices and unrealized scrubbing or shear damage to the tire's belts and tread, not to mention increased sidewall stress.

The three factors of publicity, improper inflations and improved performance contributed to a high adjustment rate as consumers went through the "learning curve."

So, despite the commercial problems of the radial tire technology and the adverse publicity it has and continues to receive, it represents a very positive impact on driving risk. Indeed, in seven years the American Tire Industry has transitioned from bias technology, which delivered 10,000 to 20,000 miles of ordinary performance and whose failure mode could affect air integrity, to steel belted radial technology, which delivered 40,000, 50,000 or 60,000 miles of high performance driving, and whose failure mode is normally benign - a technological achievement.

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2. MVMA Motor Vehicle Facts and Figures, 1979, Motor Vehicle Manufacturers Association, Detroit, Michigan, p. 64.

3. Institute for Public Safety, Indiana University, "Tri-Level Study of the Causes of Traffic Accidents," Final Report Briefing, U.S. Department of Transportation, National Highway Traffic Safety Administration, August 1977.

4. Besuner, P. M., Tetelman, A. S., Egan, G. R., and Rau, C. A., "The Combined Use of Engineering and Reliability Analyses in Risk Assessment of Mechanical and Structural Systems," Presented at Risk Benefit Methodology and Application Conference, Asilomar Conference Grounds, Pacific Grove, California, 21-26 September 1975.

5. Baker, J. S. and McIlraith, G. D., "Tire Disablements and Accidents on High Speed Roads," Paper to the 48th Annual SAE Meeting.

6. Condition of Tires after Accidents," University of North Dakota, 1968.

7. California Highway Patrol, "Operation 101, Final Report, Phase 1 - Background and accident analysis," Sacramento, 1966.

8. Tetelman, A. S., "An Engineering Analysis of the Risk Associated with Pitman Arm Separation in 1959-60 Model Year Cadillac Automobiles," U.S.A. vs. General Motors Corporation, January 1975.

9. Other studies have reported a higher tire associated accident rate when the study was restricted to superhighway driving experience. This data is not representative of total tire accident experience. Additionally, investigators have noted a tendency on the part of tollway drivers to file accident reports which overstate tire involvement for legal purposes. As such, this data source is not reliable. See A. J. Unione, Erdmann, R. C., "Risks Associated with Defective Tires," Journal of Safety Research, September 1977, p. 108.

REFERENCES, continued

10. National Safety Council, Accident Facts, 1978.

11. The extent to which FMVSS 109 will predict actual road performance is the subject of some controversy. The material in the text is presented as at least consistent with other evidence of improved tire safety.

12. Significance is defined using the χ^2 approach at the 95% level of confidence (one degree of freedom).

13. The recall extended from the end of 1975 to the beginning of 1977, with the bulk of the data occurring in model year 1976.

14. McCarthy, R. L., and Knauss, W. G., "An Engineering and Fracture Mechanics Analysis of the Pneumatic Tire: A Perspective on the Firestone 500 Radial Tire," Paper presented to the American Society of Mechanical Engineers, 1979.

15. Knauss, W. G., and Kyriakides, S., "A Study of Air Tower Pressure Gage Accuracy in the Los Angeles Basin," Pasadena, California, 1978.

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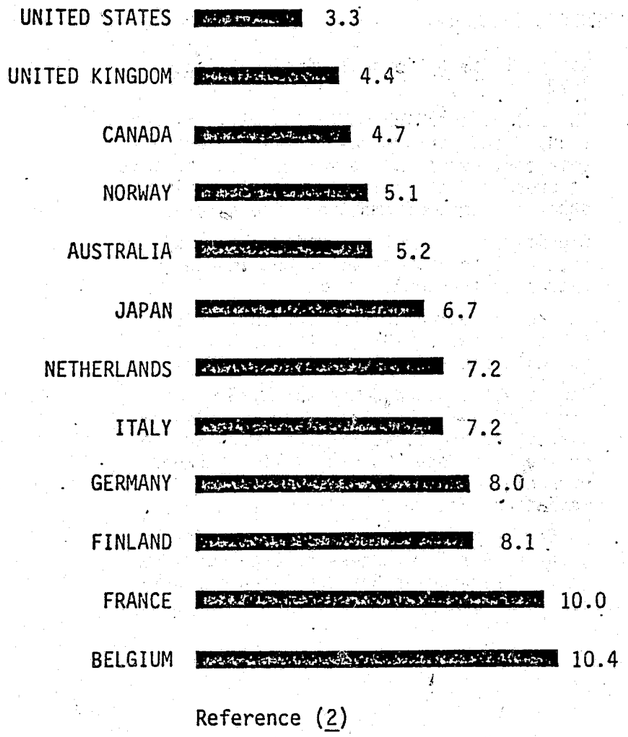

Reference (2)

Figure 1. Traffic fatality rate per 100 million miles (1976)

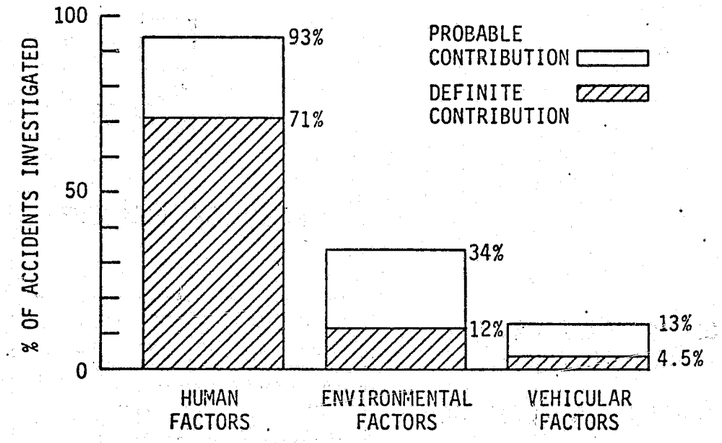

Figure 2. Human factors were definite or probable causes in 93% of accidents, compared to 34% for environmental factors, and 13% for vehicular factors

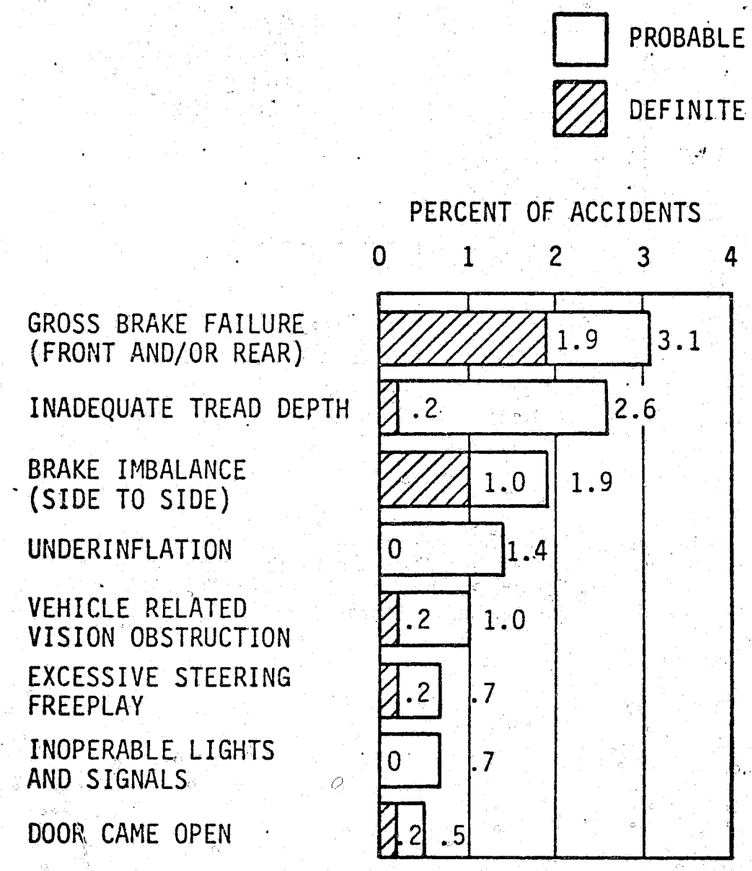

Figure 3. The eight specific vehicle causes most frequently identified by the in-depth team. Note definite accident involvement for both tire categories totals only .2%

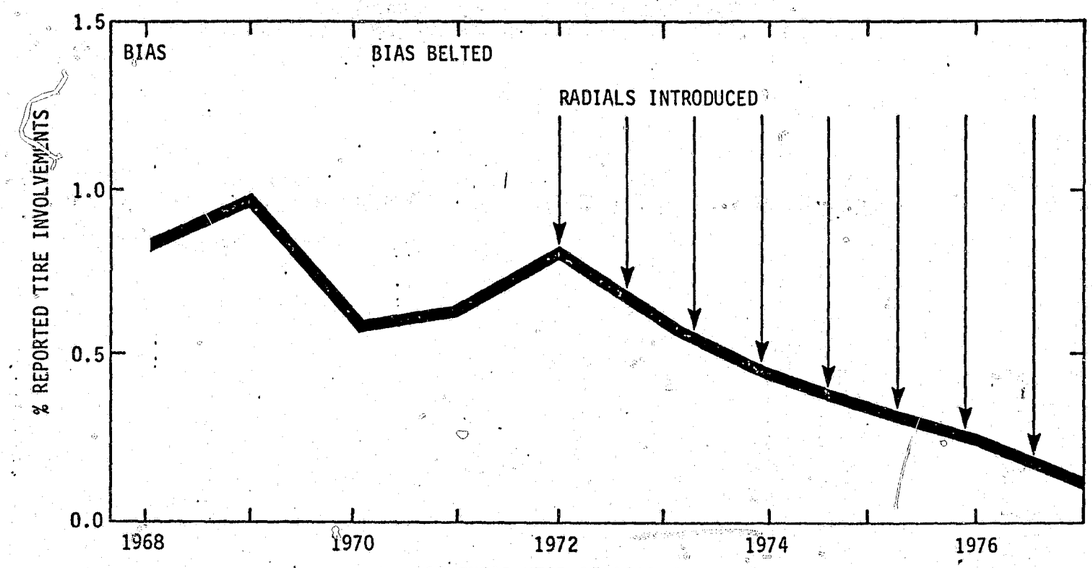

Figure 4. Tire associated accidents

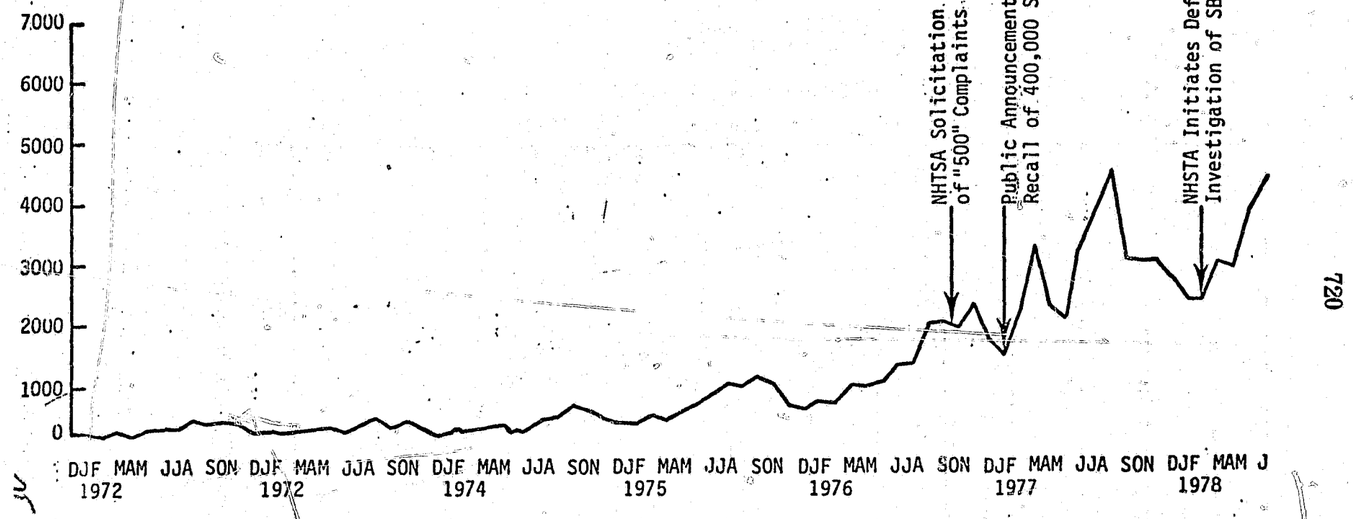

Figure 5. Total number of passenger tire complaints (received by month, 1972-1978), Firestone

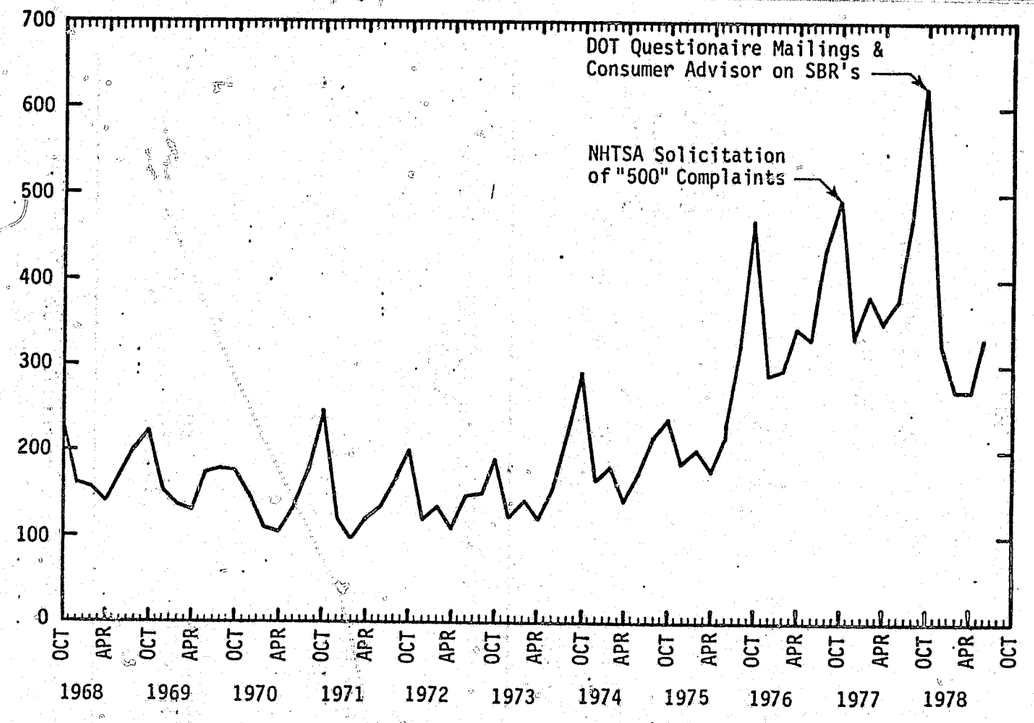

Figure 6. Total passenger tire adjustments reported every two months from unit and dollar adjustment loss reports (Firestone)

TABLE 1

TIRE ASSOCIATED ACCIDENTS
1975-1978

COMPARISON TIRES	1,275 / 407,820	=	0.31%
RECALLED FIRESTONE TIRES	91 / 45,952	=	0.20%

Statistically Significant Difference

TIRE ASSOCIATED ACCIDENTS (INJURY)
1975-1978

COMPARISON TIRES	487 / 407,820	=	0.12%
RECALLED FIRESTONE TIRES	40 / 45,952	=	0.09%

TIRE ASSOCIATED ACCIDENTS (FATAL)
1975-1978

COMPARISON TIRES	25 / 407,820	=	.006%
RECALLED FIRESTONE TIRES	1 / 45,952	=	.002%

TABLE 2
TIRE ASSOCIATED ACCIDENTS
BY ACCIDENT YEAR

	1975	1976	1977	1978
Comparison Tires	38 / 19,414	250 / 114,877	467 / 138,576	520 / 134,953
Percent	.20	.22	.34	.39
Recalled Firestone Tires	1 / 729	24 / 13,444	25 / 16,561	41 / 15,218
Percent	.14	.18	.15	.27

TIRE ASSOCIATED ACCIDENTS
(INJURY) - BY ACCIDENT YEAR

	1975	1976	1977	1978
Comparison Tires	17 / 19,414	102 / 114,877	185 / 138,576	183 / 134,953
Percent	.09	.09	.13	.14
Recalled Firestone Tires	0 / 729	11 / 13,444	12 / 16,561	17 / 15,218
Percent	0	.08	.07	.11

WORK HISTORY OF HAROLD LARSON

MAY [illegible] 1980

I started working for Johns-Manville in the Pittsburg, California plant in 1929, after a four year hitch in the U.S. Marine Corps.

My 38 years with Johns-Manville were all spent in the Roofing Department on various jobs from janitor to supervisor in the Roofing Department and Paint Shop.

The major raw materials used in making roll roofing and shingles included asbestos, asphalt, sand, slatedust, silica-flour, mica, schist, granules and various types of organic felt.

The jobs I had up to 1943 were in the worst asbestos and dust areas in the department. In 1943, I was promoted to Foreman so the dust conditions improved somewhat for me.

About 1951, a spot on one of my lungs showed up on a company X-ray examination. For several months, I went to a County Clinic in Pittsburg, once a week for examinations and check-ups. They also sent me to the County Hospital in Martinez for a thorough examination, but at no time was any diagnosis made of the spot on the lung. After several months, I changed to Dr. Stone's office in Oakland. (Dr. Stone was the doctor at the Pittsburg Clinic.)

As I recall, a sputum sample was put on a shelf to be cultured. After some time, Dr. Stone told me that I had T.B. Then I went to Alum Rock Sanitarium in San Jose for six weeks and then home for another 4 1/2 months, and then back to work.

I continued for several years for X-rays and check-ups at Dr. Stone's office in Oakland. Due to the distance to Oakland, I changed to Dr. Eldred in Concord for regular X-rays and examinations. In 1963, after being thoroughly examined by Dr. Eldred, he told me that I had cancer in my lungs, that he would have to remove one lung and then treat the other one.

After the operation, he told me he had some good and bad news for me. I did not have cancer or T.B., but there was something in my lungs that was unknown to him. A short time later, my brother, Haakon Larson, went to the hospital for a hernia operation. (He also worked for Johns-Manville.) During examinations at the hospital, they found that he had silicosis in both lungs, so the hernia operation was postponed. Dr. Eldred had a talk with my brother's doctor and it was agreed that the Larson brothers both had silicosis. In the summer of 1966, Mr. Jones, the Plant Manager, called me into his office. He wanted to know if I had given any thought to early retirement. As I was 61 1/2 years old at the time, I told him I had thought about it, but had no definite plans. On October 30, 1966, Mr. Jones called me to his office again, and he showed me

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papers that he had received from the New York office, what my retirement pay would be as of November 1, 1966, and that they would give me seven months severance pay. At no time did the question come up if I wanted to retire. October 30, 1966 was my last day at Johns-Manville.

Eddie Pierce, supervisor in the Paper Mill was appointed supervisor in the Roofing Department also. Six months later a son-in-law of a Johns-Manville director got the job as supervisor in the Roofing Department. Mr. Pierce went back to his own job on the Paper Mill. (Eddie Pierce died from asbestosis several years later.)

I filed suit against Johns-Manville and was awarded $6,500.00 through workers' compensation.

Harold B. Larson
4709 Tobi Drive
Concord, California 94521

NOTE: All medical expense is presently being paid by me, since my case was compromised and released in 1967.

Socializing Risk

editorial

THIS MONTH'S INVESTIGATIVE COVER STORY on the Love Canal episode illustrates in a particularly dramatic way the power of wrong-headed ideas.

To begin with there's the by-now routine assumption of corporate guilt by the news media. The Hooker Corporation has been accused, tried, and convicted in the court of public opinion, thanks to journalists who didn't even *look* for contrary evidence. Whatever is the outcome of the ongoing litigation of this case, it was never as cut-and-dried as the public has been led to believe. As our story reveals, plenty of evidence implicating parties other than Hooker was right there all along, in the public records in Niagara Falls.

Yet the term "Love Canal" has passed into the language as an exemplar of corporate irresponsibility. And because this myth is widely believed, we have now been blessed with something called the "superfund" law.

The superfund actually consists of two funds. One will pay for mishaps occurring at waste dumps that meet new federal standards; it will be financed by a tax on wastes deposited in those dumps. The other fund—paid for by a tax on chemical and oil companies and by all of us as income tax payers—will be used to clean up chemical spills and hazardous waste dumps.

What we have here is yet another instance of the socialization of a risky industrial situation. You know the pattern. A much-publicized accident or catastrophe leads to sympathy for the victims and thence to general demands to "do something" so that such situations won't occur again. The result is the creation of a new federal bureaucracy with the power to set and enforce safety standards—and an implicit or explicit limit on the liability of the potential wrongdoers.

We've seen this pattern repeated time and again. Air crashes in the 1920s led to a federal takeover of aviation safety, and successive crashes continue to yield increased power for the Federal Aviation Administration. The Thalidomide incident in 1961 led to the transformation of the Food and Drug Administration into a vastly more powerful regulatory body. The fear of nuclear accidents led to creation of the Atomic Energy Commission and its successor, the Nuclear Regulatory Commission, to limit liability for accidents and to set and enforce safety standards.

There is no question that these agencies are set up and reinforced in their powers in response to legitimate, often tragic, problems. And there is no question that they take their roles seriously and expend large sums of money in pursuit of their mandates. There is also no question that each has a substantial effect on the industry it regulates. But the important question to ask is whether this type of solution—bureaucratic regulation—is in *fact* the best way to deal with complex safety problems.

Evidence is accumulating that it is not. In aviation, major crashes keep occuring, all too often traceable (as in the 1979 DC-10 crash) to a breakdown of the FAA's safety regulation system. American consumers are denied access to hundreds of potentially life-saving drugs, due to the FDA's bureaucratic hyper-caution in approving them for use. And the nuclear power industry stands virtually paralyzed by regulatory delays and the aftermath of the Three Mile Island accident—an accident stemming directly from the nature of the regulatory system (see "Who Caused Three Mile Island?" REASON, Aug. 1980).

Moreover, consider the injustice built into such solutions. Instead of paying for their own standards development and safety research—as most other industries do—the aviation, pharmaceutical, and nuclear industries have managed to get the *taxpayers* to absorb varying amounts of this portion of their overhead. And as for the victims of disasters, how secure can such people (or their survivors) be, knowing that the offending firm can seek shelter in the defense that it met all the applicable government standards—however politically motivated, however ineptly administered those standards might be?

Yet it is just such a solution that has now been legislated for the toxic waste problem. All firms—responsible and irresponsible—will be taxed to pay for the misdeeds of the worst of them. So will each and every one of us. And any firm whose dump meets federal standards will escape liability for harm to others. In certain instances, liability will be explicitly limited.

What's the alternative? It's the same solution we have urged for the aviation, drug, and nuclear industries: *privatize* the risk, don't socialize it. The law should provide for strict and full liability for *all* harm caused by chemical dumps and spills, with no limits and no escape hatches (like "sovereign immunity"). If companies and government agencies stood thus naked before the law, what would be the result? We would have larger and more robust systems of insurance, and that in turn would require extensive private research and development efforts (on waste-disposal technology) and vastly improved information systems—paid for by the industry's customers, not taxpayers. Firms unable to satisfy safety experts and thus unable to get insurance would fall by the wayside as their capital dried up.

It's true that we can't afford "another Love Canal." But what that really means is that we can't afford to add to its legacy another costly bureaucracy that destroys incentives for responsible action while soothing the public with an aura of safety. Yet that seems to be just what Congress is giving us.

Robert Poole, Jr.

LOVE CANAL

The Truth Seeps Out

BY ERIC ZUESSE

Sowell makes many of the same arguments (see REASON interview, Dec.). Author Dr. Nathan Wrights, Jr., may well sum up this point of view when he argues that "black people cannot be subsidized into self-sufficiency."

Competition Not Illegal

In a major antitrust ruling, the Federal Trade Commission has decided that competitive practices leading to a large share of the market for a product does not violate the antitrust laws. The FTC made this ruling in finding that the DuPont Company had done nothing wrong in fighting hard to become the leading firm producing titanium dioxide. "The essence of the competitive process is to induce firms to become more efficient and to pass the benefits of the efficiency along to consumers," says the ruling. "That process would be ill-serviced by using antitrust to block hard, aggressive competition that is solidly based on efficiency and growth opportunities, even if monopoly is a possible result."

What's so strange about that? Only that it represents a stunning reversal of government policy. Ever since 1944 when Judge Learned Hand wrote the Supreme Court majority opinion in the Alcoa case, market domination per se has been taken as a measure of monopoly power and therefore considered illegitimate—even if obtained, as in Alcoa's case, purely by continuing technological innovation. The DuPont decision seems to be "an almost outright rejection of the Alcoa case," concedes Donald Baker, former head of the Antitrust Division of the Justice Department. All of which should be good news to America's leading technology firms—and their customers.

Milestones

• *Stevens Jailed.* New Hebrides revolt leader Jimmy Stevens (see our Sept. 1980 cover story) was sentenced to fourteen and a half years in jail and fined $30,000 for the crime of insurgency against the new Vanuatu government led by socialist Walter Lini.

• *Heroin Crimes.* Two recent studies show that drug addicts, particularly those on heroin, account for an astonishing number of street crimes annually. Some 239 heroin addicts were known to be responsible for about 80,000 criminal offenses in Miami, for instance. The addicts need to support their costly habits (about $150 a day) through such crimes. (And why is the habit so costly? Because it's illegal: by restricting supply, the government substantially raises drug prices.)

• *Judge Backs Disneyland.* Judge John K. Trotter, Orange County Superior Court judge, upheld Disneyland's right to prohibit couples of the same sex from dancing together on the park's dance floor. Two gay men had been stopped from joining the dancing couples and subsequently sued Disneyland, charging that their civil rights had been violated. Trotter ruled that the private park could set and enforce its own regulations, set up to protect the interests of other patrons. The Trotter decision will be appealed.

• *Vatican to Resurrect Galileo.* In 1633, Galileo Galilei was forced by the Dominican-led Inquisition to recant—under threat of death—his mathematical proof of Copernicus's thesis that the earth revolves around the sun, instead of vice versa. Since the early 1960s, Rev. Dominique Dubarle, a Dominican, has been attempting to get the Galileo trial reopened, and Pope John Paul II has finally agreed to do so. It is expected that the Catholic Church will officially concede that the earth does, indeed, revolve around the sun.

• *British Cable-TV.* The British government has given tentative permission for 12 cable-TV stations to operate for a period of two years in Britain—on certain conditions, naturally: that advertising is not allowed, that program schedules be submitted to the Home Office in advance, that strict limits be placed on the movies that can be shown, that exclusive rights to major events be barred, and that audience research and viewer complaints be forwarded to the Home Office. Censorship was never so delicately put.

• *3-D on Cable-TV.* SelecTV, a subscription television service in California with about 75,000 subscribers, is currently showing one 3-D movie a month to test subscriber response. Glasses are distributed through Sears, Roebuck & Co. with coupons that subscribers receive with their billing each month. SelecTV is not worried about commercial television competition, because federal regulations require networks to broadcast a clear picture, and the 3-D process involves sending out a split picture that becomes focused only when wearing the special glasses.

• *Laser Defenses.* The Defense Department is seriously looking into the technology for space-based, high-energy laser battle stations, as well as laser, particle-beam, and plasma weapons. Two firms, TRW and Hughes Aircraft, have submitted proposals saying a fully operational laser battle station could be developed and deployed by the end of the decade. The Advanced Research Projects Agency is responsible for making any recommendations to the Senate Armed Services Committee for funding to develop such systems.

• *NRC on TMI.* A Nuclear Regulatory Commission study of reported animal deformities, stillbirths, and "glowing" fish around Three Mile Island concluded that nuclear radiation did not cause the problems. Nutritional deficiencies and infectious diseases were the culprits of such problems, the NRC said.

• *Afghanistan Unity.* Former government minister Shamsuddin Majrooh, a respected 71-year-old elder, is leading an attempt to unite Afghanistan's 28 provinces and different tribes into a unified front to battle the Soviet invasion. Majrooh is trying to convene a *loya jirga,* a national council of representatives from all Afghan tribes, that would elect a president and a military commander and possibly form the basis of a new government.

• *French Minimum Wage Problems.* French economist Andre Fourcans recently wrote in the *Wall Street Journal* that his econometric analysis for the period 1969-77 clearly shows that "everything else being equal, the minimum wage increase appears to explain from 60% to 85% of the jump we [France] experienced in the unemployment rates for young males and females between 1973 and 1977." The minimum wage floor was raised by 285 percent during those years, while the consumer price index increased by 141 percent.

• *Car Quotas and Competition.* A recent *Washington Post* editorial dittoed the US International Trade Commission's recommendation not to protect the American auto industry from car imports. The *Post* blamed the US car companies' economic woes on their failure to produce smaller cars as quickly as foreign markets did, and opined that "Economic growth in a competitive, open market offers the American automobile makers far more than any import quotas can."

• *Banking Protectionism.* A Senate Banking Committee staff report criticized the Office of the Comptroller of the Currency for being "more interested in protecting existing banks during [the 1970s] than in promoting competition and meeting the banking needs of the public." Sen. William Proxmire said he plans to hold hearings this year on legislation to alter federal bank-chartering statutes. The report was based on a review of nearly 1,000 chartering decisions between 1970 and 1977.

• *Intermodal Ownership Okayed.* Sen. George McGovern (D-S.D.), of all people, added a provision to the recently passed rail deregulation bill allowing railroads to acquire trucking subsidiaries to haul freight betwen main rail lines. A small catch though: affected shippers must approve.

—Robert Poole, Jr., and Christine Dorffi

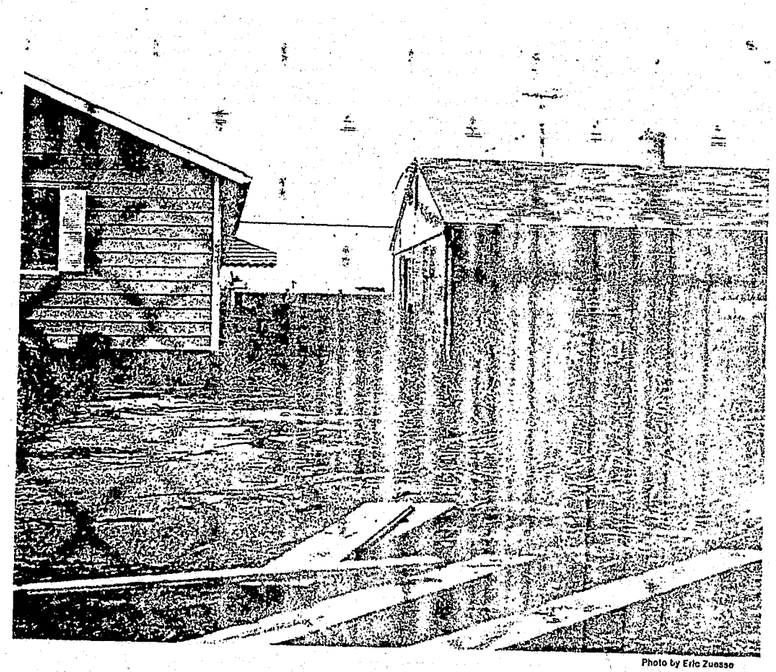


Photo by Eric Zuesse

You're about to be untricked. If you believe that the guilty party in the Love Canal tragedy is the Hooker Chemicals & Plastics Corporation, which the Justice Department is suing, rather than the Niagara Falls Board of Education, which bought the dump from Hooker in 1953; or if you believe that Michael Brown's famous book that has become the popular authority on the whole mess, *Laying Waste: The Poisoning of America by Toxic Chemicals,* sets out the truth, the whole truth, and nothing but the truth about

Love Canal, then you've been snookered. In fact, as I'm going to show, hardly ever has there been a more blatant example of Big Brother successfully hiding the skeletons in his closet or of a gullible investigative reporter and compliant major media going along with the cover-up so that a bunch of bureaucrats can pass the buck to some bewildered private interest. The irony is that the target of this particular smear, Hooker Chemicals, may very well have botched others of its many chemical dumps, but not Love Canal, the very site that has brought the company so much adverse publicity and a flood of government and private lawsuits.

I first suspected that something might be wrong with the press reports about Love Canal—I had not yet read Michael Brown's book—when I noticed that only passing mention was being made of the fact that the Niagara Falls Board of Education has owned the site since 1953. Twenty-plus years after Hooker deeded the property to the Board, the Canal is seeping huge quantities of poisonous chemicals. These toxic substances have been down there a long time, I thought. Why are they percolating up only after such a long sleep? Could something have disturbed the chemicals buried there? Or was the oozing inevitable? Had Hooker unloaded the property on the School Board back in the '50s, hoping to avert the very claims for damages now being pressed against it?

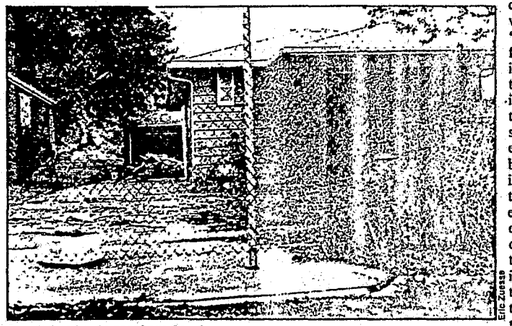
My curiosity sparked, I obtained a copy of the Love Canal deed. It opens: "This Indenture [is] made the 28th day of April, Nineteen Hundred and Fifty Three, between Hooker Electrochemical Company...and the Board of Education of the School District of the City of Niagara Falls, New York," which would, "in consideration of One Dollar" paid to Hooker, receive title to the described property. The kicker is the deed's closing paragraph:

> *Prior to the delivery of this instrument of conveyance, the grantee herein has been advised by the grantor that the premises above described have been filled, in whole or in part, to the present grade level thereof with waste products resulting from the manufacturing of chemicals by the grantor at its plant in the City of Niagara Falls, New York, and the grantee assumes all risk and liability incident to the use thereof. It is therefore understood and agreed that, as a part of the consideration for this conveyance and as a condition thereof, no claim, suit, action or demand of any nature whatsoever shall ever be made by the grantee, its successors or assigns, against the grantor, its successors or assigns, for injury to a person or persons, including death resulting therefrom, or loss of or damage to property caused by, in connection with or by reason of the presence of said industrial wastes. It is further agreed as a condition hereof that each subsequent conveyance of the aforesaid lands shall be made subject to the foregoing provisions and conditions.*

So Hooker had shifted to the Board "all risk and liability incident to the use" of the property. In addition, the deed specified that the future owner(s) of the property could not make any claims against Hooker for injury or death or property damage arising even from "the *presence* of said industrial wastes." It's not surprising that Hooker would have wanted this shift of liability incorporated into the deed. After all, it had made clear that these "waste products resulting from the manufacturing of chemicals" could cause not only property damage but "injury" and "death." That's pretty dangerous stuff.

Looked at one way, these provisions would seem to indicate that Hooker had been quite anxious to unburden itself of responsibility for this property. On the other hand, since the first condition, assumption of liability for use, only makes explicit what normally accompanies any property exchange, and since the second would protect Hooker only from claims made by the Board and subsequent owners, and not from claims by third parties, it would seem that these provisions are more in the nature of a warning. By incorporating them into the deed, Hooker had provided clear notice, recorded for all time, that its use of this property had been such that any future owner would have to take care to use it in a safe manner so as to avoid causing harm.

Certainly the last sentence in the indenture must be interpreted in this way. Not only the School Board but "its successors and assigns"—any future holder of the property obtaining rights to the Canal after or from the Board—had already been drawn into the shift of liability. So why add the closing sentence, about "each subsequent conveyance of the property"? The concern seems to have been with preventing catastrophe to innocent third parties by making sure that, down through all future generations, whoever obtained this property would be warned that it contains dangerous chemicals and reminded of the corresponding obligation to use it in a manner reflecting this hazard. So the inclusion of that last sentence in the deed doesn't fit in very well with the ruthless and negligent attitude I'd been led by most press accounts to



Boarded-up house near Love Canal

believe that Hooker has been displaying in the Love Canal matter.

Ruthless and negligent? As I was subsequently to learn, Hooker had evidently been so concerned that the Board know what it was getting in taking over the Canal that the company had not left to chance whether School Board officials would physically inspect the property prior to acquiring it. Instead, Hooker had escorted them to the Canal site and in their presence made eight test borings—into the protective clay cover that the company had laid over the Canal, and into the surrounding area. At two spots, directly over Hooker's wastes, chemicals were encountered four feet below the surface. At the other spots, to the sides of the Canal proper, no chemicals showed up.

So whether or not the School Board was of a mind to inspect the Canal, Hooker had gone out of its way to make sure that they *did* inspect it and that they did see that *chemicals* lay buried in that Canal. Yet the subsequent behavior of the School Board would lead the casual observer to conclude that its members never knew the facts about the property they were acquiring.

I decided to try to talk with some of the people who sat on the Board during the key years of 1952 through 1957 and so had first-hand knowledge of the events. In the latter year, the Board was debating whether to sell portions of the Love Canal to real estate developers; Hooker officials came to the Board meetings to urge that these sales not be consummated. For this and other reasons, 1957 served as a turning point in the history of the Love Canal—the beginning of its precipitous slide into becoming a hell-pit.

I introduced myself to the first former member of the School Board I'd managed to track down and get on the phone, Peter Longhine, by saying that I was a reporter who wished to speak with someone with first-hand knowledge of the Board's transactions with Hooker. That's all—I made no mention of courts, legal liability for Love Canal, or anything even remotely threatening. But Longhine would say only:

> *I don't want to get involved in giving any court testimony. It's better to let sleeping dogs lie. But I can tell you one thing—the Board of Ed didn't do anything wrong. Anyway, we don't have any legal responsibility for it.*

This seemed to me an odd reaction, considering that I had just introduced myself and had not suggested even remotely that the Board of Education was in any way culpable, much less legally liable.

I got another former School Board member on the phone, Dr. Robert Brezing. This time, I wasn't even able to finish my introduction. He abruptly hung up the phone, and I found myself trying to protest to a dial-tone. Now I knew that something was fishy. I packed my bags, camera, and cassette recorder and left for Niagara Falls.

> *"It's better to let sleeping dogs lie," a former Board member told me. "But I can tell you one thing—the Board of Ed didn't do anything wrong."*

The first thing that struck this newcomer about the town of Niagara Falls was how very normal the place is. Because of its famous namesake falls, I had expected the town itself to have a character different from your typical American small city, but that's just what the place turned out to be. The people, I found, are pleasantly friendly and open, and if there is a wrong side of the tracks anywhere to the right or left of Main Street, it's hard to find.

Visually, it would perhaps be more accurate to describe Niagara Falls not as a small city so much as an endlessly sprawling suburb of 75,000 people without a core city. There are only two commercial streets, Main and Pine, both of which intrude upon otherwise uninterrupted expanses of suburban-style houses, which extend row upon row on each side of the two chief thoroughfares. In any event, whether it's seen as a town or merely as a suburb without a city, Niagara Falls struck me as a singularly odd kind of place to serve as a bellwether for the souring of America's dream of an insect-free plasticized world—"better living through chemistry," to quote the commercial from DuPont. There's an irony to this place: on the one side of town is the eternal majesty of nature grandly displayed in the water tumbling over the Niagara escarpment; across the city stands a stark symbol of the incompetence and perhaps greed of man—the acrid fumes and boarded up houses along the periphery of the now-infamous chemical ditch.

But as it turns out, that festering blister of the industrial age known as Love Canal isn't quite as incongruous a fixture in Niagara Falls as it might seem at first blush. You don't have to be around this place long but you'll hear about how the local economy was built even more upon the chemical industry than upon tourism. Back in the 1950s, the locals will tell you, the putrid air from the industrial stacks made the eyes and lungs continually smart. The smog was so bad that the city was recognizable from an approaching plane by the dark grayish-brown cloud of pollution that blanketed the earth below.

Of course, this was in an era when *conservation* meant leaving the wild bears alone, *nutrition* meant "fruit, cereal, milk, bread, and butter," and *pollution* was a term that only communists, oddballs, or crazy people ever used. Niagara Falls considered itself fortunate back then to be one of the capitals of the world's chemical industry. The townspeople felt proud to be in the vanguard of the coming technological society. When the Atomic Energy Commission handed out awards to Niagara Falls chemical plants for work on radioactive substances, it made page-one headlines in the local newspapers. Chemical row along Buffalo Avenue, which skirts the southernmost edge of town bordering the Niagara River, was not only the Falls area's chief source of employment but also a source of considerable civic pride.

Now, however, the long-anticipated chemical future has at last come to the world, and a lot of people

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in Niagara Falls are finding that they don't like it. The theory used to be that industrial wastes need only be shoved under the rug and they would be gone. Out of sight was out of mind. But as events at Love Canal and elsewhere were ultimately to make clear, today's far-away rural chemical dump is tomorrow's suburb, where you may someday live and where your children may end up going to school.

Of course, many people don't care about tomorrow and never did. According to the popular wisdom, this kind of dangerous shortsightedness is an attribute of private businesses more than of governmental bodies, and this perception has colored the way the Love Canal story has been reported. But my own investigation shows that this popular interpretation of the Love Canal tragedy is 180 degrees off.

Back at the turn of the century, an ambitious entrepreneur by the name of William Love envisioned building a huge hydroelectric project in the Niagara Falls area. Thomas Edison had just harnessed the force of electricity; but because the state-of-the-art allowed only for transmission by direct current, which was uneconomic over long distances, industries had to be located near the source of electrical generation. Love planned his hydroelectric canal project as a means of supplying this electrical power to nearby industry and even dreamed that his "Love's Canal" would become the basis for a booming model city. But the economic recession of 1894 and Nikola Tesla's pioneering system of alternating current, which facilitated transmission of electricity over long distances, combined to bankrupt Love's canal after only short segments of it had been dug. The 3,200-foot-long section that Hooker started filling with waste chemicals in 1942 has now come to be known internationally as *the* Love Canal.

Hooker says that it chose the site because the soil characteristic of the area—impermeable clay—and the sparse population surrounding the Canal at the time made the pit outstandingly suitable for disposing of dangerous chemical wastes. The customary practices then were to pile up such wastes in unlined surface impoundments, insecure lagoons, or pits, usually on the premises of the chemical factory, or else to burn the wastes or dump them into rivers or lakes. Except for disposal into water supplies, these practices were all legal until 1980, when the Environmental Protection Agency began issuing regulations implementing the Resource Conservation and Recovery Act of 1976. The EPA estimates that 90 percent of chemical wastes are currently being disposed of in ways that do not meet its proposed standards (controlled incineration, treatment to render the waste nonhazardous, secure landfills, or recovery). An attorney I spoke with from the New York State Department of Environmental Conservation told me that "at least 50 percent of chemical waste dumping [in that state] is contracted out to organized crime." If true, however, such was not to be the case with Love Canal.

Hooker in 1941 began studies of the suitability of using the Canal as a chemical dump. The findings were affirmative, and by April of the next year the company completed the legal transactions to commence dumping what ultimately amounted to approximately 21,800 tons of the company's waste before the Canal property (which included a strip of land on either side of the Canal) was donated by Hooker to the Niagara Falls Board of Education in 1953, under pressure from the Board that if Hooker didn't willingly deed the land the property would be seized under eminent domain for the building of a school.

It's also worth noting here that other wastes besides these 21,800 tons from Hooker have apparently been dumped into the Canal. According to New York State officials, federal agencies, especially the Army, disposed of toxic chemical wastes there during and after World War II. The city of Niagara Falls also regularly unloaded its municipal refuse into this Hooker-owned pit.

There were two reasons why the School Board wanted to acquire Hooker's Love Canal property. One was that the postwar baby boom had produced a need for construction of more schools, and virtually every available open lot of suitable size was being eyed voraciously by the Board of Ed's Buildings and Grounds Committee for possible construction of new schools. The other was that since the area was not built up (one of Hooker's reported criteria for the site's suitability), land prices around this dumpsite were low, and the Board was strapped for cash. On October 16, 1952, the very same day that Hooker sent a letter to the Board of Education agreeing to donate the Canal property for the token price of $1.00, the Board itself recorded, in its minutes for that evening's meeting, that "a communication was received from the Niagara Falls Teachers Association stating that teachers are becoming more and more uneasy because of their uncertain financial prospects."

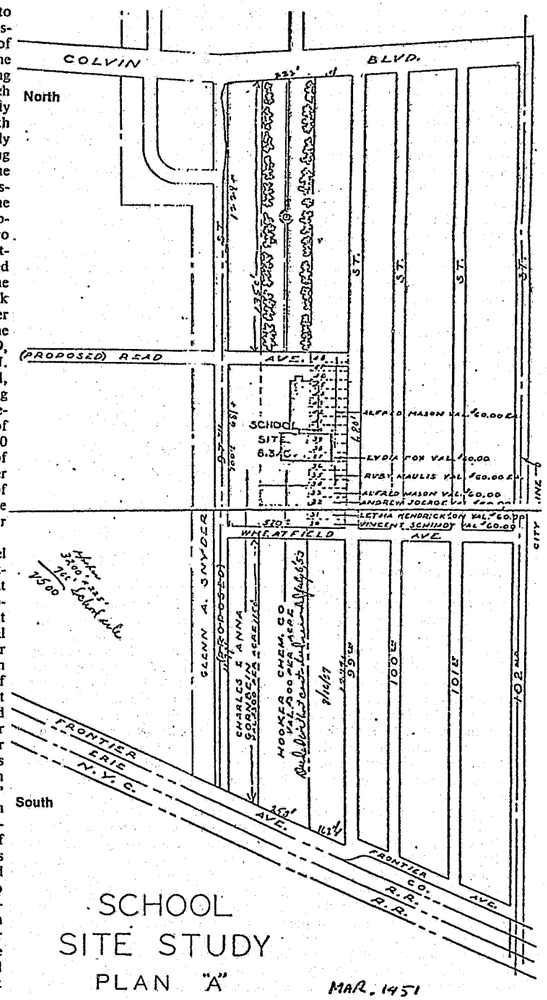
Looking over the School Board minutes from the early '50s, one notes two concerns that dominated and practically obliterated all others: construction of new buildings, and overcoming the monetary shortage. There is no indication that any long-term consequences were being thought of; the attitude seems to have been that the future could take care of itself. For example, the 99th Street School, which was built beside Love Canal, was being planned by the School Board simultaneously with the planning for another, the 66th Street School; and the *Niagara Gazette* reported on September 13, 1978, that high radiation had been found at that other location. It turns out that this school also may have been built upon a former dumpsite. The Board of Ed's deed to the site (donated by the federal government) refers to the presence of radioactive substances.

The negotiations that culminated in Hooker's transfer of the Love Canal property to the Board of Education took place over a period of several years. The contemporary documentary record is very sparse, consisting of three perfunctory letters and the deed itself. Virtually all of the negotiations were verbal rather than written.

One thing, however, is clear: according to the School Board's own records, the Board was already well along in its planning of the 99th Street School more than two years

before Hooker deeded the Canal to the Board. And the Board meant business. It was gearing up for a string of condemnation proceedings for the Canal site and all properties abutting it. First, there's a map, dated March 1951 and labeled "School Site Study Plan A" (Plan B was for the 66th Street School). This map not only shows the projected school being built right over the very center of the Canal itself but also shows the assessed condemnation values for the Canal property and each of the properties bordering it. Then there are two letters from the School Board's attorney, Ralph Boniello—one dated September 4, 1952, informing the Board's business manager, Frank Lang, that procedures were under way to purchase four lots abutting the Canal; the other dated September 19, 1952, addressed to Mr. Carmen J. Caggiano and sent registered mail, return receipt requested, informing Mr. Caggiano that since he had refused the Board's "price offered of $10 per front foot" for the strip of 10 lots he owned along the east side of the Canal, "The purpose of this letter is to apprise you of the institution of an action in condemnation to acquire the above-described property for educational purposes."

According to reporter Michael Brown, in his book and other writings, the School Board's attorney at the time denies that the threat of property condemnation was ever held out against Hooker for the Love Canal site. Brown neither questions nor documents this. Yet when Hooker, in 1957, addressed to the president of the Board of Education a letter that was read out loud and passed around at the Board's meeting on November 21 of that year, and when that letter recalled that in 1952 Board officials had threatened "that condemnation proceedings might be resorted to," there wasn't a peep of protest from any Board member or official present—not from Wesley Kester, head of the Board's Buildings and Grounds Committee in 1957, who had served in the same capacity in 1952 and so must have been very prominently involved in the negotiations with Hooker at the time; not from Arthur Silberberg, another member of the same committee who had also served in the same capacity throughout that



period with the Board; not from Frank Lang, a Board member who had served as manager of business affairs throughout the period and was always involved in such matters as property condemnations; not from William Small, who was superintendent of schools throughout the period and who had personally accompanied Hooker's executive vice-president, Bjarne Klaussen, to Love Canal in March 1952 when the test-holes were bored into the clay cover over the Canal and into the surrounding area to check for chemical leakage; not from the Board's attorney, William Salacuse, who had been its president back in 1952 and who had also been present at that test at the Canal site; not from anyone at all, though the printed minutes of that evening's Board meeting make conspicuous mention of this letter from Hooker.

One might wonder why Hooker deeded the property to the School Board for $1.00 rather than let it be condemned and seized under eminent domain. After all, condemnation would clearly have freed the company from future liability for the chemical dump, saving Hooker the trouble of spelling out such matters in the deed.

Hooker claims that it had wanted any future propertyholder there to know of the dangerous chemicals and that it had therefore agreed to donate the property, subject to the Board's recognition that, to quote Hooker's letter of October 16, 1952, to the Board, "in view of the nature of the property and the purposes for which it has been used, it will be necessary for us to have special provisions incorporated into the deed with respect to the use of the property and other pertinent matters." Had the land been condemned and seized, says Hooker, the company would have been unable to air its concerns to all future owners of the property. It is difficult to see any other reason for what it did.

The School Board, however, ultimately refused to accept the special provisions proposed by Hooker concerning the use of the property. Hooker wanted to require that the donated premises "be used for park purposes only, in conjunction with a school building to be constructed upon premises in proximity to" them. And it wanted the Board to agree that, should the property ever cease serving as a park, title to it would revert to Hooker. Instead of these restrictions, which the Board rejected, the company had to settle for the liability provisions and warnings in the last paragraph of the deed hammered out in meetings between Hooker and Board representatives.

On April 28, 1953, Hooker's secretary and general counsel, Ansley Wilcox—the same man who later, as the company's vice-president and general counsel, was to be the author of the letter read out at the meeting of the Board of Ed on November 21, 1957—submitted to the Board the final draft of the deed. Nine days later, the Board's attorney, Mr. Bonello, wrote to the Board that, because of the provisions contained in the deed's closing paragraph, "In the event that the Board shall accept this deed, it is my opinion that there is placed upon the Board the risk and possible liability to persons and/or property injured or damaged as a result thereof arising out of the presence and existence of the waste products and chemicals upon the said lands referred to in the said deed." In short, the Board's own attorney at the time was emphasizing to his client that if it were to accept the Canal it would be getting as part of the package liability for personal and property damage, as ultimately happened to homeowners in the area surrounding the Love Canal.

According to the School Board's own records, the Board was already well along in its planning of the 99th Street School more than two years before Hooker deeded the Canal to the Board.

Nonetheless, on May 7, 1953, the Board voted unanimously to accept the deed. Similarly, the Board had voted unanimously to accept the deed to the site of the 66th Street School; that deed's reference to radioactivity at the site served as no deterrent either. Both sites, incidentally, had already, on December 30, 1952, been approved by the Niagara Falls Planning Board.

In August 1953, before construction work had begun on the school, the Board voted (unanimously) to remove 4,000 cubic yards of "fill from the Love Canal to complete the top grading" at another school, on 93rd Street, whose construction was already well under way. This school, like the one on 99th Street nearby, is now closed down because of public concerns about the school children's exposure to chemical waste residues.

On January 21, 1954, the Board approved the removal of 3,000 more cubic yards of fill from the Love Canal. On the same date, the architect for the 99th Street School wrote to Board member Wesley Kester, chairman of the Buildings Committee, saying that

> *the General Contractor...hit a soft spot in the ground. This turned out to be a filled drain trench which gave off a strong chemical odor. Upon further investigation the excavator made contact with a pit filled with chemicals and immediately stopped work in this area. The General Contractor contacted one of his employees who formerly worked on this property for one of the former owners. From this man we learned that...these pits were filled with chemical waste, some of which was in 55 gallon drums.*

Suggesting that these chemicals "might be a detriment to the concrete foundations," the architect advised soil tests with a view toward possible "revisions of building location," and the building was shifted 30 feet eastward.

When the *Buffalo Courier-Express,* in the wake of the recent recognition of chemical seepage in the Love Canal area, interviewed the architect about this in 1980, he "said the records indicated only 'poor soil conditions' as the reason for the move." The newspaper's reporters didn't say that this was a gross understatement, apparently because they had never gone to the Board of Education to see the letter from which I've just quoted, which shows that the records indicate a lot more than just "poor soil conditions."

A set of architect's plans dated August 18, 1955, reveals that another 10,000 cubic yards of soil were to be removed from the top of the Canal in order to grade the surrounding area. Part of the area from which this soil was to be scooped out had been filled with Hooker's wastes. The grading was executed as shown in these plans. Later in the year, the Buildings and Grounds Committee donated some of the property immediately surrounding the school to the city so that streets and sidewalks could be paved. (The school building had been completed and its doors opened to 500 students in February 1955.)

On June 25, 1956, the architect wrote to the contractor for the school's playground, changing the location of the kindergarten play area "so as not to interfere with the apparent chemical deposit" and informing him that "this revision has been approved by Dr. Small, Superintendent of Schools." In an October report on this contractor's work, the architect reiterated that "these changes were discussed with school authorities" and had been made "because a chemical dump occurred at the originally located play area." The architect further pointed out that "these chemical pits are continuously settling."

The whole character of this correspondence between the architect and the Board and contractors is in the manner of a somnambulist executing his accustomed routines, as in a deep, quiet fog that is never interrupted by the sound of the 55-gallon drums clanking around in the pits. One would be led to believe that they had signed the Love Canal deed with their eyes closed and their ears shut. The superintendent of schools approved relocation of the play areas so as to avoid "chemical deposits" and "chemical pits" and never once took it upon himself to advise the architect that more was at stake here than "detriment to the concrete foundations" due to "chemical pits...continuously settling." It is evident that the architect had never seen the deed. He and the contractor had to *discover* that this place had once been a chemical dump. The superintendent *knew* that it had been; he had been present at the drilling of test holes at the site; he had read the deed but evidently never imparted any wisdom therefrom to the architect or the contractor. He didn't tell them, for example, about the danger of injury or death.

The Board was finally jarred awake in November 1957. The precipitating event was a proposal from two developers who owned land on another site that the Board was hungrily eyeing. The developers had suggested a trade whereby they would have gotten chunks of the Love Canal property in return for their properties plus some cash. The deal would have netted the Board $11,000, and Wesley Kester and the rest of the Buildings and Grounds Committee were strongly in favor of it. But Hooker got wind of the proposal and was just as strongly opposed.

Hooker sent its attorney, Arthur Chambers, to attend the meeting of the Board on November 7. As reported in the *Niagara Gazette* the next day, Chambers admonished the Board of Education that it had "a certain moral responsibility in the disposition of the land." After reminding the Board that chemicals were buried under the surface, he explained that this "made the land unsuitable for construction in which basements, water lines, sewers and such underground facilities would be necessary." He referred to "negotiations at the time the land was deeded to the board," in which Hooker had urged that it be used only for surface constructions or parks. According to the Board minutes from that evening, Mr. Chambers conceded "that his company could not prevent the Board from selling the land or from doing anything they wanted to with it," but he made clear Hooker's "intent that this property be used for a school and for parking. He further stated that they feel the property should not be divided for the purpose of building homes and hoped that no one will be injured."

The head of the Buildings and Grounds Committee, Wesley Kester, was furious. According to the article in the *Niagara Gazette,* he spluttered, "The land is a liability to us. There's something fishy someplace. Now they tell us it shouldn't be used." The battle lines were now clearly drawn.

Hooker was determined to prevent, if it could, the selling of this land to subdividers. The showdown came at the Board meeting of November 21. Arthur Chambers again made his appearance, this time reinforced with a lengthy letter from the company's vice-president, Ansley Wilcox, in which the Board was reminded in no uncertain terms of the details of the mostly verbal negotiations and unwritten promises that had preceded the transfer of this property to the Board more than four years earlier. In addition, Hooker's position on the proposed sale was again stated. According to the Board minutes, "They

School closed down due to chemicals from Love Canal

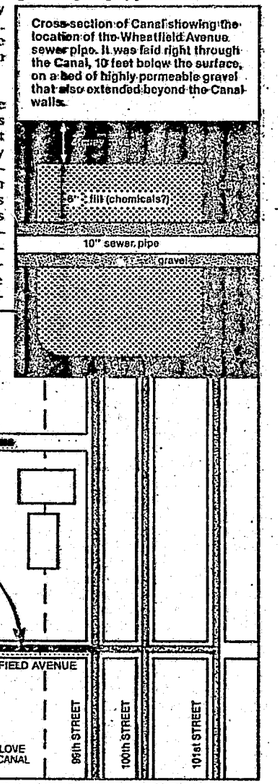
feel very strongly that subsoil conditions make any excavation undesirable and possibly hazardous." As the *Niagara Gazette* quoted him the next day, Chambers told the Board, "There are dangerous chemicals buried there in drums, in loose form, in solids and liquids," The *Buffalo Courier-Express,* too, referred to Chambers's speech about this "chemical-laden ground."

But perhaps the deciding factor in the Board's ultimate vote wasn't the address by Arthur Chambers so much as the letter from Ansley Wilcox. Now even Wesley Kester's memory was refreshed. One no longer heard from him, "Now they tell us...," since, as Wilcox pointed out, they'd told it all before.

As I stated earlier, Wilcox's letter was being heard this evening by an audience that included, besides Kester himself, other key people on the Board who had been involved in the negotiations with Hooker during 1952 and 1953. It contains the most thorough recounting of these negotiations on record anywhere, and the officials present protested not a single item in Hooker's recounting—not that Hooker had been approached by Dr. Small and other representatives of the Board in the interest of acquiring the property; nor that Hooker had "explained in detail to Dr. Small the use which we were making of the property"; nor that Hooker had expressed its reluctance "to sell the same, feeling that it should not be used for the erection of any structures"; nor that the School Board was nevertheless "so desirous of acquiring the same" that its representatives had brought up the option of condemnation proceedings; nor that Hooker had then agreed to donate the property subject to certain restrictions upon its use; nor that Hooker had proposed and the Board had refused to agree that the Love Canal property be used "for park purposes only" and that the school building be constructed only on premises "in proximity to" the same; nor that any of these events had transpired in the way described, which indeed made Hooker look like the opposite of the negligent and shortsighted company it is now widely thought to have been. In fact, as evidenced by Wilcox's letter, Hooker was adamant in its long-range view, noting "that even though great care might be taken" in development of the property, "as time passes the possible hazards might be overlooked *[and]* injury to either persons or property might result." (See p. 29 for full text of letter.)

The Board's vote that evening was practically unprecedented. They split 4 to 4, with one member abstaining, and thus failed to pass Wesley Kester's resolution to sell the land. For once, the Board did not vote unanimously; they had been shaken awake from their slumber.

As it turns out, these tumultuous Board meetings of November 1957 were just so much "sound and fury signifying nothing," anyway. Apparently unbeknownst to Hooker, on the very same two November days when the company's representatives were urging the Board that the subsurface chemicals made the land unsuitable for underground construction, city workmen were busy at the Canal constructing a sewer that punctured both of its walls and the clay cover. From September through December 1957, work was in progress on this sanitary sewer between 97th and 99th streets beneath Wheatfield Avenue, a soon-to-be-paved street that lay right across the middle of the Canal property. This sewer pipe was laid 10 feet below the surface, on a gravel bed, and covered with gravel, providing a highly permeable violation

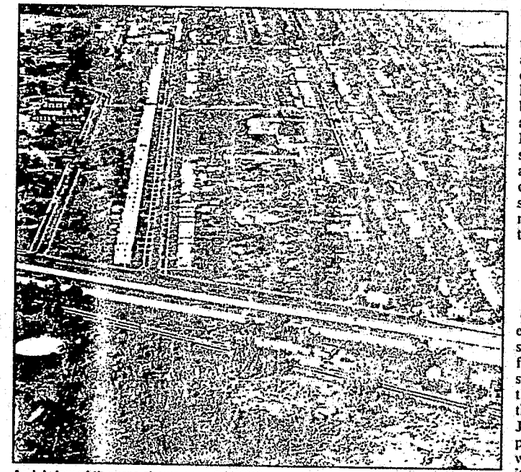


Map showing the location of sewers that pierced the Canal walls and linked up to the neighborhood sewer system

of both Canal walls. Any loose and liquid chemicals buried in this part of the Canal could now escape, flowing along the gravel sewer-bed not only under Wheatfield but also under 97th and 99th streets, and so throughout the neighborhood. To top this all off, a manhole was dug from the top of the Canal down through the fill to this sewer system 10 feet below the surface.

Whether or not any of Hooker's chemicals were in fact buried in this part of the Canal is not clear from public records. Hooker says that its practice was to fill various parts of the Canal, creating an earthen dam with clay, pumping out the standing water, dumping waste to within four feet of the surface, then covering the section with clay. From Board of Education maps indicating the approximate location of Hooker and city wastes in the Canal, and another map showing the location of streets and the 99th Street School, it can be estimated that Wheatfield Avenue crossed over the Canal at a spot just south of a Hooker dumping area. It is doubtful, however, that these maps are precise enough to make a positive determination. One of them carries a notation showing that the Hooker dumping spot in question—the same one that, by the same approximations, would have been invaded at its northern end during construction of the school building—was used by Hooker to dispose of "fly ash, trash, and HGI spent cake," the latter, according to a Hooker spokesman, being an abbreviation for lindane (a chlorinated hydrocarbon pesticide more toxic than DDT).

Whether or not this sewer was laid through Hooker chemicals, however, one thing *is* clear from the record: Hooker was opposed to *any* construction through *any* part of the Canal, precisely because of such risks. And work on this sewer system was being done by the city of Niagara Falls at the same time as the warnings that such construction was "dangerous," "injurious," and not "safe" were appearing in the local newspapers. But nobody made the connection; it is as though the printed word had not existed. The sleepwalkers kept bumping around in the night. Hooker was protesting into an abyss; no one was there who would hear and who would make connections between the real world and the printed warnings. Yet now Hooker is being excoriated.



Aerial view of the area shown on p. 24 (1978)

This marked the first time in history that the Canal walls had been penetrated. Maps in the city engineer's office show that there were no sewers into the Canal before this one. But another was soon to be built. This was a storm sewer, under Read Avenue. It was put in between May and September 1960 and penetrated only the west Canal wall, running from a catch basin sunk into the Canal, out to 97th Street. Again, the sewer-bed was gravel.

The drawings of these sewers are available for public inspection at the office of the city engineer in the town hall. One member of the public who, it seems, never cared to look at them—nor at the voluminous printed records and correspondence regarding Love Canal that are also available at the Board of Education—is Michael Brown, the author of the Pulitzer-prize-nominated book on the subject of waste dumping.

In addition to these publicly recorded breaches of the Canal walls, there were two other, though lesser, man-made incursions upon the surface of the Canal: one a French drain that the School Board had placed around the school, the other an illegal catch basin put in by a 97th Street homeowner. Both of these were noted by Stephen Lester, who, under the auspices of the New York State Department of Transportation, served as a consultant to Love Canal area residents during remedial work on the Canal. Of course, like the sewers put in by the city, Hooker had nothing to do with these constructions.

Following Hooker's successful defeat of the Buildings and Grounds Committee's proposal to sell Love Canal property to developers in 1957, the Board sought every means possible to transfer liability for the property to somebody else. They wanted to dump the Canal like a hot potato. First, they tried to palm it off onto the local Junior Chamber of Commerce for a playground area. But the Jaycees wouldn't move ahead without liability insurance, which, it seems, no firm was willing to supply. So that

deal fell through. Then, on June 2, 1960, the Board "dedicated to the City" the section of Canal property that lay north of the school. Hooker's restrictive provisions were included in the deed.

All that remained to unload now was the southern section. This was put up for public auction in December 1961. On the bidding sheet was duly imprinted the last paragraph of the deed from Hooker, with all those ghoulish warnings, and with one revealing addition: the indemnification clause to protect Hooker was now expanded with the mention also of the Board of Ed, so that the Board would pass liability along with the property. The difference this time was that the new owner would be receiving the property in dangerous condition and, in spite of the warnings in the deed, without any mention of all of Hooker's admonitions concerning suitable use of the property.

When the sole bid was opened, the Board found that they had been offered $1,200, which they voted, unanimously, to accept. The fellow who bought the land—a former firefighter, now a motel-keeper, by the name of Ralph Capone—ended up paying $5,400 in local paving assessments and $1,500 in property taxes, even though the city, every time he tried to get a building permit to develop 50 or so houses, confronted him with regulations that, as he later put it, "would have cost me millions." Then in 1972 the city ordered him to do $100,000 worth of work on his plot "to correct...strong chemical odors permeating from ground surface" and to alleviate "potentially hazardous conditions" there. Finally, after spending a total of $13,000 on the property, he gave up in 1974 and sold this bundle of headaches to a friend for $100.

Capone says that when he bought the property for $1,200 he had considered himself lucky. The release clause on the bidding sheet and in the deed had struck him as having been just so much lawyerese, hardly meriting a second wink. As he recently put it, in an interview with the *Niagara Gazette*'s Paul Westmoore, "Back then I never would have believed a public body would have sold land it felt was dangerous." In fact, however, the Board had known quite well what it was selling; and the minutes of the Board, under the date of January 4, 1962, show the following reaction to Capone's bid: "Three members of the committee visited this plot of land on 99th Street and checked from one corner to the other. We all agreed that, if we could sell the property, it was the thing to do."

"Three members of the committee visited this plot of land on 99th Street and checked from one corner to the other. We all agreed that, if we could sell the property, it was the thing to do."

Itis on the question of apportioning blame for Love Canal that the media have fallen down the most. Practically every level of government has been involved over the years in violating either the Canal's walls or the protective clay cover that Hooker says it had laid four feet thick on top of its wastes. Even the New York State Department of Transportation, which now shares major responsibility for remedial work on the Canal with New York's Department of Health and the federal Environmental Protection Agency, ripped into the Canal in 1968, at the southern end where Hooker had done most of its dumping. In the construction of an expressway and the moving of Frontier Boulevard northward, chemicals were contacted, and Hooker was requested to, and did, cart away 40 truckloads of chemical wastes. Just as Hooker had worried in 1957, as time passed the possible hazards of construction on the property had been put totally out of mind.

Quite in line with media reports, then, which have picked up on very little of this governmental involvement in the Love Canal disaster, is the lawsuit filed in December 1979 by the Justice Department on behalf of the EPA, seeking to collect from Hooker $124.5 million for cleaning up the Love Canal area. Evidently, with the public so misled, the government's lawyers thought they could get away with laying all the blame at the doorstep of the only nongovernmental body involved, Hooker Chemicals & Plastics Corporation and its parent, the Occidental Petroleum Corporation.

Although the suit also names the Niagara Falls Board of Education, the city, the County Health Department, New York State, and UDC-Love Canal (a state agency set up to purchase the homes of families evacuated from the surrounding area), not one of these governmental bodies—and here again the media have missed a step—is implicated in the responsibility for the problems at Love Canal. "The City is named herein as a defendant only to insure that the remedial measures requested by the plaintiff [EPA] can be fully implemented by the City's action with regard to its own property." And so on and so on. For each of the governmental units named in the suit, there is a reassuring paragraph noting that it is so named only to enlist cooperation in remedial work.

The government's case against Hooker contains a great many charges and allegations that I have seen disproven in the documentary records at the Board of Education and the office of the city engineer. Hooker hasn't supplied me with its own supplementary documentation, but that wouldn't be necessary except on one point that has served as a focus for many of the EPA-Justice Department charges: the adequacy of the clay cover Hooker laid over its dumpings.

Residents of the Love-Canal area have contended that at least some of Hooker's wastes were covered only with fly ash. These are recollections of what happened 30 years ago. There *is* evidence that there was plenty of fly ash in the area. Not only did Hooker itself use part of the Canal to dump fly ash, which accumulated in the bottom of its furnaces, but School Board records show that Hooker and probably the city also were asked to supply fly ash to fill in the portions of the Canal that were still an open trench when the Board took over the property. There is no evidence, however, that Hooker used fly ash to cover its chemical dumpings.

Hooker claims—and notes on maps at the Board of Ed dating from the early '50s tend strongly to support this—that the company laid four feet of clay over its fill. Furthermore, a private engineering firm, Conestoga-Rovers Associates of Waterloo, Canada, hired by the city in 1979 to evaluate the Love Canal dumpsite, has concluded that Hooker's practices there cannot be faulted, even by the standards of the Resource Conservation and Recovery Act (RCRA) being implemented in 1980—the only existing federal law concerning the hows and wheres of industrial dumping.

(Of course, even without a statute on the books, Hooker would be liable, subject to the relevant statute of limitations, for damage to third parties due to negligence, were its practices in fact negligent. But it would be hard for such a claim to get very far if Hooker's practices decades ago met and exceeded regulations, generally regarded as stringent, effected only in 1980.)

Although the Conestoga-Rovers report had not yet been delivered to the city at press time, Mr. Frank Rovers has stated to Senate staff members considering toxic waste clean-up legislation that, as summarized by the Washington representative of the American Institute of Chemical Engineers, on whose RCRA Task Force Mr. Rovers was serving, "The design of the Love Canal site was well within the standards of RCRA. What went wrong with Love Canal can be attributed in large part to lack of monitoring, invasion of the site itself, and lack of remedial work." And the invading construction, which raised the need for remedial work, can only be laid at the feet of the School Board, the city, and the state Department of Transportation. (The other main factor that precipitated the crisis was that in 1976 Niagara Falls experienced record rains that poured down into the by-then opened Canal, forcing large quantities of the chemicals up and out; in October of that year, there surfaced the first reports of nearby basements being invaded by chemicals attributed to Love Canal.)

The EPA's own chief of Hazardous Waste Implementation, Mr. William Sanjour, was quoted in the *New York Times* on June 30, 1980: "Hooker would have had no trouble complying with these (RCRA) regulations. They may have had a little extra paperwork, but they wouldn't have had to change the way they disposed of the wastes." Ironically, Mr. Sanjour's admission here was a bold and direct contradiction of a key charge leveled by the EPA itself in its suit against Hooker, filed in federal court six months earlier.

- 1942 — Hooker begins dumping chemicals in the Love Canal (LC)
- Mar. 1951 — 99th Street School is mapped at LC site
- Mar. 1952 — Hooker and Board of Ed test LC site
- Sept. 1952 — Board of Ed moves to acquire property abutting LC
- Oct. 1952 — Hooker agrees to donate LC property
- Dec. 1952 — City Planning Board approves 99th Street School site
- Apr. 1953 — School Board attorney warns Board about liability
- May 1953 — Board votes unanimously to accept LC deed
- Aug. 1953 — Board votes to remove fill from LC for top grading of another school
- Jan. 1954 — Architect for school reports construction disturbing chemicals
- Aug. 1955 — Board votes to remove fill from LC to grade surrounding area
- June 1956 — Architect changes kindergarten play area to avoid chemical deposits
- Nov. 1957 — Board debates proposal to sell part of LC property to home developers
- Hooker's attorney and VP oppose subsurface construction
- Board votes against safe sewer through LC
- City begins construction of sanitary sewer through LC
- Children burned at LC
- June 1958

- May 1950 — City begins construction of storm sewer through west wall of LC
- June 1960 — Board dedicates northern portion of LC property to city
- Feb. 1962 — Board sells southern portion of LC property
- 1968 — NY DOT disturbs chemicals in construction of expressway at southern end of LC
- 1978 — Michael Brown begins reporting LC problems in Niagara Gazette
- Aug. 1978 — NY State declares LC area a health hazard
- 99th Street School closed, 255 families evacuated
- Pres. Carter declares LC area a national disaster
- Oct. 1978 — NY State begins LC clean-up
- Jan. 1979 — New York Times Magazine publishes Michael Brown on LC
- Aug. 1979 — 93rd Street School closed
- Dec. 1979 — Michael Brown LC article published in Atlantic Monthly
- EPA/Justice Dept. file suit against Hooker
- May 1980 — Laying Waste published
- Pres. Carter declares national emergency at LC
- Oct. 1980 — Hooker files countersuit against US, NY, city, School Board

Reading this EPA-Justice Department lawsuit, one senses how desperate its drafters must have been to implicate Hooker on whatever grounds could be dredged up. In paragraph 23 it's charged that "two storm sewer systems...were built in 1952 before Hooker sold the Canal property to the Board." It is not claimed that the two sewers in question penetrated the Canal walls; the fact is that these systems—Colvin-100th Street and Frontier-100th Street—didn't even come close. Interestingly, the suit does *not* mention the real villain-sewers, constructed in '57 and '60, which would, of course, have implicated party or parties other than Hooker.

In paragraph 35 we find that "vegetation in the vicinity of the Love Canal is suffering from stress." The Love Canal homeowners might wilt upon hearing that one, as though their own travails were not enough to bring Hooker down if Hooker is guilty.

Paragraph 108 informs us that "Hooker never applied to the Secretary of the Army for and does not have a permit authorizing the deposit of wastes into navigable waters at the Canal." This is one of the few allegations in the suit that Hooker doesn't contest as false. Did you know that there are "navigable waters at the Canal"? Can you imagine sailing a ship upon this chemical dump? Well, of course, nobody's ever done it, nor even tried it. In fact, the Canal never was navigable, even before it became a dump in the early '40s; it wasn't even being dug for that purpose when its construction was abandoned in 1910. "Navigable waters" indeed.

But in the court of public opinion, Hooker is already adjudged guilty. Playing into the hands of the feds on this has been that intrepid "investigative reporter" Michael Brown, whose book, *Laying Waste*, has been praised to heaven, despite the fact that its tale of Love Canal is unrecognizable to anyone who has examined the actual documents. Jessica Mitford said, "This extraordinary and terrifying book is one of the best examples of tenacious, dedicated journalism I've ever read." Senator Moynihan pronounced the book "strong, clear, credible, and humane." Ralph Nader said, "*Laying Waste* takes the reader on a macabre journey from the notorious Hooker Chemical Company waste dump at Niagara Falls to..." and called the volume "an advance briefing" on America's future of "cancerous, toxic cesspools left by callous corporations." Sen. Bill Bradley applauded it as "a clear call for the massive effort necessary to clean up the horrors." Paul Ehrlich praised it as "a vitally important book." Jane Fonda said, "I hope every American is awakened by this book." So let's dip a bit into *Laying Waste*.

The very passage in the deed that Michael Brown saw as not "an overwhelming concern," Boniello has described as "like waving a red flag in front of a bull."

On page 8 Brown says, "At that time [1953], the company issued no detailed warnings about the chemicals; a brief paragraph in the quitclaim document disclaimed company liability for any injuries or deaths that might occur at the site." He doesn't quote from the deed and mentions it again only once, curtly.

Would you know from his description of the "brief paragraph" (which I quoted in full earlier) that this is the longest paragraph in the entire deed, running 17 full lines of type, or that it speaks of these chemicals as being capable of *causing* injury and death? Furthermore, there's an innuendo here that is simply not true: that there is no evidence that Hooker had verbally warned the Board repeatedly and in strong terms about the chemicals. Ansley Wilcox's letter, which is reproduced here, but which Brown never even mentions in his book, is strong documentation to refute this innuendo.

On page 9 Brown says: "When I read [the Love Canal] deed I was left with the impression that the wastes would be a hazard only if physically touched or swallowed. Otherwise, they did not seem to be an overwhelming concern." That's his other reference to the deed, and it's equally misleading. Brown's introduction of "touching" and "swallowing" into the deed's restrictions are his own concoctions. Neither they nor any equivalents are in the deed, and even Brown's inference of them is drawn entirely from thin air. And although "injury" and "death"—which *are* in the deed—may "not seem to be an overwhelming concern" to Michael Brown, they did to relevant parties at the time, contrary to what Brown claims.

Also on page 9 Brown writes: "Ralph Boniello, the board's attorney, said he had never received any phone calls or letters specifically describing the exact nature of the refuse and its potential effects, nor was there, as the company was later to claim, any threat of property condemnation by the board in order to secure the land."

Boniello, however, had not *needed* any phone calls or letters. The very passage in the deed that Michael Brown saw as not "an overwhelming concern," Boniello warned his client at the time to take seriously. Boniello would later describe it as "like waving a red flag in front of a bull." The School Board members "were forewarned. But all that they felt was that they were getting a big piece of land for free." If Brown had read the newspaper for which he himself was a reporter, the *Niagara Gazette*, he would have known that this was Boniello's opinion, because that's where it was quoted, on August 9, 1978, more than a year before Brown's book went to press. In this interview with Paul Westmoore, Boniello further stated: "I suggested they get a chemical engineer to inspect it [Love Canal]. They never did, to my knowledge."

On the property condemnation issue, my phone conversation with Boniello on the evening of October 16, 1980:

Q: *Is it possible that Hooker could have been verbally threatened with land condemnation at Love Canal by the Board's representatives, such as Wesley Kester, head of the Buildings and Grounds Committee, while you might not have been informed of this?*
A: *Oh, yes. My function was only to come in afterwards and close a deal, not to negotiate or make deals. The Board decided what they wanted done, and told me to draw up the papers. I was brought in after the fact. So all I can say is that I was never instructed to initiate condemnation proceedings on the Love Canal property. Whether condemnation was actually threatened verbally by the Board is a question I'm not competent to answer, since I wasn't in a position to know.*

On page 10: "In 1958, the company was made aware that three children had been burned by exposed residues on the surface of the canal, much of which, according to the residents, had been covered over with nothing more than fly ash and loose dirt. Because it wished to avoid legal repercussions, the company chose not to issue a public warning of the dangers only it could have known were there." This strings three distortions together into one big lie.

First, Brown fails to mention anywhere in his book that not only Hooker but the city had been dumping into the Canal; that this municipal waste may well have been covered over with fly ash and dirt; and that, in any case, the Board of Education had used fly ash at this site, as the record shows it had at other school sites, to grade the property. Therefore, Brown's slur of Hooker—the implication that fly ash and dirt is what Hooker had "really" laid over its wastes and that this gives the lie to the company's claim of having laid a clay cover over its dumpings—is at best a fudging of the available documentation and at worst a vicious distortion.

Second, Brown offers no evidence of Hooker's alleged wish "to avoid legal repercussions." The Board of Ed, of course, in accepting the deed, had explicitly assumed liability for any injury attendant to its use of the property, which use, as we now know, had unearthed those chemicals. For its part, Hooker was apparently confident that its own practices at the Canal had all been entirely legal, not just matching but surpassing the safeguards then in normal usage (which were zilch, even according to the EPA itself).

Third, as to the charge that Hooker "chose not to issue a public warning of the dangers only it could have known were there," this is false in both clauses. Brown never mentions in his book the very public warnings that Hooker had made in November 1957, which were published in the local newspapers at the time (including the *Niagara Gazette*, for which Brown later reported, but which, again, it appears he never consulted). These warnings preceded by less than a year this 1958 incident. So not only Hooker but the Love Canal area residents and the city government could have known of the dangers there. Yet while Hooker was issuing these warnings the city was rip-

HOOKER ELECTROCHEMICAL COMPANY
NIAGARA FALLS
NEW YORK

November 21 1957

Dr Charles M Brent President
Board of Education
Administration Building
Sixth Street and Walnut Avenue
Niagara Falls New York

Re 99th Street Property

Dear Dr Brent

In the interest of amplifying the remarks made by Mr Charbers at the Board Meeting on November 7th and in the further interest of providing the Board with a written statement of our position with respect to the subject property, I would like to submit the following account of the transaction. I might point out that I was personally involved in the negotiations and have a direct knowledge of some of the significant arrangements.

Hooker acquired the property in question in the early 1910's. As you doubtless know, it was a section of the abandoned Love Canal. At the time it was acquired it was a sparsely settled section and our purpose in acquiring the same was to obtain an area for burying industrial wastes.

The area was used for this purpose for a number of years, and, in fact, was still being so used when we were approached by Dr Small and other representatives of the Board of Education who stated that the Board of Education would like to acquire at least a portion of the property for the erection of a new school. We explained in detail to Dr Small the use which we were making of the property and stated that we were very reluctant to sell the same, feeling that it should not be used for the erection of any structures. However, after several discussions with Dr Small and others it was pointed out to us that the School Board felt that this was the only property available in the location in which a new school had to be constructed and that they were so desirous of acquiring the same that condemnation proceedings might be resorted to.

As a result, our management considered the matter very carefully and came to the conclusion that if the property was so important to the Board of Education we would make a gift of the same to the Board with the understanding that it should be used only for the construction of a new school and the maintenance of a park. We were thoroughly convinced that should the property ultimately be used for any other purpose the residues which had been buried thereon might well have a serious deleterious effect on foundations, water lines and sewer lines, and, in addition, we felt it quite possible that personal injuries could

Dr Charles M Brent Page 2 November 21 1957

result from contact therewith. Therefore, on October 16, 1952 we wrote Dr Small, copy of which is enclosed, stating that we would be willing to donate the property to the Board of Education and pointing out that in view of its use it would be necessary for us to incorporate in the deed a recital as to the use of the property and restrict the same to the erection of a school at a particular location which had not been used for the purpose of burying residues and that the balance of the property should be maintained for a park or recreational purposes. The following day Dr Lang wrote us advising us that our letter had been presented to the Board and that he had been instructed to advise us that the Board had accepted our offer and recognized the necessity of incorporating special provisions in the deed. Copy of Dr Lang's letter of October 17, 1952 is also attached. Following the receipt of the above letter we prepared certain proposed restrictions for the deed, one of which read as follows:

"This conveyance is made subject to the condition that the premises shall be used for park purposes only, in conjunction with a school building to be constructed upon premises in proximity to those above described, and that upon the abandonment of said p. unless for such purposes, or upon their use for any other purpose, the title to said premises shall revert to the grantor, its successors or assigns."

These were submitted to representatives of the Board and it was then pointed out to us that since the Board of Education itself had no facilities for maintaining a park it was reluctant to accept a conveyance containing an affirmative agreement to do so. It was pointed out that actual maintenance as a park could probably only be carried out by the City and some agreement would have to be made with the City to do this. Therefore, at the request of the Board's representatives this provision was not included in the deed. However, its omission in no sense indicated that we felt it would be safe or proper to use the property for any other purpose. It is our feeling that even though great care might be taken at this time in the construction of buildings on the property that as time passes the possible hazards might be overlooked with the result that injury to either persons or property might result. It is our primary purpose in calling these facts to your attention to avoid the possibility of any damage to any one or to any one's property at any time in the future and we feel that the only way that this can be assured is by using only the surface of the land, and possibly hazardous if excavations are to be made therein and urge most strongly that arrangements be made to use the property for the purposes intended, since we also feel that additional park or recreational facilities in this area are very desirable.

Very truly yours

Ansley Wilcox

Ansley Wilcox 2nd
Vice President and General Counsel

Letter from Hooker's Ansley Wilcox, on record at the Board of Education

ping through the Canal to build a sewer. That the children's exposure to chemicals took place only months later lends plausibility to the hypothesis that this construction disturbed buried chemicals, just as Hooker had feared. Brown also fails to mention anywhere in his book the earlier warnings that Hooker had communicated to the Board, also brought to public light in 1957; and he furthermore leaves entirely out of the picture the correspondence between the Board and the school's architect, which shows how intimately the Board was involved with these "chemical pits."

When Hooker, in a letter to the editor in the July 1980 *Atlantic*, pointed out in response to Brown's article on Love Canal in an earlier issue that the chemical dump under Hooker's management in the '40s and '50s had been found by a chemical engineer to be "well within the standards of RCRA"—the strict law of

The head of the homeowners had never even gone to the Board of Ed to check its records so as to make an informed judgment about the roots of their tragedy.

1980—Brown's evasive printed reply, which ignored these very findings, was that it would not comply with RCRA because "those standards, among other things, propose that landfills not be located near so populated an area, and mandate that a landfill not be in a position to poison a water source. The Love Canal has leaked into the Niagara River, and probably is still doing so." Brown's reply neatly avoided mentioning the lack of evidence for any such leakage while Hooker had managed the Canal and the abundant evidence of the dump's mismanagement by the School Board and the city for decades afterward—the "invasion of the site itself" noted by the engineer hired by the city.

And for Michael Brown to claim that the Love Canal dump in 1953 had failed to meet RCRA standards because the surrounding neighborhood was subsequently to become populous simply makes one's mind reel. Even Brown himself, in his book, acknowledges that in 1953 the surrounding area had been sparsely populated. Well, Brown's book won three Pulitzer nominations, so who cares about such insignificant matters as accuracy and truth!

When I spoke with the president of the Love Canal Homeowners Association, Lois Gibbs, on October 17, 1980, I learned that Michael Brown has been one of her chief sources of information about Love Canal. This surprised me, because I expected that the information flow would have been in the reverse direction, since Brown relied so much on residents' testimony. But as it turned out, Ms. Gibbs knew practically nothing about the Canal itself, although she has said a great deal about the dump.

This is a matter of some consequence, because Lois Gibbs has appeared prominently on network TV news programs and as a guest on national TV talk shows and has been much quoted in the newspapers and over the wire services. She has certainly been one of the chief sources for Mr. and Mrs. America's idea about what went wrong at Love Canal. Apparently, however, no interviewer or reporter has ever checked her facts; nor has she, so far as I am aware, ever been asked probing questions to determine the documentation for her positions.

As with Michael Brown, the basic thrust of her position is that, as she put it in response to my question, "Who was primarily responsible (for Love Canal)?": "I believe fullheartedly that Hooker is primarily." On Hooker's role at the Canal, she said:

> *They left open avenues of swale, pipelines, and so forth. They didn't deposit the waste in 55-gallon drums, as they say they have. They also knew children were being burnt on the Canal proper, and never made that public knowledge. And when they told the Board of Education there were wastes buried there, they never truly explained what the wastes were and what the ramifications of the wastes moving around in the ground and surfacing in the school could cause.*

Ms. Gibbs, I soon learned, is fond of snowing the listener with technical terminology that she herself, as it turns out, doesn't understand. So for the perplexed reader who, like myself, has never encountered the term *swale*—which she later defined for me as "underground stream beds"—I subsequently found that it refers to a line of surface-water runoff. Every plot of land necessarily has swales. As for her *intended* charge of underground streams at Love Canal, there is not a shred of evidence for the allegation. And what we know and don't know about "pipelines" will be made clear below.

As to her charge that Hooker "didn't deposit the waste in 55-gallon drums as they say they have," Hooker's actual statement, as reported in the *Niagara Gazette* on November 22, 1957, was: "There are dangerous chemicals buried there in drums, in loose form, in solids and liquids." The rest of her statement is pure Michael Brown and has been dealt with earlier.

I asked her: "Are you aware that the Board of Education back in 1951 had drawn up a map of the Love Canal area and that it showed the assessed condemnation value of each property?" Her reply: "No." The head of the homeowners had never even gone to the Board of Ed to check its records so as to make an informed judgment about the roots of their tragedy.

When I asked her about the sewer under Wheatfield Avenue, whose installation in 1957 may well have precipitated the ultimate catastrophe, she denied my assertion that it was "surrounded with gravel." She claimed that this underground excavation was instead "backfilled with clay." The city engineer could straighten her out on that one.

In response to my question whether she'd ever heard of the American Institute of Chemical Engineer's Task Force on RCRA and the findings of one of its members about why the

Love Canal had seeped, she said, "No." But, she continued:

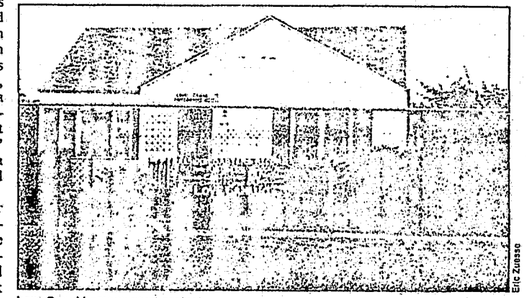
> *Let's pretend that the Canal hadn't been disturbed. It still would have leaked.*
> **Q:** *How so?*
> **A:** *Because there were farmers' field tiles that were connected to the Canal, and these were clay pipes 6 inches to 8 inches in diameter.*
> **Q:** *When were these tiles put in?*
> **A:** *Probably before the Canal was used as a dump. Furthermore, there are open avenues of swale, which are underground stream beds, that were backfilled with rubbish—not a solid fill.*
> **Q:** *Is this in Stephen Lester's report [which she had mentioned earlier]?*
> **A:** *I think so. If not, it's in Beverly Paigen's.*

Beverly Paigen is not an engineer but a biologist, so of course her study had nothing to do with the structure of the Canal. Instead, it was an epidemiological study of the incidence of health problems among Love Canal area residents. (This report created a sensation—and panic—when it was released in February 1979 with the conclusion that area residents showed high rates of pregnancy disorders, birth defects, and other illnesses. Subsequently, a five-member panel of scientists reviewed this study and concluded that it is "literally impossible to interpret" and "cannot be taken seriously as a piece of sound epidemiological evidence.")

Stephen Lester is not an engineer either. He is a toxicologist and environmental researcher hired by the New York Department of Transportation in 1979 to assist the Love Canal area residents during remedial work being done by the DOT. In the course of observing that work, says Lester, he did see clay pipes running from the Canal, which, he speculates, were probably used to draw water from the Canal to irrigate the orchards that surrounded the area before it was built up.

Did they exist along the entire length of the Canal? Had Hooker removed any such pipes or backfilled them with clay in the sections used by the company for dumping chemicals? Lester's report has no answers to such questions; nor does the city engineer's office, which contains no records of the existence or location of such pipes; nor do the people working at Hooker 30 years hence. But it strains credulity to believe that Hooker would have chosen this site, prepared a section at a time for dumping, and covered its wastes with clay—rather than just dumping anywhere into the Canal's waters—and not have seen and attended to any such clay pipes. Of course, of what the Army did when it dumped toxic wastes there, we know nothing. And what would have happened had the Canal not been disturbed after Hooker owned it, we shall never know.

Love Canal may or may not have polluted its neighborhood beyond repair. But the question now is, Has it polluted the media beyond repair? Except for the *Wall Street Journal*'s publication of the minutes of the two November 1957 School Board meetings under the headline "What Hooker Told Whom, When About



Love Canal homeowners' protest

Love Canal," and the *Journal*'s two editorials on the facts therein, none of the national media has delved into the history of the Love Canal mess. This story has been butchered in the press. The executioners have been a motley band, led by the US Justice Department, the EPA, the New York State departments of you-name-it, Michael Brown, and Lois Gibbs. Why has their joint exercise in public deception been so overwhelmingly successful? More to the point, why hasn't Hooker's counterfight so far been more effective?

It makes me blush to say it; but in an OpEd article of mine in the *New York Times* in late '79, the editor there cut out a slashing comment I had made in a preliminary draft, calling Hooker's actions at Love Canal "criminal." I've learned since then to be more circumspect about the truthfulness of what I read (and write!) in the papers. There genuinely are big-corporate criminals, and the public's outrage at this, and at their frequent success, is good and healthy—but only if one can still keep one's eyeglasses clean when approaching the facts of each particular case. But that's hard to do.

It hasn't helped that Hooker, and its parent Occidental Petroleum Corporation, have met the public relations challenge of Love Canal with a practically unbroken string of catastrophically bad decisions. At first, when the story was strictly a local one, before Love Canal had hit the national press in the summer of 1978, Hooker's response was to stonewall. The company refused to provide even basic information requested by both the homeowners and the local news reporters. After Love Canal exploded across the nation's front pages during the first half of 1979, cracks started appearing in Hooker's stonewall, but this change got under way too slowly and too late.

In the summer of 1980 the company published a booklet, *Love Canal: The Facts,* which for the first time presented Hooker's detailed public defense against the accusations

that were now being hurled at the firm from every corner. Most of the damage to the company had already been done, however. Michael Brown and Lois Gibbs had made their starring appearances on the network TV talk shows, and the ghastly pictures of Love Canal's chemical oozings had finished their sensational runs on the nightly news shows—with prominent mention of the fact that the Canal had once been a Hooker dump.

Even now, the response of Hooker and Occidental remains strictly defensive. Having permitted the Love Canal spark to ignite a conflagration that (according to present Wall Street estimates) has burned off a half-billion dollars' worth of Occidental Petroleum stock value, the best that Hooker and its parent firm can come up with is still a meek squeak: "We didn't do it." Hooker has not sued Michael Brown and his book publisher, Random House, for libel; to the public, this means that Hooker must be guilty.

When I asked Hooker's PR department why the company isn't challenging in a court of law the allegations by Brown and others, I was told, in effect, that that was a matter for the legal department—and that none of Hooker's lawyers was talking to any reporters. Then, on November 3, I phoned Occidental Petroleum, which referred me to Philip Wallach Associates, the parent corporation's public relations counsel. Mr. Wallach told me that it was he who had advised Occidental not to file a libel suit against Michael Brown and Random House, because "to do so would only have given the book free publicity." When I asked Mr. Wallach, "But isn't it sometimes the case that the best defense is a good offense?" he agreed with me that this was so. And when I further inquired why he was more concerned about preventing some negative publicity for Brown's book than he was about giving his own bloodied corporate client some desperately needed positive exposure—and especially increased credibility—he told me, "Well, you have a point there. I suppose maybe I should reconsider." That's where the matter now stands. To think that $500 million of a corporation's stock value can hang on decisions made in such a manner!

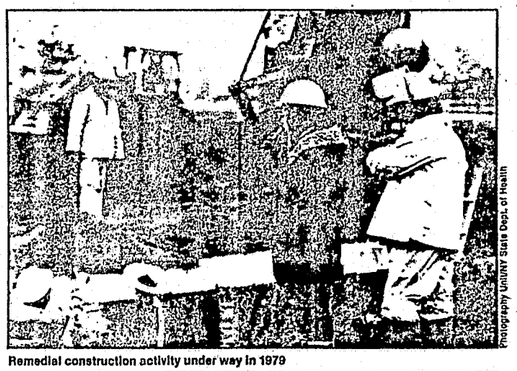
Can more Love Canals happen? There's no reason why not. Niagara Falls is not the only town that's been gung-ho on technology without concern for consequences. This kind of attitude may still prevail there; it certainly can be found elsewhere, and Love Canal may well turn out to have been just the opening battle in a long hot war between the present and the future.

Despite the popular myth that Love Canal is the result of a single corporation's greed and heartlessness, the actual explanation is far more complex. It's clear to anyone who digs into this matter that Hooker may well have been the only party to the affair to behave responsibly. Hooker chose an exceptionally fine chemical dumpsite; it ceded the dump to the School Board under circumstances in which the threat of condemnation was real and the reality of condemnation was already under way for adjoining properties; it warned the School Board that the chemicals could kill and insisted that the Board pass this warning on to any subsequent owner of the property; it urged the Board not to construct the school or any other buildings directly over the Canal; it protested the prospect of any subsurface construction on the Canal.

These warnings were repeatedly ignored, however, by the governmental bodies involved in desecrating this chemical tomb: the School Board itself, the City Planning Board, the city engineer, and the state Department of Transportation. In addition, other governmental agencies have been busy spreading misinformation about the Canal: the Niagara County Health Department, the state Department of Health, the US Environmental Protection Agency, and the US Department of Justice.

Despite all these nefarious governmental involvements, nothing has happened up to the present time to reduce the likelihood of similar governmental crimes being committed in the future. Even if the new federal legislation on waste dumps, the RCRA, proves effective against corporate violators, it could never be effective against governmental bodies. Just on the outside chance that an RCRA suit might someday be filed against a town, school board, or other public agency, what would be the probability that any governmental criminals would be penalized? No matter how guilty they might be, it is the taxpayers who would end up paying the tab on any resulting fines, and it is unlikely that any government bureaucrat would be imprisoned, even if his crimes included the deaths of innocent victims.

When the Justice Department and the EPA joined the fray in December 1979 with their suit against Hooker, they were tacitly acting to protect the



Photography Courtesy NYS Dept. of Health

Remedial construction activity under way in 1979

interests of all the governmental agencies that throughout the years seem clearly to have produced the Love Canal mess. The federal authorities could instead have chosen to file charges against those governmental bodies, but this would have made some important New York State politicians unhappy during an election year—and New York was a crucial state for Carter. With the press and the homeowners screaming, the federal government apparently felt compelled to "do something" about the matter, and Hooker turned out to be the most suitable punching bag under the circumstances.

The federal attorneys must certainly have seen much of the evidence that I've presented here and so must have known how shoddy their case against Hooker really was, yet they slogged through their legal mire and came up with the obligatory political document. If instead they'd sued the governmental agencies, that would have made considerable news but even more considerable political enemies. It would also have deflated the Michael Brown bubble, but why do that when it could be exploited, since Brown had conveniently placed blame upon the same scapegoat that the politicians now found so suitable?

Perhaps because of the visibility of what went wrong at Love Canal, even if there has been little attempt to understand how it went wrong, there is an increased public awareness that in environmental matters the future *doesn't* take care of itself. But that would not alone prevent future Love Canals. It would not get at any of the fundamental structural problems that aided and abetted the environmental disaster.

At the very least, governmental criminals should not be protected from paying the price for their actions. And when businesses share in the blame, they too should be hotly pursued for every ounce of damage to persons and property. If nothing else, that's the protection that should be afforded citizens by a proper system of property rights, whereby you may do what you will with your property and what is in it and on it, so long as it does not infringe on my rights to my life, my liberty, and my property.

Certainly the worst thing we could do would be to hand to the corporate world some of the same kind of protection from responsibility that we've allowed government officials. Yet, ironically, one of the hottest new items from Congress—the recently passed "superfund" legislation for cleaning up toxic chemicals in the environment—will serve, in part, to lessen the risks of mismanagement on the part of individual firms involved in disposing of toxic chemical wastes.

Any environmentalist who believes that this set-up is a super idea should pay heed to our experience with legislatively limited liability in another industry where the risks of injury are high: nuclear power. Back in the 1930s, when "the peaceful atom" was but a fervent dream on the part of the Atomic Energy Commission, Congress stepped in as the promulgator of devil-may-care. Faced with a drawing-board industry unable to obtain insurance (for reasons that themselves have much to do with government—see "Who Caused Three Mile Island?" REASON, Aug. 1980), Congress passed the Price-Anderson Indemnity Act in 1957, dictating that, in the event of a major nuclear accident, the first $500 million in claims would be footed by US taxpayers, the next $60 million by the firm (through its insurance), and anything over and above that—practically everything in a serious accident—would simply go uncompensated.

The nuclear-power industry was born as a direct result of this legislation. While it may well have come into existence anyway—eventually, and when reactor designers and so on had satisfied insurers' safety experts that nuclear-power generation was insurable—the indisputable effect of this legislation has been to reduce the incentives for individual firms or the industry as a whole to make sure that they are employing and coming up with the best, safest procedures possible.

How could we even *think* of imposing a similar system upon the public as a way of "controlling" the chemical industry? Said Sen. Jennings Randolph in urging the Senate's passage of its superfund bill: "We cannot afford another Love Canal." But the senator entirely misses the point. Any society that socializes risks while it privatizes rewards is earning every Love Canal it gets. ◻

Eric Zuesse is a free-lance writer and the director of the Consumers' Alliance, a New York-based consumer advocacy group.

SUPERFUND

In the waning days of its lame-duck session, Congress passed a compromise bill creating a federal fund to pay for cleaning up abandoned chemical dumps and toxic chemical spills, to be financed by a tax on the chemical and crude oil-producing industries, with taxpayers' dollars sweetening the pot. The legislation also creates a separate fund, from a tax on wastes deposited in chemical dumps licensed by the EPA, that will assume liability for dumps operated by RCRA standards.

If the superfund is used to clean up a hazardous site, the EPA can sue the responsible company for the cost. No victims' medical expenses, loss of income, or property damage will be paid for by the fund. When it comes to government-owned property, however, companies may be held liable for damage from toxic spills and wastes, although even here the liability would be limited to $50 million per incident.

Moreover, how thoroughly the government cleans up a site, and thus how much the responsible company will be liable for reimbursing the fund, will be at the EPA's discretion and hence subject to competing demands on the fund's kitty, to political pressure, and to corporate wheeling and dealing. All these features, plus the fact that the fund can be used for purposes other than direct clean-up (such as promoting efforts to prevent toxic spills), means that the link between a company's doing harm and having to pay up for it—in full and by itself, without contributions from taxpayers and from more responsible members of the industry—is substantially weakened.

—M. Z.

excavations from the abandoned Love Canal as a chemical dump site from 1942 to 1953, in which year, under threat of seizure by eminent domain, it had sold the canal and surrounding property to the school board for $1. Shortly afterwards, the school board built an elementary school on the central portion of the property, with part of the building being over the dump site itself. As the minutes make clear, Hooker accepted use of the property as a school and playground, but the company vigorously protested a proposed sale that might lead to subsoil construction and disturbance of the "dangerous chemicals down there."

What's most interesting about these protests is how seldom they have been reported. They are never once mentioned in "Laying Waste: The Poisoning of America by Toxic Chemicals," a popular book by Michael Brown that excoriates Hooker for failing to warn the school board and local residents of the dangers lurking in the dump site. They never once appear in the tirades of Ralph Nader, who has said that "Michael Brown's 'Laying Waste' takes the reader on a macabre journey from the notorious Hooker Chemical Company waste dump at Niagara Falls to other cancerous, toxic cesspools left by callous corporations around the country for present and future generations of Americans to suffer by."

The facts aren't all in yet on Love Canal, and it's possible that regardless of its warnings Hooker still bears some responsibility for the seepage of toxic chemicals into the basements of nearby homes. The Environmental Protection Agency, which is suing Hooker for the costs of cleanup and relocation, charges that Hooker failed to place an "adequate clay cap or other appropriate seal" over the dump site when it gave the landfill to the school board. Hooker argues that its clay cap was sufficient but was disturbed by construction. Though no houses were ever built over the canal, two city streets and a state expressway were built across the dump site, and Hooker also contends that the property was dug into as a source of landfill.

The EPA's lawsuit charges that Hooker "did not warn anyone living in the Canal vicinity that contact with material at the Canal could be injurious," even though as early as 1938 some children playing above the dump site had to be treated for chemical burns; and that in 1968 the company failed to warn the state Department of Transportation of possible hazards associated with construction of an expressway across the southern tip of the dump site. The courts will decide how often a company that no longer owns a dump site property should be legally responsible for monitoring and protecting its misuse.

But whatever Hooker's legal responsibility, it is clear that on at least two occasions the company did go out of its way to alert the public to possible dangers. The unfortunate history of Love Canal should teach us the urgency of cleaning up and monitoring the nation's chemical dump sites more carefully. But contrary to the half-truths and innuendoes dealt in by professional corporate baiters, the story does not provide an object lesson in unbridled corporate callousness or villainy. It is perhaps understandable that the EPA has not sought to correct this impression—public officials tend to stick together when faced with acute political embarrassment. On the other hand, it is a bit much for the agency to use narrow legal language in an effort to imply, contrary to an easily accessible public record, that Hooker provided no warnings.

[From the Wall Street Journal, June 19, 1980]

LOVE CANAL WARNINGS

In November 1957, at the nearby school board minutes and news accounts reveal, a lawyer for what was then the Hooker Electrochemical Company twice issued strong public warnings about potential health hazards at Love Canal. These warnings don't necessarily absolve Hooker of all responsibility for the misfortunes that have subsequently afflicted families living near the Niagara Falls, N.Y., dump site. But they do put in perspective various efforts to use the Love Canal mess as an opportunity to defame both Hooker in particular and profitmaking corporations in general.

The warnings came at a time when the Niagara Falls Board of Education was thinking of selling part of the Love Canal property to private developers. Hooker had used

[From the Wall Street Journal, June 19, 1980]

WHAT HOOKER TOLD WHOM, WHEN ABOUT LOVE CANAL

From a complaint filed in U.S. District Court in Buffalo last December by the U.S. Environmental Protection Agency against Hooker Chemical, the city of Niagara Falls and the Niagara Falls Board of Education:

1. As explained in more detail below, from about 1942 until 1953 Hooker Chemical Corporation and its predecessors in interest disposed of its chemical wastes at the Love Canal landfill in Niagara County, New York. The migration of these hazardous wastes from the landfill site has resulted in the entry of these wastes into the soil outside the Canal, the sewers running through the Canal area, waters of the United States, ambient air at the Canal and air in homes in the Canal area; as a result, these wastes have been consumed by human, animal and plant life. The migration of these wastes and their consumption by human, animal and plant life gives rise to this action.

. . . 44. Hooker neither warned residents and developers in the vicinity that contact with materials at the Canal could be injurious, nor did it take any action to prevent future injuries due to exposure of the wastes.

From the Regular Meeting Official Record of the Board of Education, Niagara Falls, N.Y., November 7, 1957:

Mr. Arthur Chambers appeared as a representative of the Legal Department of Hooker Electrochemical Company regarding the piece of property on Ninety-ninth Street on the north side of Buffalo Avenue which was deeded to the Board of Education by his company around 1953. He reminded the Board that, due to chemical waste having been dumped in that area, the land was not suitable for construction where underground facilities would be necessary. He stated that his company could not prevent the Board from selling the land or from doing anything they wanted to with it but, however, it was their intent that this property be used for a school and for parking. He further stated that they feel the property should not be divided for the purpose of building homes and hoped that no one will be injured. He referred to a moral obligation on the part of the Board of Education in the event the property is sold.

Mrs. Runals moved, seconded by Mrs. Bialecki, that a letter be forwarded to the Hooker Electrochemical Company expressing appreciation for sending their representative here tonight to explain the conditions of the soil near the Ninety-ninth Street School when there was no legal obligation on their part to do so.

From the Niagara Gazette, Nov. 7, 1957:

The Board of Education has a certain moral responsibility in the disposition of land in 99th street near Buffalo avenue which the Hooker Electrochemical Co. deeded to it in 1953, in the opinion of a member of the company's legal firm.

He is Arthur Chambers, who discussed the situation at last night's board meeting.

The board built a school on part of the land and now is entertaining the idea of selling a section of the land.

Mr. Chambers reviewed the company's transactions involving the land. He said Hooker bought the 200 by 2,400-to-3,000 feet area running north and south, a section of the old Love Canal, to bury chemical waste. He said this use made the land unsuitable for construction in which basements, water lines, sewers and such underground facilities would be necessary.

The company in disposing of the land sought protection lest some party might dig into the chemicals and incur personal or property damages, he said. It gave the school a deed absolute in form but drawn up with a restriction that no claims for damage shall ever be made against Hooker.

Mr. Chambers said definitely that the company did not think the land should be subdivided. "You're apt to hit something we buried there," he explained.

From the Board of Education official record, Nov. 21, 1957:

Mr. Arthur Chambers of the Hooker Electrochemical Company's Legal Department presented a communication from Mr. Manley Wilcox 2nd, Vice President and General Counsel of that Company, amplifying the remarks made by Mr. Chambers at the Board meeting held November 7th opposing the sale of property, owned by this Board, located near the Ninety-ninth Street School. The letter gave a detailed account of the transaction at the time the property . . . was donated by the Hooker Electrochemical Company to this School System. It was pointed out that, although it was not so stated in the deed, there was a mutual understanding that the property would be used only for the construction of a new school and the maintenance of a park. . . .

Also that, at the request of the Board of Education, this provision was not included in the deed due to the fact that actual maintenance of a park could probably only be carried out by the City and some agreement would have to be made with the City to do this. A copy of a communication from the Hooker Electrochemical Company to the Superintendent of Schools, dated October 16, 1952, and one to that company from the Clerk of this Board under date of October 17, 1952 were presented indicating that the Administrative Officers and the members of the Board of Education knew of this restriction. Mr. Wilcox stated they feel very strongly that subsoil conditions make any excavation undesirable and possibly hazardous; he urged that arrangements be made to use the property for the purpose intended since additional park or recreation facilities in this area are desirable.

From the Buffalo Courier-Express, Nov. 22, 1957:

The Niagara Falls Board of Education is back where it started in its attempt to purchase land in the east end of the city for a school building.

The Hooker Electrochemical Co., from whom the Board received the property in 99th St., said it was the company's understanding that if at any time the Board decided it did not want to use the land, it was to be returned to Hooker.

Arthur Chambers, an attorney for the company, emphasized that tonight. He added that Hooker had buried, "willynilly," chemicals which would be injurious to developers who had to put pipe or other materials underground.

From a Niagara Gazette article Nov. 22, 1957, explaining that the Board of Education voted not to sell two parts of its Love Canal property:

. . . Under the recommendation, approximately 10 acres of land in parcels north and south of the 99th Street School would have been sold to Mr. Infantino and Mr. Cubello for $16,000.

This land is used as a chemical dump. It was given to the board by Hooker Electrochemical Co. in 1953 along with the site for the 99th Street School.

Arthur Chambers, of the Hooker legal department, who appeared at the Nov. 7 meeting, was back again Thursday night to reiterate the company's opposition to the sale of the two parcels.

He said there had been an unwritten understanding at the time of the gift that the board would not dispose of the land in any way that might lead to digging or construction work.

"There are dangerous chemicals buried there in drums, in loose form, in solids and liquids. It was understood the land would be used for a park or some surface activity if it was developed," he said.

He said there was four to five feet of fill over the chemicals which made use of the land as a park or playground not dangerous.

TRIBUTE TO NATIONAL PORCELAIN PAINTING ART MONTH

● Mr. RIEGLE. Mr. President, it is a great pleasure and honor to recognize the passage of Senate Joint Resolution 115 that designates the month of July as "National Porcelain Painting Art Month." This delicate and exacting art form has been an important contribution to the fulfillment and enjoyment of thousands of American citizens. With the convoking of the International Convention of Porcelain Art Teachers in Detroit on July 1, it is only fitting and proper that we take time to recognize this intricate artwork, and its important place in American artistic life.

Like all great artwork, porcelain painting demands the very best of its artists—a resilient hand, a sharp eye and a keen esthetic sense—are all vital to the accomplished masters. Mr. President, at this time, I would like to highlight the artistic achievements of Gladys Galloway of Caro, Mich., who worked extremely hard for the passage of Senate Joint Resolution 115. Mrs. Galloway is a brilliant artist in her own right, and she is presently completing a 2-year term as president of the International Porcelain Art Teachers Association. Through the untiring efforts of dedicated artists like Gladys Galloway, porcelain painting has begun to receive the recognition and public acceptance that it so rightfully deserves.●

THE DEPOSITORY INSTITUTIONS DEREGULATION COMMITTEE

● Mr. MORGAN. Mr. President, on March 31 of this year, the Congress passed and sent to the President, H.R. 4986, the Depository Institutions Deregulation and Monetary Control Act.

I opposed this legislation on the floor of the Senate and expressed even greater opposition to the agreement reached by the conference.

Part of the Deregulation Act provided for the establishment of a Deregulation Committee composed of the heads of the Treasury Department, the Federal Reserve Board, the Federal Deposit Insurance Corporation, the Home Loan Bank Board, and the National Credit Union Administration.

The committee was charged under section 204 with regulating the "orderly phaseout and the ultimate elimination of the limitations on the maximum rates of interest and dividends which may be paid on deposits and accounts as rapidly as economic conditions warrant." The law provided for a 6-year period of orderly deregulation.

Mr. President, I have heard from many financial institutions in my State about the actions already taken by the Deregulation Committee in its first 3 months of existence. Frankly, the committee's decisions have caused me as great a concern as it has my constituents.

In its first meeting on May 7, 1980, the committee proposed among other things a ban on the use of premiums by financial institutions to attract deposits. Presently, premiums or gifts are limited

PRELIMINARY REPORT OF NEW YORK STATE ASSEMBLY TASK FORCE ON TOXIC SUBSTANCES: INQUIRY INTO THE LOVE CANAL AND RELATED MATTERS

TO: THE HONORABLE STANLEY FINK, SPEAKER
NEW YORK STATE ASSEMBLY

May 29, 1980

Investigator: Arthur James Woolston-Smith
Consultant to the New York
State Assembly

SPECIAL MAJORITY TASK FORCE

Maurice Hinchey
Alexander B. Grannis
Matthew J. Murphy
Joseph T. Pillittere

INTRODUCTION AND BACKGROUND

LOCATION OF LOVE CANAL

Love Canal is most often described as a 16-acre, below ground level landfill located in the southwest corner of the City of Niagara Falls, Niagara County, about one quarter mile from the Niagara River. For purposes of this report, this commonly used description, in fact, comprises only the southernmost section of the Canal. Its northern region actually begins in Lewiston, New York, the bordering township just north of Niagara Falls, approximately five or six miles from its most southern region. Accordingly, our use of the term "Love Canal" refers to that region running along Old Military Road from the 16-acre rectangular piece of land in the southeast corner of the City of Niagara Falls into the Township of Lewiston.[1] Both sites are within the borders of the County of Niagara.

In 1970, the population of Niagara Falls was approximately 86,000 and the population of Lewiston approximated 16,000.[2] A major industrial enterprise of the county was the manufacturing of chemical and allied products. According to the 1970 data of the New York State Department of Commerce, nine major chemical-producing industries employing a total of 5,267 people were then located in the county.

The southern most part of the Love Canal is bordered on two sides by single family homes with a public elementary school separating its two most southern regions. As of July, 1978, 97 families were residing in this area, and approximately 400 students were enrolled in the school.

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[1] March 3, 1942, Niagara Gazette article by Edward T. Williams, entitled "The Government Project Below the Lewiston Escarpment Recalls Another Promotion in that Locale ..."
[2] United States Census Figures, 1970

STATE RESPONSE TO HAZARD

The Love Canal problem literally began to surface in recent years as chemical odors in the basements of homes bordering the region became more noticeable. This development followed prolonged heavy rains and one of the worst blizzards ever to hit this section of our country. The ensuing inquiries and investigations turned up an omnibus array of chemicals, buried within the boundaries of the southern section of the unfinished canal for more than twenty-five years -- toxic ingredients which infiltrated scores of nearby homes, threatening health and upsetting the tranquility of hundreds of families in the community. As of the latter part of 1978, scientific analyses have identified 82 different chemical compounds at this section of the landfill, of which one was a known human carcinogen and eleven were known or presumed animal carcinogens.

In response to the identification of a number of organic compounds in the basements of eleven area homes, the State Departments of Health and Environmental Conservation in early 1978 launched an intensive air, soil and groundwater sampling and analysis program. The data collected by the agencies confirmed the presence of a variety of compounds and established precise concentrations for many of the chemical constituents. It became immediately apparent from this data that the problem was not limited to a few homes and that a potential health hazard existed from long term exposure to the chemicals. This data was transmitted to the Chief of Toxic Substances for Region II of the United States Environmental Protection Agency in August 23, 1978, with a recommendation that remedial action be undertaken immediately to prevent further contamination of private property and additional human exposure to unacceptable health risks.

In his Health Report Order with respect to the Love Canal Chemical Waste Landfill dated August 2, 1978, Commissioner of Health, Robert P. Whalen, M.D., concluded that there existed a great and imminent peril to the health of the general public residing in the area as a result of exposure to toxic substances emanating from such site. His recommendations included the temporary relocation of families residing in the area, and the avoidance of homegrown food products from the area. An emergency was declared.

In April of 1979, in response to a request from Governor Carey to investigate, the State Attorney General asked the Governor for $1 million to pursue lawsuits against companies whose alleged dumping of toxic wastes have created health hazards. Suit was filed in April 28, 1980 to recover damages stemming from the hazards at the Love Canal Dump.

On June 1, 1979, New York State Assembly Speaker Stanley Fink commissioned an investigation into the toxic and hazardous contamination in Niagara County resulting in this report of the Special Majority Task Force.

On December 20, 1979, the United States Department of Justice and Environmental Protection Agency filed suits against Hooker Chemicals and Plastic Corporation, its parent firm, Occidental Petroleum Corporation and the Olin Corporation demanding cleanup of chemical dumps in the Niagara Falls area and related fines totalling more than $120 million.

PURPOSE OF TASK FORCE INVESTIGATION

It was the Task Force's intention to delve into all related issues and make an evidentiary report of their findings for submission to the Speaker of the New York State Assembly, and to whomever should be so

informed. The findings and backup documentation embodied in this preliminary report compel the Task Force to call upon you, the Speaker, to authorize and empower the Assembly Standing Committee on Environmental Conservation to conduct formal hearings, with full subpoena power to examine issues of the improper transportation, storage and disposal of toxic and hazardous wastes.

PRELIMINARY FINDINGS

1. Evidence that the United States government was engaged in extensive wartime and post-war manufacture of munitions, nuclear chemical engineering, and the manufacture of items of chemical warfare in the Love Canal region of New York State;

2. Evidence that hazardous and toxic chemical wastes were improperly disposed of without regard to the need for decontamination, and without regard to the potential dangers to the health and safety of the people of the Love Canal region;

3. Evidence that the United States government transferred a portion of its dangerously contaminated properties in the Love Canal region of New York State to private concerns, without decontaminating.

HISTORY

Because the Love Canal region contained a source of cheap power, a number of chemical manufacturing enterprises were developed. This development started approximately in 1910 and was accelerated by the intensified industrialization brought about by World War I.

Specific involvement of the United States government in this region, according to newspaper accounts of the period, began between 1939 and 1941 with the manufacture of armaments.

> "Department of Defense activities in the Love Canal region with the exception of continued operations of military and military reserve installations, were largely concentrated during World War II and to a lesser extent, the Korean War. This area was a substantial contributor to the war material production effort during both these conflicts.
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> "During World War II, the Department of the Army mobilized existing industrial resources in the Niagara Frontier by contracting with local manufacturers for the production of war material such as anti-aircraft and steel armor castings, munitions (TNT) and chemical clothing protectors, as well as for the furnishing of combat support services such as the repair and winterization of aircraft, warehousing of aircraft parts, incendiary and napalm bombs and artillery maintenance. Many of these activities were resumed during the Korean War.

> "The industrial resources of the Niagara Frontier also provided crucial support to the Manhattan Engineering District (MED) and the Atomic Energy Commission (AEC) for the processing of radioactive materials during World War II (MED and AEC related activities have since been consolidated under the aegis of the Department of Energy). After the war, uranium ore processing was continued by a number of corporations under contract to the AEC for the production (full scale and pilot plant testing) of nuclear reactor fuel rods. Nuclear fuel processing in the Erie-Niagara area was gradually phased out and finally discontinued in 1956.
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> "Current DOE involvement continues in the area in connection with the storage of radioactive materials at the Lake Ontario Ordnance Works in Lewiston and Porter. Since the Korean War, the primary DOD industrial-related activities in the area have been the production of aircraft parts and the testing of rocket engines and rocket fuels."[3]

Congressional Inquiry - Army Investigation

The Report on Army Investigation into Alleged Army Dumping of Toxic Substances in Love Canal Area, Niagara Falls, New York, stated as follows:

> "On May 23, 1978, Congressman John J. LaFalce contacted the Department of Defense and the Department of the Army concerning certain

[3]Draft report of Interagency Task Force on Hazardous Wastes, March, 1979, pp. 111-133.

allegations which had been made to him to the effect that the Army had dumped certain materials into Love Canal in Niagara Falls, New York, in the late 1940's and early 1950's. Military records were immediately searched, but no evidence of Army involvement in the contamination of Love Canal was found.

"Again, on June 26, 1978, Congressman LaFalce wrote the Department of Defense, urging a more extensive investigation into possible Army involvement. Also on June 26, 1978, Robert P. Whalen, M.D., Commissioner of Health of the State of New York, wrote the Secretary of the Army, seeking data concerning possible Army disposals in Love Canal....On June 29, 1978, a more extensive investigation was directed to confirm the original findings of no evidence of Army involvement in the contamination of Love Canal. The investigation plan was to interview persons in the Niagara Falls area, to locate knowledgeable Army personnel who were at the Niagara Falls Army Chemical Plant in the late 1940's and early 1950's, to make a more detailed analysis of past official records, and to meet with certain chemical company officials and employees concerning their knowledge of past events and manufacturing processes.

"On July 7, 1978, the Office of the Chief of Engineers formally requested the Commander, United States Army Material Development and Readiness Command (DARCOM), to investigate the allegations of possible Army involvement in the contamination of Love Canal. Immediately, the Army's Project Manager for Chemical Demilitarization and Installation Restoration began a more thorough search of available records concerning Army-related chemical activities in the Niagara Falls area. As of July 15, 1978, record repositories at Aberdeen Proving

Ground, Maryland; Washington National Records Center, Suitland, Maryland; National Personnel Records Center, St. Louis, Missouri; Dugway Proving Ground, Utah; U.S. Army Armament Materiel Readiness Command, Rock Island, Illinois; and U.S. Army Armament Research and Development Command, Dover, New Jersey, had been searched. Also being screened were various historical files, including city maps, city council minutes, and newspaper files, at the Niagara Falls City Library."[4]

The Army investigation concluded that there was no evidence of direct Army involvement in the Love Canal site.

Our investigation, as will be documented herein, shows that while the Army itself may not technically have been directly involved in the Love Canal site, the United States government itself and/or through its agencies and proprietory corporations were so involved, at least inasmuch as we have defined the region.

UNITED STATES GOVERNMENT INVOLVEMENT

The Reconstruction Finance Corporation ("RFC") was created by an Act of January 22, 1932 to, in part, acquire strategic and critical materials, provide financing for plant conversion and construction and undertake many other activities, some of which later became involved in the World War II effort.[5]

It soon established The Metals Reserve Company as a subsidiary corporation to procure, stockpile and dispose of metals, minerals, defined as "strategic and critical", and to pay subsidies to the producers of such materials.[6]

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[4]The Report on Army Investigation, etc. Aug. 14, 1978

[5]National Archives of the United States, "Records of the Reconstruction Finance Corporation (Record Group 234)."

[6]IBID, Incorporated on June 29, 1940

The Metals Reserve Company established a number of buildings on the property of Hooker Electrochemical Company in Niagara Falls. Documents dated November 16, 1942, from the Sign and Zoning Inspector, City of Niagara Falls show that buildings on the real property of Hooker Electrochemical Company were owned and operated by the Metals Reserve Company.

In addition, a sworn statement from the Assistant Assessor of the City of Niagara Falls shows that a United States government building on Hooker's property, in accordance with the permits, was demolished sometime between 1947 and 1957.[7]

The United States government was also involved through its defense procurement programs. Plancor, the code name for any plant of the Defense Plant Corporation, a subsidiary of the Reconstruction Finance Corporation, organized August 22, 1940 to finance and supervise construction and equipping of industrial facilities was operated for the most part by private concerns sponsored by Federal agencies administering defense and war programs. The Plancors, for reasons of security, were given numbers and numbered into the thousands. They were Army, Navy, and Army Air Corps operations which received their orders from the Army-Navy Munitions Board. The Plancors were involved in the production of chemicals critical to the war effort. After the war the government decided to sell various Plancors to private companies as they had been determined to be surplus.[8]

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[7] Statement of Michael Farina, Assistant Assessor, City of Niagara Falls, May 15, 1979

[8] A letter to John F. Sonnett, Assistant U.S. Attorney General, February 18, 1948. In the letter it is proposed that Plancor-45 be sold to the Hooker Electrochemical Company for a sum of $171,000. The letter further states that the "cost of the property proposed to be sold is in excess of $1,000,000."

DISPOSAL OF IMPREGNITE

To find out what was being developed, we searched the records of the Chemical Corps Journal, which originally was the publication of the Army Chemical Corps Service. In this document we found the history of the Chemical Corps plant known as the Niagara Falls Chemical Warfare Plant as it was built by E. I. DuPont deNemours and Company. It was to develop an impregnite for military fabrics. The first impregnite formula was known as RH-195, which was very unstable. It was replaced with CC-2, which was also unstable, but not as unstable as RH-195. The solvent for both was tetrachlorethane.

This document, referring to the manufacturer of CC-2 and RH-195, states that the manufacturer had a serious problem with insoluble residues.[9]

The above document does not inform as to the disposal of insoluble residues from this process. However, there is circumstantial evidence to indicate that such residues were dumped in the southern end of the Love Canal. This evidence consists of the following: On July 19, 1978, Mr. Frank Ventry, a former employee of the City of Niagara Falls, who operated heavy equipment at the Love Canal dump site, made a statement to the Army Board of Inquiry investigators:

> "With reference to the Army incident, I recall three specific times that the Army disposed of material in the Love Canal area. Each time a Captain arrived in a jeep with his driver and a six by six truck, Army color, perhaps with stripes on the bumper, perhaps with the number 17, which comes to mind. Each time prior to unloading the truck, I was requested to loosen up the dirt in the area where the drums were to be dropped from the truck to provide a cushion

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[9] The Chemical Corps Journal, Official publication of the Chemical Corps Assoc., dated April, 1948, published from Room 523, 1129 Vermont Ave. NW, Wash. 5, D.C., Lt.Colonel Harold Rodier, Chemical Corps, Retired.

effect. Then the drums were pushed into the water with a bulldozer by myself. The drums were a little smaller than 55 gallon drums, however the shape was different, more like a beer keg. The markings on the drums were yellow stripes and the exterior of the drums appeared as if they were covered with lead or zinc. The outer coating was painted with Army olive drab color. There were five men and one officer in each party, three men normally handled each drum and the men wore rubber gloves and fatigue clothing. Drums were skidded off the back of the truck. The officer in charge, the Captain, wore a sidearm. To the best of my memory, the men stated that they came from the plant on Buffalo Avenue. At this time the Director of Public Works indicated to me that the Army plant was closing down and being taken over by one of the civilian plants. Army personnel did not request me to sign any documents or receipt for material placed in the dumps. At no time during my tenure of responsibility in the Love Canal area was I required to sign for material placed in the dump nor maintain an inventory of material dumped therein. There was no specific criteria to reject material from being dumped. Anything delivered was placed in the dump. About 30 or 50 truckloads a day...."

The Army headquarters in Washington, D.C. established an inquiry, and their report dated August 14, 1978 states that they found no evidence to support Army dumping at that time.[10]

[10]Department of the Army, Report on Army Investigation into Alleged Army Dumping of Toxic Substances in Love Canal Area, Niagara Falls, New York, dated August 14, 1978

Mr. Dudley Barton, General Manager of Haveg Industries, Inc. stated that the main type of container used by the various Plancors and defense installations in the Niagara Frontier during World War II for corrosive materials was supplied by Haveg Industries, Inc. of 900 Green Bank Road, Wilmington, Delaware.[11] He supplied the Task Force with information pertaining to the equipment, and informed us that he was the salesman of this equipment at the end of World War II. He also supplied a catalog of all the containers used during World War II by the various establishments.[12] One particular container in the catalog which is described with diagrams appears to be identical to that described by Mr. Ventry.

The catalog description was given to Mr. Ventry, who confirmed that the Haveg container could be what he saw. The use of Haveg containers was further substantiated in discussions with Lieutenant Colonel Arnold Arch, Former Commanding Officer of the Niagara Falls Chemical Warfare Plant.

The Army report of August 14, 1978, states that these types of containers were suitable for the movement of dangerous chemicals. The Haveg brochure indicates the same. Indeed, the Army report indicates that such containers were used for the movement of impregnite CC-2 and its predecessor, RH-195.

One of the heavy equipment operators for the Conestoga-Rovers, Inc., the contractor hired by New York State to cap the Love Canal, disclosed in August 1979 that while operating excavating equipment in the Love Canal area, at a depth of 10 feet, a number of fiber containers of the Haveg description were punctured, and a white substance poured forth. The white substance was, apparently, not tested but would conform with a description of impregnite.[13]

[11]Investigator interview with Mr. Dudley Barton, dated 12/3/79
[12]Catalog of the products made by Haveg Corporation during the World War II.
[13]Interview with investigator August 6, 1979.

MANUFACTURE OF PHOSGENE

The Army report states that the United States Army did not produce Phosgene in the Niagara Frontier area during or after World War II.[14] Further, it indicates that at no time would chemical warfare materials be shipped in military vehicles.

From the declassified documents of the Aromatics and Intermediate Chemical Division of the War Production Board of the United States government dated October 7, 1943, the Task Force obtained a report showing that Phosgene was being manufactured under the direction of the Army with a Coordinating Officer by the name of Major Willard. Phosgene was being produced at the Niagara Chlorine Plancor in Lockport and Hooker Electrochemical Company. The Chemical Warfare Service was receiving Phosgene from both locations to meet their requirements.

In documents of the same organization, the Task Force found that Phosgene was shipped in high-pressure cylinders and at the time that the document was written there was a shortage of high-pressure cylinders; therefore, because of Interstate Commerce Commission trucking regulations, the War Production Board requested that the Army make arrangements to ship Phosgene from the various plants in Army vehicles carrying one-ton cylinders so that there would be no violation of the I.C.C. regulations.

The military services which required Phosgene as a munitions stabilizer were the Navy Rocket Project, the Soviet government, and the Chemical Warfare Service. The Chemical Warfare Service was

[14]Phosgene is described in the Army investigation as a lethal chemical warfare gas in World War I. Subsequent documents list it as a major component of Dyes, Centralite and Theophylline (a heart stimulant) during 1944.

to receive the majority of their Phosgene from the Army Ordnance Plancor.[15]

Major Willard reports that as of May 25, 1944 the Army Ordnance planned to expand their own facilities for producing Phosgene, and the Chemical Warfare Service would continue to obtain only a supplement of Phosgene manufactured by private industry. The Hooker Chemical Plancor was not able to supply the amount for which they were contracted unless they utilized additional facilities. The documents indicate extremely dangerous chemical substances were being produced in the area of the Love Canal, substances dangerous to personnel.

Therefore, contrary to the Army investigation report of August 14, 1978, it appears that the Army was in fact producing Phosgene and transporting it in military vehicles in the Love Canal area during and/or after World War II.

It has been demonstrated herein that a major effort was underway by the United States government in the early 1940's to establish chemical production in the Love Canal region. Aerial photographs show a change in the environmental conditions in the area from 1940 to 1958, a time period coinciding with the effort by the United States government to foster chemical production in this region.[16]

[15]Memorandum to Mr. R.G. Ruark, War Production Board, from Walter Runge, Chief Intermediates Unit, dated April 18, 1944, with production report on Phosgene by War Production Board for years 1943, 1944, 1945.

[16]A series of aerial photographs examined by or in the possession of the Assembly Investigator clearly indicate the accumulation of foreign matter in the Love Canal itself and on the banks of the Niagara River. PHOTOGRAPHS: Military picture, ROLL-3-V42342, National Archives, WB-537, Record Group No. 373. Canadian Archives, CAN 3A921. Agriculture Dept. stabilization photograph dated October, 1951, ARE-511-215.

Transfer of Contaminated Property

On April 23, 1942, as part of the Defense Program, the United States government took aerial photos which indicate a large military-style housing facility called Griffin Manor in the Love Canal area westerly from Love Canal towards the line of Great Lot 60. Griffin Manor was built by the Defense Homes Corporation, which was established on October 23, 1940 to alleviate a housing shortage for defense workers in cooperation with the office of the National Housing Administration. The Defense Homes Corporation was organized under the Reconstruction Finance Corporation. After World War II Griffin Manor was deeded to the City of Niagara Falls for housing.[17] The deed contains no warning pertaining to fissionable materials in the property as set forth under Executive Order 9908.

However, in the quitclaim deed between the United States and the Board of Education of the School District of Niagara Falls for the area north of Colvin Boulevard, which is in direct line running north of Griffin Manor, we find a warning pertaining to Uranium and all other materials pursuant to Section 5(b)(1) of The Atomic Energy Act of 1946 and in accordance with Executive Order 9908.[18]

These two parcels were adjacent to and running parallel with the area known as Love Canal.

Another site of United States Government involvement was the Lake Ontario Ordnance Works. The Lake Ontario Ordnance Works occupied large tracts of land on the northern end of Love Canal, an area within the Townships of Porter and Lewiston. These lands were owned

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17Quitclaim deed by and between The Public Housing Administration of the United States government and the Niagara Falls Housing Authority as recorded in LIBER 1173, page 264.

18Quitclaim deed by and between the United States of America and the Board of Education of the School District of the City of Niagara Falls as recorded in LIBER 987 page 26.

by the United States Army.[19] These Townships, which were farmlands and orchards, were converted into a complex of chemical plants and munitions factories, railway sidings and roads.

Surrounding the military establishment there was a civilian-paramilitary operation organized directly under the RFC and the Army-Navy Munitions Board. The military and civil government nuclear chemical productions were intertwined. All the Plancors and the military establishments used the same drainage and easements into Lake Ontario and the Niagara River.

A document from the U.S. Surplus Property Board, including maps and easements, shows that the land of the Lake Ontario Ordnance Works was owned by the United States Army, and lists specific buildings that were carried on the Army inventory for the Lake Ontario Ordnance Works. There is language in this document which could reasonably bear the interpretation that these properties were contaminated during the U.S. government involvement in the area.

"DECONTAMINATION: A Decontamination program was initiated, but was not completed as it was determined that it would be to the advantage of the government to defer this program until the property is disposed of. It is reasoned that in the event the manufacturing area is disposed of to a concern manufacturing chemicals, decontamination would not be required."[20]

19General Services Administration, Real Property Transaction Advice No. 215491, dated August 28, 1963.

20United States of America Surplus Property Board, Declaration of Surplus Real Property from the War Dept. Army Service Forces Corp of Engineers, January 13, 1947.

Subsequently, the War Assets Administration verified the contamination of these lands:

In a section marked "Type of facility and physical characteristics" it describes the central area, Reference 3 and 4, as highly contaminated. "The soil is impregnated with dangerous combustible and corrosive acids from residual TNT materials.

"Below grade extensive pipe iron lines interlace these areas and can never be fully decontaminated or safely removed except at considerable cost."[21] Further documentation suggests that the U.S. government was involved in nuclear chemical engineering in this area during the 1940s[22].

There is a compendium of documents obtained from the General Services Administration under the caption of: Real Property Transaction Advice, Number 215491, prepared on August 28, 1963. This compendium of documents demonstrates that the Lake Ontario Ordnance area in Lewiston, New York, included Air Force and Navy installations. There were storage areas and areas apparently under the control of the Atomic Energy Commission, including a potable water line.[23]

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21 War Assets Administration, Report Control No. RP-F-13, October 17, 1947.

22 War Assets Administration, Z1-PMD, Report Control Number RP-F-13; A letter dated July 11, 1947 to Mr. Thomas E. Drumm, Deputy Administrator, Office of Real Property Disposal, Washington, D.C. from Harry Filens, Associate Deputy Zone Administrator for Real Property Disposal, Zone 1, War Assets Administration, to the effect that Lake Ontario Ordnance Works had not been decontaminated as of the date of the letter. The letter also documents that the Army Corps of Engineers ha not complied with numerous requests that such decontamination be completed; similarly, follow-up letter dated July 11, 1947, and others in the same vein.

23 op.cit. G.S.A. Real Property Transaction Advice #215491, dated August 28, 1963.

As of the end of March, 1944, certain areas had been dismantled, including a power area, an acid area, a magazine area, an acid and TNT area, and a nitration area.

The Town Clerk of the Town of Lewiston, upon receiving complaints from residents who own homes in the Lewiston escarpment area known as the Whittaker Subdivision commissioned a soil evaluation. The Dominion Soil Investigation, Incorporated, of 104 Crockford Boulevard, Scarborough, Ontario, Canada, completed their contract and established that the Whittaker Subdivision was built on top of the northern end of the Love Canal, which had been filled during World War II.

An analysis and statements by Lt. Colonel Arnold Arch indicated that the chemicals in that region, permeating the soil and destroying the foundations and pipes of the housing in the Whittaker Subdivision, were the same chemicals used in the development of the Atomic Bomb and nuclear chemical engineering.[24]

On June 1, 1947 the Buffalo Academy of the Sacred Heart, known as Stella Niagara New York, obtained a lease from the United States Army for $30 payable annually in advance for certain properties adjacent to the Niagara River and a part of the Lake Ontario Ordnance Works. This is the precise area described in official documents as having been heavily contaminated.

The leased property was designated for surface agricultural use. Subsequently, a seminary was built on this property.

Clause 16 of the lease alludes to the possibility that below the surface of this property were uranium, thorium, and other materials covered by the 1946 Atomic Energy Act.

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24 Investigator interview with Lt. Col. Arnold Arch, November 11, 1979; in which his analysis of the Dominion Soil Investigation, Incorporated Report, Reference Number 78-9-16 dated March, 1979 prepared for the Town of Lewiston, was recorded.

On May 6, 1949, the United States government, through the Public Housing Administration, deeded to the School District, Board of Education, of Niagara Falls property known as the 93rd Street School for educational purposes. The deed includes the statement, "All uranium, thorium and all other materials determined pursuant to the Atomic Energy Act of 1947 to be peculiarly essential to the production of fissionable material contained in whatever concentration remains the property of the United States government."[25]

Additional documentation of the toxic pollution of the area has been obtained by the Task Force and is attached.[26]

The United States government has also been involved with another type of enterprise dating from 1956 to the present. This enterprise involves experimentation in electromagnetics conducted under the auspices of the United States Air Force. The experiments are to determine biological effects of microwave radiation.[27]

CONCLUSION

In summation, it is our view that the documents and interviews obtained by the Task Force lead to a finding that the United States government was engaged in extensive wartime and post-war manufacture of munitions, nuclear chemical engineering and the manufacture of items of chemical warfare; that the government improperly disposed of various attendant wastes from these projects; and that the government knowingly transferred contaminated properties to private concerns without decontaminating them and without regard to the health and safety of the people of the Love Canal region.

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25 Lease to the Buffalo Academy of the Sacred Heart, Stella Niagara, from the United States Army, Corps of Engineers, Contract Number W30-075/eng3571 dated June 1, 1947. deed as recorded in the Niagara County Court, Liber 953, page 96 dated 8th day of May, 1949 between the United States government and the School District, City of Niagara Falls.

26 Former Hooker Chemical Company employee inter-office memoranda, as received by the Securities and Exchange Commission, dated May 1, 1979.

27 A report and maps by Officers of the United States Air Force, addressed to the Honorable F. Edward Hebert, House Armed Services Committee Chairman, December 29, 1972.

ERRATA

Page 19 - The third, fourth and fifth paragraphs should be omitted, and the paragraph following inserted:

The Buffalo Academy of the Sacred Heart, known as Stella Niagara New York, entered into a lease with the United States Army beginning in June 1, 1947, for a twelve acre parcel of land which was part of the Lake Ontario Ordnance Works and was located adjacent to the Niagara River. This property was situated next to the Water Intake Easement of the LOOW, which was part of an area described in a U.S. Surplus Property Board report as in need of decontamination. There is no indication, however, that the actual property leased by Stella Niagara is, or ever was, contaminated.

Contained in the lease to Stella Niagara was a clause which was apparently inserted in all federal government dispositions of surplus real property during this period. This clause reserved to the government the right to use any uranium, thorium and like materials which might be contained in deposits which were located in the land being disposed of, and "to prospect for, mine and remove the same"[24a]

Page 20, fn. 25 - The first sentence should be designated as footnote 24a. Only the second sentence remains as footnote 25.

INDUSTRIAL DISEASE IN THE GREAT DEPRESSION:
THE SILICOSIS TRAGEDY AT GAULEY BRIDGE,
WEST VIRGINIA

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Deborah A. Rosen

INDUSTRIAL DISEASE IN THE GREAT DEPRESSION:
THE SILICOSIS TRAGEDY AT GAULEY BRIDGE, WEST VIRGINIA

Deborah A. Rosen
Class of 1977

A senior thesis submitted to the History Department of Princeton University in partial fulfillment of the requirements for the degree of Bachelor of Arts.

April 1, 1977

PREFACE

In 1930-32, hundreds of men died of the lung disease silicosis while building a tunnel in Gauley Bridge, West Virginia. These deaths, and the incapacitating illnesses of hundreds of other workers, were the result of callous negligence on the part of the contracting company. The Gauley Bridge incident is an example of the kind of action by companies that accounts for the hard line often taken now by union leaders. Having lived through these abuses by uncontrolled industry, many of the union leaders are distrustful of the company management. They realize that in spite of the improvements of the past forty years the mining industry is still among the most backward industries, particularly in the area of safety and concern for workers, and so they are working to change that situation. Remembering the harsh Gauley Bridge tragedy, and others of its kind, unions today would no longer let a company get away with such abuses and exploitation.

The purpose of this paper is to examine the medical, engineering, legal, and social aspects of the outbreak of silicosis at Gauley Bridge and, further, to consider the legislative and social consequences of the tragedy. For help in researching and writing the paper I am indebted to a number of people. I would like to thank Professor Gerald Geison of the Princeton University Department of History and Philosophy of Science for constructive criticisms, suggestions, and encouragement. In addition, I appreciate the useful suggestions of Edgar L. Weinberg, Virginia mine geologist; Professor Abe Shtob of the Department of History, Philosophy and Religion of Essex County College; and Professor Duane Lockard of the Department of Politics of Princeton University. I am especially grateful for helpful information from Professor Saul Benison of the Department of History of the University of Cincinnati; Robert C. Irwin, Jr., Writer-Editor of the Appalachian Laboratory for Occupational Safety and Health; Dr. Lorin E. Kerr, Director of the Department of Occupational Health of the United Mine Workers of America; And Richard Nellius, Chief of the Office of Information of the Mining Enforcement and Safety Administration, United States Department of the Interior.

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I. INTRODUCTION: THE TUNNEL

The New River is one of the oldest rivers in the world. Some geologists even call it the oldest, referring to its ancestor of forty million years ago, the Teays. One of the few northern-flowing rivers, it alone breaks through the Allegheny Mountains from east to west, indicating its birth prior to the rise of the mountains. Around it the Alleghanies grew to heights of ten thousand and fifteen thousand feet. Then as the centuries passed they were eroded to two to four thousand feet, the soil going to make up the lower Mississippi valley. The River managed to cut its gorge through the rock and then push north in West Virginia to Gauley Bridge, where it is joined by the Gauley River to become the Kanawha.

Before the advent of the white man, the three hundred and eighty mile length of the New-Kanawha River in North Carolina, Virginia, and West Virginia served as the Mason-Dixon line for the sectional conflict between the Iroquois and Algonquins of the north and the Catawbas and Cherokees of the south. Only remnants of the destroyed villages were still visible in 1645 when the indentured servant Abraham Wood discovered the river. By 1758 British troops had built Fort Chiswell to guard the lead mines and

the settlers from the Indians. In the 1770s white settlers and native Indians fought Lord Dunmore's War along the River. Fifty-three whites were killed, eighty-seven wounded. On the Indians there are no official figures, but it is known that they suffered greater losses than their more sophisticated enemy. The Civil War, too, came to the New-Kanawha River. The New River Valley delegates voted almost unanimously for secession in April 1861. When the war was over, the homes and lives of many of those who lived along the River had been destroyed.

In the wake of the Civil War the industrialists--power companies, salt manufacturers, and lead, zinc, iron, and coal mining companies--came to the River, and they, too, brought destruction. With industry came the railroads, and with the railroads came a distortion of the River gorge. The famous Hawk's Nest overlook, for example, was formed in 1873 when part of the mountain along the River was blasted away to make room for a railway. The Hawk's Nest precipice has been admired by many since that time--but the birds have abandoned it.

What became the largest firm in the area, Union Carbide Chemicals Company, moved into South Charleston, West Virginia, in the early years of the twentieth century. In January of 1901, the Company began operating its first

plant: a dam, power house, and electric furnace in Glen Ferris. Ten years later Union Carbide began planning a power plant and tunnel further up the river in Gauley Bridge, near the Hawk's Nest overlook.

The Company did not start buying land for the project until 1926 and did not draw up detailed plans until 1928. The tunnel and power plant construction was to be directed by the New-Kanawha Power Company, which received a preliminary license in 1928 and a final license in April of 1930 from the West Virginia Power Commission. The license granted the right to build the tunnel and associated plant to produce power for public sale.

The multimillion-dollar contract was given to Rinehart & Dennis, a contracting firm of Charlottesville, Virginia. The 30,000 horsepower hydroelectric project was to consist of a dam on the New River at Hawk's Nest to divert the waters into a tunnel three miles in length, half the distance traveled by the winding New River. The water was to fall 169 feet to turn the turbines in the power house at the end of the Hawk's Nest tunnel.

Rinehart & Dennis began tunnel construction in 1930. Hundreds of men, eager to leave behind the hard times of the Great Depression, flocked to Gauley Bridge. In a matter of months, the population of that small town of 1500 was

doubled. The rest of the 2,000 to 2,500 new miners set up their homes in such nearby settlements as Vanetta, which was on the other side of the Gauley River, and a mile away from the main town, and Gamoca, two miles from Gauley Bridge. Two and a half years later, in September of 1932, the miners' shacks were again deserted. The project had been finished and the workers had moved on.

The construction of the Hawk's Nest tunnel had been completed, but not forgotten. In 1936 the project resurfaced, and this time it hit the national press. A freshman congressman, Vito Marcantonio of New York, had brought it to the attention of the United States House of Representatives. He demanded an investigation into claims that hundreds of men had died of the lung disease silicosis while building that tunnel, and that many more of the workers were still suffering from (and dying of) that disease.

During his seven terms in Congress, Marcantonio earned a reputation for consistently advocating legislation on behalf of labor. He was strongly criticized for his radical stands, and was labeled a communist and a demagogue. His sympathy for the downtrodden, however, appears to have been genuine. Marcantonio was born of Italian-American parents in East Harlem in 1902. Even as a teenager he was a very

active, leftist leader who led a strike against high rents in East Harlem. Strongly believing that it was the duty of government to protect and provide for the disadvantaged, Marcantonio entered politics as a protege of Fiorello LaGuardia while attending law school.

In the congressional election of 1934 Marcantonio defeated his district's Representative, James Lanzetta. Congressman Marcantonio reversed his predecessor's lukewarm support of important relief and public works measures. He played a particularly important role in the development of the Wagner-Connery Act of 1935, and while most Representatives were attacking the Social Security Act for its overly liberal and socialistic nature, Marcantonio criticized the Act for not going far enough.

Other pro-labor stands taken by Vito Marcantonio in his first term included: dencuncing the Kramer Sedition Bill and the emergency use of the National Guard as threats to labor and denials of civil rights, urging the federal government to set a good example in its treatment of civil service employees, criticizing the government for giving contracts to firms which denied the basic rights of labor, and supporting the demands involved in a number of local and statewide strikes. In summary, Vito Marcantonio demonstrated in his first two years as a Congressman that he

had made a total commitment to labor, not caring how much hard work this meant nor how severely he would be criticized.

It was consistent with this commitment that Marcantonio should call the attention of the House to the situation at Gauley Bridge. In early 1934 a young New York playwright, Albert Maltz, had picked up a hitchhiking miner from whom he had heard the Gauley Bridge story. Impressed by the tale, Maltz had written a short-story for the radical weekly New Masses about a miner slowly suffocating from silicosis. When he returned to New York, Maltz told the story to editor Frank Palmer of the People's Press, a labor weekly. Palmer got more information and broke the story, which was then picked up by other labor newspapers. Representative Marcantonio had sensed the rustlings of the radical press of the nation, which in late 1935 was condemning the Gauley Bridge affair as a disgraceful industrial scandal. Marcantonio called for an investigation. A congressional subcommittee of the House Labor Committee was formed in January of 1936 to investigate the affair. Chairman Glenn Griswald of Indiana, Matthew Dunn of Pennsylvania, Jennings Randolph of West Virginia, and W. P. Lambertson of Kansas joined Marcantonio on this committee. At the same time, a Manhattan group organized the National Gauley Bridge

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Committee. The members of this committee, including Columbia Professor and former New York Health Commissioner Haven Emerson, Socialist Norman Thomas, Drug Manufacturer and head of the Citizen's Union William Jay Schieffelin, and Secretary of the American Association for Labor Legislation John B. Andrews, paid the expenses of a trip to Washington for some of the Gauley Bridge workers so that they could testify before Marcantonio's committee.[1]

The Congressmen found that 476 of the approximately 2,000 to 2,500 workers in the Hawk's Nest tunnel had died since 1930 of the respiratory disease silicosis and that the 1,500 to 2,000 other underground workers were seriously ill with the same fatal disease. The final report added that the deaths, illnesses, and hardships which accompanied the tunnel project were the result of health and safety negligence on the part of the contracting company. The report was the outcome of the testimony of fifteen persons.

In addition to the five congressmen who conducted the congressional hearings, the participants were:

Philippa Allen, social worker with the Jacob A. Reis

1. "Silicosis Relief Organized Here," New York Times, 25 January 1936, p. 1. The National Gauley Bridge Committee also organized a drive for funds and clothing for the Hawk's Nest tunnel silicosis victims. According to the secretary of the Committee, Edward Royce, gifts of clothing and money poured in in response to the Committee's request.

Neighborhood House of New York City;

John W. Finch, Director of the United States Bureau of Mines;

William J. Pinke, New York City merchant working as a reporter for the People's Press;

Leonard J. Goldwater, doctor, chief of the occupational disease clinic of the New York University College of Medicine;

Rush Dew Holt, United States Senator from West Virginia;

Charles Jones, underground worker ("nipper") in the Hawk's Nest tunnel, three of whose sons died of silicosis, and who was himself dying of the disease;

Dora Jones, wife of Charles Jones;

A. C. Lambert, radiology specialist of Charleston, West Virginia;

Gilbert Love, reporter for the Pittsburgh Free Press;

James M. Mason, attorney, formerly employed by the House of Delegates of the State of West Virginia to investigate workmen's compensation in that state (in 1931), and later represented ninety-six of the Rinehart & Dennis employees in their damage suits;

Arthur Peyton, engineer for the New-Kanawha Power Company in the Hawk's Nest tunnel;

George Robison, underground worker (driller) in the Hawk's

Nest tunnel;

R. R. Sayers, M.D., former chief surgeon of the Bureau of Mines (for twelve or thirteen years), then senior surgeon in the United States Public Health Service and physician in charge of Industrial Hygiene and Sanitation;

Hiram Skaggs, underground worker (drill mechanic) in the Hawk's Nest tunnel; and

William P. Yant, chemist of the United States Bureau of Mines.

Rinehart & Dennis denied culpability and claimed that the findings of the congressional subcommittee were based on rumor, not on fact. Along with the company doctors, however, Rinehart & Dennis officials refused to appear before Marcantonio's investigatory committee, saying that they had "no knowledge" of any deaths from silicosis contracted during the tunnel job.[2]

Nevertheless, Marcantonio's exposure of labor abuse at Gauley Bridge was called by a biographer his "greatest personal triumph,"[3] and, according to this same author, Marcantonio himself considered the investigation and exposure of silicosis hazards to be a "major highlight of

2. U.S., Congress, House, 74th Cong., 2nd sess., 1 April 1936, Congressional Reccrd 80: 4752.
3. Salvatore John LaGumina, Vito Marcantonio, The People's Politician (Dubuque, Iowa: Kendall/Hunt Publishing Company, 1969), p. 20.

his career."[4] Certainly the increased public awareness of silicosis and the passage of state and federal legislation on industrial diseases which resulted from the examination of the Gauley Bridge affair justify Marcantonio's pride in his accomplishment. But what were Marcantonio's reasons for choosing this specific incident for his investigation? Why did the subcommittee focus on what might seem to be a trivial or minor project?

One answer to this question might be that the health conditions at Gauley Bridge were far worse than those at other U. S. mines, where silicosis was not a major problem. At the same time, however, many of the negligent or callous acts of the Rinehart & Dennis contracting company were scarcely unique. It was the middle of the Depression and the employees of many other companies were suffering the consequences of low wages and poor living conditions. Nor was the contracting company solely responsible for the inadequate compensation received by the Hawk's Nest silicosis victims. The West Virginia State Legislature was also partly responsible for the ambiguous and inadequate legal protection offered the victims of industrial diseases.

By 1930 a great deal was known in scientific circles

4. Ibid., p. 147, based on talk with Arthur Schutzer.

about silicosis and about medical and engineering methods of preventing this major occupational disease. In fact, a major study, "The Health of Workers in Dusty Trades," with a two hundred page section on exposure to siliceous dust, had been published by the United States Public Health Service in 1929, the year before construction on the Hawk's Nest tunnel was begun. However, communication between industrial company physicians and the governmental health agencies was generally poor. Therefcre (when there is no evidence to the contrary), it is possible that some companies, including Rinehart & Dennis, may have been unaware of this thorough 1929 study, of the many investigations which had preceded it, and of the current accepted scientific knowledge on such industrial health problems as silicosis.

In short, the basic medical, engineering, social, and legal problems associated with silicosis at Gauley Bridge were shared by many other U.S. mines, so it was not the uniqueness of Gauley Bridge which explains the attention given to it in 1936.

Yet it would be misleading to suggest that Marcantonio was merely looking for a scapegoat in seeking to build his own reputation with "the people," and chose Rinehart & Dennis as the unlucky company by chance. Although many of the criticisms leveled at Rinehart & Dennis could

justifiably have been directed at any of a large number of mining companies, the evidence suggests that Rinehart & Dennis executives, doctors, and engineers were aware of the dangers of their operational practices, and the treatment of workers at Gauley Bridge was significantly more apathetic, negligent, and callous even than would be expected by the very low standards of 1930.

The Gauley Bridge incident was the result of a combination of negligence and ignorance. Marcantonio singled it out both because it demonstrated the typical kinds of negligence among mining companies (and thus was an example of the many real problems in the mining industry) and also because it demonstrated an atypically high level of irresponsibility and apathy concerning human lives. As such, it could be expected to attract a great deal of attention, give Marcantonio significant political mileage, and result in the passage of some much-needed progressive legislation. Although the ignorance of the contracting company, the state government, and the miners contributed to the poor conditions in Gauley Bridge, the callous treatment of workers in the Hawk's Nest tunnel must be largely attributed to employer irresponsibility. Even by the standards of the 1930s, there was no excuse for the outrages perpetrated at Gauley Bridge.

II. THE DISEASE AND THE DOCTORS

Silica, the most abundant compound in the earth's crust, can be found in any ore, including those of gold, silver, lead, copper, and zinc. It can exist in combined form in silicates, or in the free SiO_2 form found in opal, in flint, and, most commonly, in quartz and sandstone. Because silica is so widespread and common in the earth's crust, workers in any metal-mining or related industry must always beware of its effects. The most acute hazards are probably in the industries of metal-mining, anthracite coal-mining, smelting and refining, foundries, potteries, sandblasting, and quarrying, drilling, or tunneling in granite, ganister, and sandstone.

The respiratory disease silicosis has been known since ancient times. It may be the oldest occupational disease, having afflicted even the ancient craftsmen who made arrowheads and spearheads. Hippocrates (in Epidemics) and Pliny the Elder (in Natural History) both wrote of the respiratory diseases of metal and mine workers. Pliny the Elder recommended the use of masks to avoid dust inhalation. George Bower, who wrote De Re Metallica under the name Georgius Agricola in 1557, described the "ulcerating" effect on the lungs of high concentrations of dust in a dry working

area. He advocated ventilation of mines to help prevent the "consumption" which "brought to an early grave" large numbers of mine workers.[1] In 1713 the Englishman Thomas Benson of Newcastle-under-Lyme was granted a patent for grinding flints by a wet method. Dry grinding, Benson noted, could cause death in two years because of the dust taken into the lungs.

Friedrich Engels, in his famous 1844 book, The Conditions of the Working Class in England, commented on the large numbers of consumptives among the workers.[2] He pointed out that 37 of 79 miner deaths listed in the public register of the Alston Moor (lead mining) district had been attributed to "consumption" and another 6 to asthma. Because of the dust breathed in continuously by miners, he noted, many of them developed incurable chest affections. These affections, which were characterized by

> short, wheezing breathing, rapid pulse (exceeding 100 per minute), and abrupt coughing, with increasing leanness and debility, speedily make

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1. Dr. R. R. Sayers, in U.S. Congress, House, Committee on Labor, "An Investigation relating to health conditions of workers employed in the construction and maintenance of public utilities," Hearings before a subcommittee of the House Committee on Labor on H.R. 449, 74th Cong., 2nd sess., 1936, p. 150.
2. All references to Friedrich Engels are from his chapter entitled "The Mining Proletariat," in The Conditions of the Working Class in England, which he originally published in 1844. The version used here was published in Moscow by Progress Publishers in 1973.

> the patient unfit for work. Every case of this disease ends fatally. Dr. Makeller, in Pencaitland, East Lothian, testified that in all the coal-mines which are properly ventilated this disease is unknown.... The profit-greed of mine owners which prevents the use of ventilators is therefore responsible for the fact that this working-men's disease exists at all.... The consequence... is that, in all districts without exception, the coal-miners age early and become unfit for work soon after the fortieth year. (2)

During the second half of the nineteenth century a few studies appeared on silicosis, a disease colloquially called "miner's consumption" or "miner's phthisis" until 1913 when it became more widely known as "silicosis." These studies indicated a high mortality rate from the disease among men who worked in mining and related industries. In 1867 the British government passed a law which required the removal of excess dust from the working area by mechanical means. Partially as a result of stronger trade unions, the 1890s brought laws in England which made the reporting of industrial diseases compulsory, established workmen's compensation, and defined the duties of the employers. By the turn of the century, according to the 1963 report on "Silicosis in the Metal Mining Industry" published by the United States Public Health Service and the United States Bureau of Mines, there was "a general awareness" of the severity and prevalence of silicosis and tuberculosis among metal miners and a recognition of the need for further

research on the subject.

In 1902, an English Royal Commission on the conditions of Cornwall miners reported that

> So far as the Cornish miners are concerned, it seems evident enough that stone dust, which they inhale, produces permanent injury to the lung, gradually in the case of ordinary miners and rapidly in the case of machine drillmen.... That the primary injury to the lung is due solely to the inhalation of dust would seem to be practically certain. (3)

Other research of that decade in the mines of Australia, Africa, Europe, and America confirmed these results.

In the same year as the Cornwall study, Dr. Thomas Oliver discussed the medical aspects of silicosis in his book Dangerous Trades:

> That the constant inhalation of dust as a necessary condition of daily labour results sooner or later in the appearance of grave and characteristic lesions which lead to premature breakdown and death among workers, is matter of common medical experience. (4)

He described the eticlogy of silicosis, one of the four kinds of pneumoconioses.[5] As the result of repeated working in a dusty atmosphere, particles of dust manage to get past the natural nasal and bronchial protective mechanisms and

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3. Dr. R. R. Sayers, Hearings, p. 150.
4. Dr. Thomas Oliver, Dangerous Trades (London: John Murray, 1902), p. 134.
5. The following discussion of silicosis is taken from the description by Dr. Thomas Oliver in his 1902 book, Dangerous Trades, pp. 271-273.

enter the lungs. The resulting irritation in the lung causes a "very marked increase in its fibro-connective tissue which encroaches upon the spongy structure of the lung and destroys its aerating function." Gradually the lung becomes hard, almost solid, and less able to contribute to the respiratory needs of the body. As the fibrotic tissue continues to replace the normal lung cells, the organ shrinks, and the chest becomes smaller, the cough more severe, the emaciation more obvious, and the breathing more difficult.

Dr. Oliver made the important distinction between "consumption" or "phthisis" caused by the tubercle bacillus (tuberculosis) and that caused by dust inhalation (pneumoconiosis). He noted that older silicosis victims may also suffer from tuberculosis because the weakened body is more susceptible to invasion by tubercle bacillus. Many of these people die of tuberculosis rather than directly from the silicosis. Oliver warned physicians against the common mistake of automatically labeling any form of consumption as tuberculosis. Silicosis (and the other pneumoconioses) can be distinguished from tuberculosis, he noted, because it is the bases, rather than the apices, of the lungs which suffer. In addition, only pneumoconioses can be arrested by permanently removing the miner from the dusty atmosphere.

Thus by 1902 the basic etiology of silicosis was understood and the connection between poor working conditions and the incidence of silicosis was clearly recognized. In spite of this, as late as 1908 only seventeen of the American states had laws requiring the removal of dangerous dusts from working areas by mechanical means. Only during the second decade of this century did the United States government really recognize and act on the threats of industrial diseases.

This crucial decade began with the First National Conference on Industrial Diseases, held in Chicago in June of 1910. At the conference, doctors referred to the 1902 Cornwall study and reported that "there can be no question or doubt as to the decidedly health-injurious consequences of underground rock-drilling and allied occupations in the deep quartz mines of our western states."[6] Conference speakers noted that miners were often "saved" from the ravages of "miner's consumption" only because they had already died in fatal mining accidents. The speakers urged further studies in mines, fuller protection of miners by state and federal safety and compensation laws, and more

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6. Frederick L. Hoffman, "Problem and Extent of Industrial Diseases," presented at the First National Conference on Industrial Diseases, which was organized by the American Association for Labor Legislation (New York: Princeton University Press, 1910), p. 42.

extensive educational programs to make the public, the miners, and the employers more aware of the dangers of industrial diseases.

Four years after the Chicago conference, the Secretary of the Anti-Tuberculosis Society of Jasper County, Missouri, and the State Board of Health of Kansas initiated the first major investigation of silicosis in the metal mines of Joplin, Missouri.[7] Dr. A. J. Lanza and his aides from the U.S. Public Health Service and the U. S. Bureau of Mines examined 93 miners. Of these, 64, or 68.8% had silicosis, and 39 of those 64 also suffered from pulmonary tuberculosis. Atmospheric dust concentrations in the mines were commonly as high as 6 to 7 mg per 100 liters of air.

A more comprehensive study in the same district in 1915 found that 472 out of 720, or 65.5%, of the miners had silicosis, with 21.8% of the 472 also suffering from pulmonary tuberculosis. The free silica content of the mine dust varied from 70 to 95%. The public health officials attributed the high concentration of silica and the

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7. U.S., Department of the Interior, Bureau of Mines, Pulmonary Disease Among Miners in the Joplin District, Missouri, and its Relation to Rock Dust in the Mines, by A. J. Lanza and Edwin Higgins, Technical Paper 105 (Washington, D.C.: Government Printing Office, 1915). Joplin, Missouri, is located approximately five miles from the Missouri-Kansas border. This may account for the cooperation of the two states on this study of Joplin miners.

resulting high prevalence of silicosis (as distinguished from tuberculosis) directly to the poor ventilation and the dry operational practices of the mine. They described silicosis as the result of "irritation by rock dust" which "produces a fibroid (thickened) condition of the lungs, leading to dyspnea (short wind) with cough, expectoration, lessened working ability, impaired general health, and sometimes loss of weight." Tuberculosis infection may follow, they added.

Between 1916 and 1919 the Bureau of Mines and the Public Health Service cooperated again on a silicosis study.[8] Of 1018 miners in the Butte, Montana, district, 432, or 42.4%, were silicotic, and 14.6% of the 432 also had pulmonary tuberculosis. These Butte mines were found to be more dusty than those in Joplin, but the concentration of free silica, at 40 to 50%, was much lower in the Butte mines than in Joplin.

These and other major investigations of silicosis in the metal-mining industry resulted in better medical service and more adequate prevertive measures in many U. S. mines. For example, mining companies in the Picher, Oklahoma,

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8. U.S., Department of the Interior, Bureau of Mines, Miners' Consumption in the Mines of Butte, Montana, by Daniel Harrington and A. J. Lanza, Technical Paper 260 (Washington, D.C.: Government Printing Office, 1921).

district applied the Joplin recommendations to their mines. In 1923 they reported that the improvement in working practices had resulted in a decrease in the concentration of atmospheric dust in the mines and a significant decrease in the number of silicotic mine workers in the Picher area.

The Joplin report had recommended yearly examination of miners to screen out the most susceptible workers and to check for silicosis and tuberculosis. As a result the Bureau of Mines, with the aid of the Tri-State Zinc and Lead Ore Producers Association, and the Picher, Oklahoma, Post of the American Legion, opened a small clinic in the Picher district in 1924.[9] Three years later, with financial assistance from the Metropolitan Life Insurance Company, they expanded the clinic. When the clinic was opened, 94 out of 309, or 30.4%, of the miners had definite silicosis. A Bureau of Mines follow-up study from 1928 to 1931 indicated a 66.6% decrease in the number of men with both silicosis and tuberculosis and an 82.7% decrease in the number with tuberculosis alone. Only 5,366 out of 27,553,

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9. U.S., Department of the Interior, Bureau of Mines, Silicosis and Tuberculosis Among Miners of the Tri-State District of Oklahoma, Kansas, and Missouri, Part I (For the year ended June 30, 1928), by R. R. Sayers, F. V. Meriwether, A. J. Lanza, and W. W. Adams, Technical Paper 545; and Part II (For the year ended June 30, 1929), by F. V. Meriwether, R. R. Sayers, and A. J. Lanza, Technical Paper 552 (Washington, D.C.: Government Printing Office, 1933).

or 19.4%, of the miners had silicosis, and 13.9% of those with silicosis also had tuberculosis.

Gradually, then, public health officials and mining companies were becoming more aware of the prevalence of silicosis in the mines. At the same time scientists were gaining a fuller understanding of the disease itself.

The 1929 Public Health Service publication, "The Health of Workers in Dusty Trades," highlighted the following aspects of silicosis.[10] The harmful effects of free silica result not from mechanical irritation by the silica particles in the lungs, but from the dissolution of the tiny (10 microns diameter) particles into the alkaline fluids of the lung to form silicates which then induce the formation of protective scar tissue. Fibrotic scar tissue progressively replaces lung tissue and also interferes with normal circulation of blood and lymph in the lung. The fibrosis may result in death by suffocation because of low oxygen level in the person's blood and cells.[11] Alternatively, the fibrosis may progress more slowly and allow time for death to occur in other ways. Silicosis may cause death by predisposing the lungs to development of

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10. U.S., Public Health Service, The Health of Workers in Dusty Trades: Exposure to Siliceous Dust, Bulletin No. 187 (Washington, D.C.: Government Printing Office, 1929).
11. As Philippa Allen described silicosis in Hearings, p. 3, "Ultimately the victim strangles to death."

pneumonia or to infection by tubercle bacillus. In other cases, fibrotic nodules result in heart failure as the decreasing area of the vascular bed of the lungs results in cardiac hypertrophy and finally death.

Silicosis, as described by the radiology specialist A. C. Lambert, was known to start centrally and spread outward, while tuberculosis spreads in from the apices. Whereas silicosis affects both lungs, tuberculosis is generally a unilateral disease. Using X-rays, silicosis can be distinguished from "military tuberculosis", where the nodules are more dense and practically devoid of accompanying fibrotic tissue, and from carcinosis, which is less evenly distributed.

Silicosis develops in three stages. As R. R. Sayers of the Public Health Service pointed out in 1936, the patient in the first stage may not seem to be sick and may be able to work. However, some coughing, recurrent colds, shortness of breath on exertion, decreased elasticity of the chest, and mottling in the lungs may be evident. In the second stage these symptoms are more obvious and more serious. The patient may also demonstrate lassitude and loss of appetite and weight. There may still be no externally-visible physical changes at this stage, although a stethoscope will show a decreased depth of respiration. X-ray analysis,

however, will point to the definite appearance of nodules throughout both lungs.

The patient who has reached the third stage shows the above symptoms to an even greater degree. There is marked shortness of breath, even on minor exertion. The cough may be severe, the chest expansion capacity is very noticeably decreased, there may be some expectoration or sputum with the cough, and if the chest is tapped it will feel hard and the doctor will hear a dull resonance, indicating widespread replacement of normal lung tissue. Loss of appetite and weight may occur. X-ray analysis will show more intense mottling, with larger, conglomerated clumps of nodules and dense fibrosis. By stage three of silicosis, serious and permanent impairment of work capacity is usually evident. Permanent removal of the patient from the dusty working atmosphere may halt the cumulative progress of the disease but it does not lead to a restoration of normal lung tissue.

Five major factors contribute to the development of silicosis: the composition of the dust, the concentration of the dust, the size of the dust particles, the duration of exposure, and the individual's personal susceptibility. Even before 1930, doctors knew that a person usually required seven years or more of exposure to free silica to develop silicosis.[12] Dr. Leonard J. Goldwater, an

occupational disease specialist, testified at the congressional hearings in 1936 that extreme or unusual conditions may result in the development of silicosis within a matter of months. Dr. Goldwater admitted that the Hawk's Nest tunnel conditions could be categorized as "very unusual" and that therefore the claims of the victims were medically possible, even probable. Another occupational disease expert, Dr. Emery R. Hayhurst, agreed that under the Hawk's Nest tunnel working conditions, with the drilling of rock containing 98% silica, the average person would get silicosis within six to eight months while the very susceptible might begin tc suffer from silicosis in as few as four months. Dr. Goldwater noted at the hearings that personal susceptibility varies with several factors, including efficiency of nasal filtering, efficiency of the cilia of the bronchial tubes in getting rid of the dust, past history of respiratory disease or infection, and manner of working and breathing (i.e., even and orderly or vigorous and erratic).

By the 1930s, then, scientists knew a great deal about silicosis. Yet thousands of men still suffered from it.

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12. U.S., Department of Labor, Division of Labor Standards, National Silicosis Conference: Summary Reports Submitted to the Secretary of Labor by Conference Committees, February 3, 1937, Bulletin No. 13 (Washington, D.C.: Government Printing Office, 1937), p. 12.

According to the February 1937 initial reports of the National Silicosis Conference, one million, or 2%, of the 49 million U. S. workers were exposed to a hazardous concentration of free silica.[13] About half of these, or 1% of the total, were exposed to a serious hazard, and approximately 110,000, or .2% of the total U. S. work force, actually had silicosis, with 4,000 to 5,000 of them being disabled by the disease. Even as late as 1937, therefore, a large number of Americans had silicosis or were subjecting themselves to the risk of getting it.

Much of this high incidence of silicosis was the result of continued ignorance concerning the disease and methods to prevent it. Even as late as 1946, when Bernard J. Stern published Medicine in Industry, there was a gap between the company doctors, who had been trained as general physicians, and the public health agencies, which were aware of the current research on silicosis.[14] It was very difficult to maintain close contact between the reporting physician and the agency to which the occupational disease reports were sent. Even in 1946, as Stern pointed out, "physicians do not have the cooperative attitude toward the reporting of occupational diseases which they now have in regard to the

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13. Ibid., p. 2.
14. Bernhard J. Stern, Medicine in Industry (New York: The Commonwealth Fund, 1946), p. 59.

reporting of communicative diseases." This lack of cooperation, Stern claimed, could be attributed to the fact that doctors are not trained to recognize occupational diseases, and they do not realize or accept (or do not care about) the value of reporting in the prevention of the diseases.

"Health authorities," Stern noted, "complain that neither physicians nor hospitals nor industries report occupational diseases adequately. The situation is least satisfactory in states where reports of factory physicians may be used in compensation suits." These physicians were reluctant to report to the governmental agencies on health conditions and problems in a factory or mine because any such information could be used against the companies in the case of employee suits. The doctors felt an obligation to protect the company from the employees and the law.

At Gauley Bridge in 1930-32 the company doctors did not report the respiratory disease problem to governmental health agencies, nor did they attempt to deal effectively with the problem themselves. The evidence seems to indicate that this was not the result of ignorance on the part of these doctors. As already shown, at the time of the onset of the Hawk's Nest tunnel construction, scientists knew a great deal about the cause of silicosis. In addition, a

number of major studies in the mines had already confirmed the connection between high concentrations of silica dust in the working environment and the significant incidence of silicosis. Mere inspection of one study, published the year before construction of the tunnel began, would have given these doctors the information later exhibited during the congressional hearings of 1936. It is, of course, conceivable that the doctors had not read this thorough report (complete with case studies and X-rays) even though it obviously concerned their field of interest. However, it seems more likely that for most of the time the company doctors did know about silicosis and were actively deceiving the miners in the interest of their employer, the Rinehart & Dennis Company.

The workmen themselves were not at first aware of the dangers to their health. When they finally understood the cause of the Hawk's Nest tunnel deaths, many of the diseased employees and surviving families sued Rinehart & Dennis. Philippa Allen, a New York social worker who had researched the Gauley Bridge affair in 1934 and 1935, was very familiar with the court records of the Hawk's Nest workers' lawsuits of 1933-35. She relayed this information to the five congressmen on Marcantonio's subcommittee. As she explained at the congressional hearings in 1936:

> Many of the workers came from agricultural communities in the South where the disease was unknown. They were not experienced tunnel men or hard rock miners who would have known. Their testimony is universal that it was not until the "ambulance was clanging day and night to the Coal Valley Hospital" that they realized there must be something wrong.... When the men realized the danger it was too late. (15)

Most of those who left Gauley Bridge in response to the deaths of their co-workers had already been affected by the disease.

The Rinehart & Dennis company and its doctors made every effort to keep the workers ignorant of the disease. E. J. Perkins, superintendent of Rinehart & Dennis, did not post notice of the danger as was required by law. Even when it became obvious that everyone who worked in the tunnel became ill with the same symptoms, the doctors told no one about the disease and made little effort to help the bewildered dying men, not even to the extent of comforting them or relieving their physical distress. Some workers, like C. M. Skinner, the car-repair foreman, were told that they had asthma, or high blood pressure. Most of the early death records listed the cause as asthma or pneumonia. The company doctors, Dr. Mitchell of Rinehart & Dennis and Dr.

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15. Philippa Allen, Hearings, p. 20. Miss Allen's testimony is based almost entirely on the Fayette County court records of damage suits by Rinehart & Dennis employees. Allen herself pointed this out in the Hearings, p. 10 ("Most of this I am saying is court testimony.").

Simmons of the New-Kanawha Power Company and the Electrometallurgical Company, ignored complaints of breathing difficulty, loss of weight, and choking. When they did agree to see a sick miner, they merely distributed what worker Leo Grey called their "little black devils" (pills) without regard to the nature of the medical complaint, and told the men that they should take better care of themselves.[16]

According to the court testimony of the company doctors, they were not allowed to inform the men of their situation because the company knew full well how dangerous the working conditions were. Certainly Rinehart & Dennis knew that in tunneling through the white sandstone and quartz the miners were working with almost pure silica. The New-Kanawha Power Company had commissioned geologic tests on the rock by the Sprague & Honeywood Company of Scranton, Pennsylvania. These tests revealed that the rock in some places was more than 99% pure (free) silica. Aware of the commercial value of silica, Rinehart & Dennis actually ordered the Hawk's Nest tunnel widened from 32 to 46 feet in the location of highest purity. The rock mined from the tunnel area was sent to the Electrometallurgical Company plant in Alloy, West Virginia, to be used (without refining)

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16. Ibid., p. 19.

as pure silica in a number of industries. Though the State had granted the New-Kanawha Power Company a construction license on the condition that the power be provided to the public, upon completion of the project the public utility instead sold the power to the same Electrometallurgical Company. This other Union Carbide Company subsidiary later bought out the New-Kanawha Power Company.[17]

It appears likely that Rinehart & Dennis knew not only that there was a high concentration of silica in the rock being mined, but also that this silica was causing men to become ill and even to die. According to Philippa Allen and employee attorney James Mason, Rinehart & Dennis workers testified in court that the company feared the possibility of revealing autopsies on the bodies of the dead miners, and so hired its own undertaker to bury the men quickly, cheaply and without publicity. H. C. White, a Summersville undertaker, allegedly agreed to bury the men at the low (bulk-rate) fee of fifty to fifty-five dollars a body on the assurance that he would get a lot of business from Rinehart & Dennis.[18] The Charleston attorney James Mason, who represented ninety-six of the tunnel workers, claimed during

17. "Silicosis Deaths Assailed in House," New York Times, 8 February 1936, p. 1; see also Hearings, p. 27.
18. Philippa Allen, recalling testimony at Fayette County court trials, Hearings, p. 10.

the hearings that White had buried approximately 500 men in pine boxes in a farmyard near Summersville. Their families were told that the men had died of pneumonia.[19]

Senator Rush Dew Holt of West Virginia testified that he had received many letters from Gauley Bridge victims and their families asking for his help. In one of these letters, dated January 18, 1936, Mrs. Roosevelt Evans of Red House, West Virginia, wrote the following:

> My husband was a workman in the Hawk's Nest tunnel, he took sick and the contracting doctor sent him to the hospital. He died there and they did not even let me know that he had died. I went to see him and the nurse said that he was at the undertaker's. I rushed to the undertaker's and found that they had carried him to Sommers and buried him. Will you please look after my case for me? (20).

This may be the same case referred to by both Philippa Allen and the worker George Robison. They told of a man who died during the night shift at about 4a.m. At the end of the shift a co-worker went to inform the dead man's wife. She had to travel an hour to get to the undertaker's. Before she arrived at 7am with burial clothes, her husband had already been buried, without being washed. Other evidence that this was the usual way of dealing with the dead at Gauley Bridge emerged in court and in letters

19. James Mason, Hearings, p. 144.
20. Letter to Senator Rush Dew Holt from Mrs. Roosevelt Evans, read by Senator Holt in Hearings, p. 124.

written to Senator Holt from C. C. Logwood, Joe Martin, and other tunnel workers. A miner was buried as quickly as possible after he died, with no effort to notify the relatives. The graves were unmarked, and later, when asked to produce his records in court, the undertaker stated that they were no longer available. They "had been destroyed."[21]

Despite its knowledge of the dangers to workers, Rinehart & Dennis probably did not anticipate having to answer for and deal with their deaths. The company had allegedly recruited workers from distant counties and states so that when the job was finished the sick men would be scattered all over the eastern section of the United States. Since silicosis usually takes years of exposure and additional months or years of incubation to develop, Rinehart & Dennis may have assumed that the deaths of the scattered miners would not be connected with the Hawk's Nest tunnel.

Representative Dunn of Pennsylvania pointed out during the hearings that the contractors had been medically advised that it would take at least two years before symptoms of silicosis would become apparent. They hoped the project would not take that long, he said, and that the men would be

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21. Philippa Allen, recalling testimony at Fayette Couty court trials, Hearings, pp. 20-21.

dispersed before the disease appeared. Dunn said that Rinehart & Dennis had

> obtained full information as to the probable effect of the course they had in mind and which they followed, and they knew that if they completed the tunnel within two years they could get out of the State and nothing could be done to them by way of litigation; but the men contracted the disease before the end of two years. (22)

In fact, the working conditions at Gauley Bridge were so bad that men began to get sick within a matter of months. Rinehart & Dennis moved quickly to fire the diseased men and to force them to leave the area. Construction of the tunnel was accelerated.[23]

As George Robison put it, "The boss was always telling us to hurry, hurry, hurry.... When the rocks were in danger of falling at any time the foreman kept telling us that everything was all right and that we should keep right on." Philippa Allen described the concerns of Rinehart & Dennis: "The tunnel must be finished quick, quick, quick--we want

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22. Representative Matthew A. Dunn, Hearings, p. 168.
23. In December 1935, the International Juridical Association reported that the Federal Power Commission threatened a court action against Rinehart & Dennis because the power project would interfere with interstate commerce (Hearings, pp. 117-120). In trying to finish the project before court action was taken against them, Rinehart & Dennis had another reason for promoting rapid construction work on the tunnel. The increased urgency of the Hawk's Nest project due to this could have been an additional factor in the company's disregard for time-consuming safety precautions. (See Chapter Three below.)

our profits, profits, was all that interested the company." Senator Holt quoted a statement he had received from a man who worked at Gauley Bridge as a foreman. Writing under the caption of "Money Versus Human Life," the man wrote bitterly at one point: "The only thing Rinehart & Dennis Company could see was money, and they did not give a damn whose life they took or what else they took. Money, money, money was all they wanted."[24]

The silicosis expert Dr. L. R. Harless agreed that the company knew full well the harm they were inflicting on the miners. He told William J. Finke, a merchant doing some reporting for the People's Press, that, five years before the tunnel project was started, he had attended a New York City conference of more than five hundred engineers and doctors, all associated with Rinehart & Dennis' parent company, the Union Carbide Company (later the Union Carbice and Carbon Company). At the time, Harless was serving as the Rinehart & Dennis company doctor. Silicosis was explicitly discussed at the conference. Dr. Emery R. Hayhurst, the occupational disease specialist who had worked for the Ohio State Department of Health, the United States Public Health Service, the United States Bureau of Mines,

24. George Robison, Philippa Allen, and Senator Rush Dew Holt, Hearings, pp. 66, 9, 122.

and the United States Bureau of Standards, spoke on the disease. He classified silicosis as being "one of the most easily diagnosed occupational diseases."[25] As Finke insisted, every engineer and doctor at that conference must have been familiar with silicosis. Having very probably learned about the disease in the training courses required for their degrees, their minds would have been refreshed at the conference.

The evidence certainly seems to suggest that the regular Rinehart & Dennis doctors deliberately deceived the employees. Even if the doctors did believe at first that the men were dying of pneumonia or tuberculosis, it should have become obvious very quickly that only those who worked in the tunnel were dying, and the earlier diagnoses should have been discarded.

Let the Charles Jones family stand for hundreds of others.[26] In the 1936 hearings, Mr. and Mrs. Charles Jones testified that the man who took an X-ray of their sick son Shirley, who did an autopsy on him when he died, and who finally diagnosed the disease as silicosis was the same Dr.

25. Dr. Emery R. Hayhurst, Fayette County court testimony during the 1933 trial of Rinehart & Dennis employee, Raymond Johnson; transcript of Hayhurst's court testimony is entered in full in Hearings, pp. 83-102.
26. The tragedy of the Jones family was described by Mr. and Mrs. Charles Jones in Hearings, pp. 37-48.

Harless who had left the Rinehart & Dennis Company to do private medical work in Charleston. Shirley Jones, age 17 when he began working, was the youngest of the three sons of Charles Jones. Before the tunnel was started, Charles and the two older sons, Owen (age 21) and Cecil (age 23) had worked on and off in the West Virginia mines. They had been introduced to the Hawk's Nest tunnel through a frequent visitor in the house, a foreman of the New-Kanawha Power Company. Soon all four of the men in the Jones family were working in the tunnel. The sediment left in the tub after Mrs. Jones washed out her family's clothing unsettled her mind. Made her uneasy. "When the boys would come home," she said, "they would be all covered with this dust. It would be in their hair, in their eyes, and in their clothes."

After Shirley had been working in the tunnel for eighteen months, said Mrs. Jones,

> he came home one evening with a shortness of breath. He said,"Mother, I cannot get my breath." I told him, "Son, I believe that dust is harming you." I kept him at home after that for a while, and then his tunnel foreman came and asked why the boy was not at work. His name was Mr. Anders, and I told him that I thought the tunnel dust was killing them. He said, "No; that is just a foolish idea of yours. I have been working in tunnels for thirty years. It will not hurt them."

Mrs. Jones took her sons to see the now private physician Harless. He took X-rays of their lungs and began

to take an interest in the cases. Shirley died three weeks later, on June 18, 1932, and an autopsy verified the silicosis. Before he died, the boy said to his mother, "When I die I want you to have them open me up and see if that dust killed me. Try to get compensation, because you will not have any way of making your living when we are gone, and the rest of them are going too." Shirley was right. His two brothers died within thirteen months of Shirley's death; Cecil on September 25, 1932, and Owen on October 27, 1933. Mrs. Jones' brother, Raymond Johnson, followed thirteen months later, in November of 1934. Mrs. Jones testified: "They call it pneumonia at first. They didn't agree it was silicosis until my boy died. They would pronounce it fever and that would be all there would be to it. They would then bury the men and forget it."

Due to his illness, Charles Jones himself had left the Hawk's Nest tunnel before the completion of the project. He had survived, but he was too weak to do much with his life after Gauley Bridge. In Washington in 1936, he described his situation:

> The only work I could do after I left the tunnel--that was only a bit--was pickin' bony at the tipple at the coal mine. And that's the easiest work they is, boy's work. I hed to give that up. Now I cain't hardly lug a bucket of water, and that not fur. I cain't hardly git up on a chair and haul window blinds. I give myself about a year. I knew I'm goin'. I'm not foolin'

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> myself. But there's no use cryin' 'bout that now, is they? (27)

At the hearings Congressman Marcantonio, who had initiated the 1936 investigation, asked Mrs. Jones, "Do you know how many persons died as a result of working in that tunnel?" She answered, "I can't say exactly..... Reports kept coming in every day about men working in the tunnel dying. Every day somebody died. Many colored men died." The drill mechanic Hiram Skaggs was asked the same question. His answer was: "That is something I could not say accurately. From reports that one hears and his own observation of the whole thing, from beginning to end, it seems that there must have been nearly 1,000 deaths." An International Juridical Association article reported that "472 workers on the tunnel are known to have died from silicosis and hundreds more are doomed." Employee attorney James Mason said that it was hard to estimate, but that the number of dead was already (in 1936) probably around five or six hundred.[28]

Gilbert Love, a Pennsylvania reporter, was sent to investigate the Hawk's Nest story by the Pittsburgh Press

27. Charles Jones, quoted in "Excitement in Congress," Industrial Medicine 5 (February 1936):93.
28. Mrs. Charles Jones, Hiram Skaggs, International Juridical Association, James Mason, in Hearings, pp. 39, 49, 118, 142.

and the Scripps-Howard newspapers. Love found that everywhere he went in Gauley Bridge the men had silicosis. The reporter had tried to find out how many had died of the disease, but, he said,

> there were no authentic records that I could find. I went to the State capitol, where I visited the bureau of mines, the bureau of health, the compensation commission, and various other departments of the State government that I thought might be expected to have such records, but none of them had it. (29)

Even the State Department of Health did not have records which indicated how many Hawk's Nest tunnel workers had died--and the death records tended to list silicosis as "pneumonia" anyway. Since many of the workers had left the area, Love said, it was useless to try to determine the exact number of deaths. Love spent much of his time in West Virginia talking with Dr. Harless. According to Love, Harless had believed that the conditions in the lower tunnel at Gauley Bridge were so bad that virtually everyone who worked in that area, even for a very short time, would get silicosis and die of it. Harless had said that men began dying of silicosis in 1931, and that approximately seventy died of it that winter. The doctor, whom Love referred to as "a conscientious man," had told him that the situation was very serious.

29. Gilbert Love, Hearings, p. 78.

According to William Finke, who also spent some time talking to Harless a few years before the investigation, the doctor had three lists of names. On one of the lists, which Finke claimed he actually saw, were the names of 307 men who had died of silicosis. The second list contained the names of 250 men who had silicosis, but who had not yet died of the disease. The third listed the names of 200 additional men, many of whom had already left the area after developing the symptoms of silicosis.

Love mentioned that at first Harless had been reluctant to discuss the affair. According to Love, Harless explained that "he had been subjected to so much publicity on that account that he did not like to talk about the matter. It appeared that the doctor thought he had been involved in too many of those court cases." Harless had, however, finally opened up to Love. Having worked with Union Carbide and Carbon Company for seventeen years, and having severed relations with the company on the "friendliest of terms" so that he could spend more time in his private practice, Harless had expressed regret about testifying against the company in the court cases. But, Harless had added, he felt it was "his duty to his patients and to the science of medicine to state what he had found by his examination."

Yet when called to appear before the congressional

subcommittee hearings, Dr. Harless joined Dr. Hayhurst--the other key member of the June 1933 court-appointed board to examine the alleged victims--in refusing to attend. Hayhurst, "one of the greatest authorities on silicosis in the Nation," wired from Columbus, Ohio: "Telegram received re House Resolution 449. What provision has the committee to bear expenses of witnesses and per diem fees?"[30] Hayhurst never did appear before the committee, although records of his earlier court appearances concerning the Gauley Bridge affair were entered into the records of the congressional hearings.

Harless, the doctor who had been so concerned about silicosis at Gauley Bridge a few years before, answered by telegram that he was "unable to appear" at the subcommittee hearings. He explained more fully in a letter that his inability to be present was due to the illness of his wife and his "urgent professional duties."[31] After stating in the letter that the press and the subcommittee had grossly exaggerated the true conditions, Harless pointed out that when he examined 200 of the workers who claimed health impairment resulting from their employment at Gauley Bridge,

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30. Telegram from Dr. Emery R. Hayhurst to the congressional committee, Hearings, p. 35.
31. Letter from Dr. Leonidas R. Harless to the congressional committee, Hearings, p. 80.

he found "very little if any impairment of their health" which he could "attribute to their work in the tunnel."

In the same letter Harless also defended Rinehart & Dennis by criticizing the workers' suits for damages, on the grounds that he himself had warned "many of them of the dust hazard and advised them that continued work under these conditions would result in some serious lung damage." If, as he claimed earlier in the letter, the work in the tunnel had not contributed significantly to health impairment of workers, it seems odd that he should have given such strongly-worded warnings to the men.

In this letter Harless reversed his earlier stand, which was sympathetic to the miners. He even expressed the belief that many of the men "took advantage of this situation and made out of it nothing less than a racket." Love commented on Dr. Harless' claim that the story was overblown:

> I would say that Dr. Harless has probably become very self-conscious about this matter.... Possibly he had been thrust into the limelight attaching to this matter so much that he is more conservative now than when the matter was simply something of local interest. (32)

William Finke was much more critical of Harless. Recalling that Harless "seemed very willing to give me

32. Gilbert Love, Hearings, p. 82.

information at the time," Finke could "not understand his present attitude."[33] Of Dr. Harless's letter, Finke said: "I think it is ridiculous. I can, though, see why he has written a letter of that kind. He will not come here to this committee without compulsion I am sure." At this point in the hearings Representative Randolph asked, "Do you think that the tunnel contractors, Rinehart & Dennis, have been there to see the doctor?" Finke answered, "Yes; there were many of the representatives of Rinehart & Dennis there before I arrived. They left only a day before we got there." "Perhaps somebody put pressure on the doctor," Randolph suggested. Finke replied, "I have no doubt about that."

There is no evidence to prove that Finke's judgment was correct or incorrect. Since the Rinehart & Dennis Company refused to testify at the congressional hearings, we cannot know with certainty that Dr. Harless actually did leave the company on friendly terms. But Harless' earlier testimony in the court trials certainly does provide prima facie evidence that he had now (in 1936) yielded to some sort of pressure from Rinehart & Dennis.

33. William Finke, Hearings, pp. 115-116.

III. CONSTRUCTION AND WORKING CONDITIONS

The early twentieth century studies in the mines provided insight not only into silicosis per se but also into ways to prevent the outbreak of the disease. In an attempt to determine the degree of negligence on the part of the Rinehart & Dennis Company, these preventive measures were discussed in 1936 during the congressional hearings on the Gauley Bridge tragedy. When asked by Congressman Marcantonio at the hearings how long methods of preventing silicosis had been known, the Bureau of Mines chemist William Yant pointed to the investigation of the Joplin mines in 1914. That study, and the other Bureau of Mines reports of the 1910s, described the four environmental factors which contributed to the level of silicosis in the mines: the concentration of the dust, the content of the dust, the size of the particles, and the length of exposure. Lengthy exposure to a dusty mine with more than five million particles per cubic foot and a high percentage of ultramicroscopic particles of free silica in that dust, creates a significant hazard of silicosis.

Therefore, as the Bureau of Mines pointed out in the Joplin reports of 1914 and 1915, the goals of any mining health program should be to prevent the formation of dust

through the use of wet operating procedures, to effectively ventilate the mine and remove the dust, and to provide the miners with respirators and other personal protection devices. In addition, the publication recommended, the company should provide close medical supervision and periodic physical examinations of the miners, and the dust levels should be carefully and frequently checked by company engineers.[1]

"Silicosis," Yant said at the hearings on Gauley Bridge, "was quite prevalent before we started using precautionary measures in tunnel and mine operations."[2] Unfortunately, although the preventive measures seemed obvious to the government health and mining officials as early as the 1920s, silicosis continued to be a prevalent disease because the mining companies did not readily accept the government's safety recommendations. The failure of the companies to use the available expertise of the public agencies in the area of engineering, as in the area of medicine, can be attributed partly to industry's fear that any information obtained through outside investigation could be used against the company in damage suits by employees. That this concern was widespread is suggested by a booklet

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1. U.S., Department of the Interior, Pulmonary Disease Among Miners in the Joplin District, p. 44.
2. William P. Yant, Hearings, p. 174.

of the National Association of Manufacturers, which felt the need to emphasize that some states guarantee that information gathered about a certain plant cannot be used in the event of a compensation claim.[3]

As Bernhard Stern noted in his Medicine in Industry (1946), the poor working relationship between employers and government scientists produced "a wide disparity between available scientific knowledge and its application in industry to the detriment of the workers' health."[4] The employers frequently did not take advantage of the knowledge and experience of the national and state agencies. Many remained ignorant of dangerous working situations because they ignored or gave only minimal attention to the reports of those agencies. And because they usually did not allow the health agencies to examine their plants or mines, the employers were less likely to become knowledgeable about necessary safety precautions.

This gap between industry and the governmental agencies and scientists was widespread. Yet the existence of the gap does not itself explain why many employers did not concern

3. National Association Of Manufacturers, Committee on Healthful Working Conditions, Who's Too Small for A Health Program?, quoted in Stern, Medicine in Industry, p. 123.
4. Stern discusses the poor relationship between industrialists and governmental agencies on pp. 121-128 of his chapter on "Preventive Services," in Medicine in Industry.

themselves with the welfare of their employees. Industrial apathy towards preventive measures and safety was common. Stern wrote that one could ascribe this "to the traditional indifference of management to the problems of the conservation of human resources and to the fact that expenses incurred do not yield immediate but only long-range financial returns." One can even question whether there are long term financial returns. Until the rise of union organizations, employers had very little incentive to protect their workers. Employer apathy toward "human resources" frequently had deadly manifestations. This was, unfortunately, the case with Rinehart & Dennis at Gauley Bridge, West Virginia.

The working procedures in the Hawk's Nest tunnel were basically the same as that of other mines. There were four "headings" in the tunnel project. Heading no. 1 was cut into the base of the mountain. No. 4 started down to meet the first heading from a point six miles up the river, at Hawk's Nest. At the midpoint of the three-mile tunnel path were headings no. 2 and no. 3. One of these aimed toward no. 1, the other toward no. 4. It was as if two separate tunnels were being built.

There were three working benches, or ledges, at each heading of the tunnel. One group of workers, pushing ahead

of the other two groups, took care of the top part of the tunnel. A second group followed at an intermediate level, and the third completed the work on each tunnel section at the floor level. Drillers used the steel points brought to them by "chuckers" or "nippers" to bore several feet into the benches of stone, making holes in which to place dynamite. After the explosion, electricians would string up lights along the newly-opened section. "Muckers" followed them to clear out the rock and load it onto dinkey cars. The broken stone in the dinkeys was unloaded directly into gondolas which were sitting on the tracks ready to transport the rock to an electrometallurgical plant in Alloy, West Virginia. Throughout the working process, "walking bosses" wandered among the various crews to supervise.

This basic procedure sounds normal, and the company contract promised that solid precautionary measures were to be used. For example, on ventilation, the contract said (as read during the congressional investigation by social worker Philippa Allen):

> The contractor shall keep the tunnel air in a condition suitable for the health of the men, and clear enough for the surveying operations of the engineers. All possible precautions shall be taken to keep dust from drilling within such limits as will not be injurious to health. A sufficient supply of fresh air shall be provided at all times in all places underground and provisions shall be made for the quick removal of gases and dusts generated by blasting or by

> dust-producing [drills?] if any be installed in the tunnel. Ventilating plants, of ample capacity, shall be installed and used...while work is going on in the tunnel. (5)

These and other provisions in the company contract promised safe working conditions for the miners. According to articles X and XX of the contracting company's contract with the power company, Rinehart & Dennis was responsible for maintaining safe working conditions. "The contractor," said the contract, "shall take all responsiblity of the work, and take all precautions for preventing injuries to persons and property in or about work." Perhaps other West Virginia companies failed to provide safe working conditions due to ignorance of state health recommendations. However it seems that with regard to the engineering aspects of the Gauley Bridge project, the employers are to blame more for apathy and callousness than for ignorance. From the contract at least, it appears that Rinehart & Dennis knew what kinds of conditions they should have provided; they simply chose not to provide them.

Even aside from the problem of dust in the mine, the air was not fresh. Especially on hot, humid summer days the men would faint from working hard in the "torpid, ladened

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5. Contract between the New-Kanawha Power Company and the Rinehart & Dennis Company, read by Philippa Allen, Hearings, p. 13.

air" inside the tunnel. Perhaps not much could have been done about this problem, but it was exacerbated by the fumes of the gasoline motors used underground. Worker Charles Jones complained of feeling sleepy and drowsy while in the tunnel, but he risked being fired if he sat down. The worker-engineer Arthur Peyton said that men often had to be carried out of the tunnel. "One night," he said, "I saw twenty-eight men carried out from heading no. 1 on account of carbon monoxide poisoning."[6] He believed the company should have used battery motors instead of gasoline engines, but the former were slower. The foremen were not willing to use slower methods, explained Peyton, because there was a race among the four headings to see which could get through the most yardage in a week. The foremen would push the men to move as quickly as possible to win that contest.

Not only were the fumes unsafe in themselves, but they also had the effect of increasing other dangers. As the occupational disease expert Dr. Emery Hayhurst pointed out in court, if the air contains a significant amount of poisonous gas which displaces some of the atmospheric oxygen, the men have to breathe more deeply to get a sufficient amount of oxygen. This kind of breathing naturally increases the inspiration of dust and therefore

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6. Arthur Peyton, Hearings, p. 62.

increases the dangers of a given concentration of free silica in the mine air. The gasoline fumes, then, exacerbated an already seriously hazardous dust level.

That the dust level was patently dangerous can be ascertained from the testimony of the workers. The Vanette lay preacher, "Deacon" Jones, who drilled in the tunnel for three months, said that he could not stand the pressure on his lungs due to the thick dust. Charles Jones and Arthur Peyton agreed at the congressional hearings that it was very hard to breathe in the cloudy tunnel and that they wer unable to see ten feet ahead of them because of the milk-colored dust. With light bulbs every twelve to fifteen feet, the tunnel should have been bright. Yet the dinkeys ran into miners and other cars on the track, and chuckers or nippers could not see the signals of drillers who sought more steel drilling tips. The reporter Gilbert Love recalled Dr. Harless' saying that although he had been told by Rinehart & Dennis that the company was using proper dust-reducing methods (e.g., wet drilling), he had realized the statement to be a lie when the miners came to him with dust all over their clothes, eyebrows, and hair. Even the drinking water had a layer of dust over it. "As dark as I am," the black driller George Robison testified, if a white co-worker had come out of the tunnel with him, "nobody could

have told which was the white man."[7]

At the congressional hearings of 1936, the chemist William Yant expressed his opinion that the two simplest observations of the miners were probably enough to make a judgment. If 1) the mine was so dusty that the men could not see ten feet in front of them, and 2) they came out all white with dust, then the cloudiness in the tunnel resulted from silica dust, not fog from the drill, and the concentration was high enough to produce silicosis within the time claimed by the men.[8]

The men found it difficult to adapt to the working conditions. Drill mechanic Hiram Skaggs, for example, declared that "the first day I went to work there I did not think I could remain." His reasons:

> The dust was so thick that one could not identify anybody he met when the man was only a few feet from him. Then there was a terrific noise, the danger of falling rock, explosions as a result of dynamite that was being touched off. It puts fear into a man and he at once came to the conclusion that he could not stay around there. (9)

The unsafe blasting procedures constantly threatened the lives of the workers. Men were frequently killed by unannounced minor blasts during the working shift. George

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7. George Robison, Hearings, p. 67.
8. William P. Yant, Hearings, p. 176.
9. Hiram Skaggs, Hearings, p. 50.

Robison, for example, remembered one time when he and a friend were drilling side by side with two other workers. Falling rocks killed the two men, leaving Robison and his friend unhurt.[10]

Probably more dangerous to the lives of the miners than the falling rocks was the exceptionally thick and slower killing dust which filled the air after each dynamite blast. West Virginia law prohibited workers from re-entering a mine within thirty minutes of blasting, a rather minimal requirement. At first the foremen at Gauley Bridge did wait a half-hour after a blasting before sending the men back into the tunnel, but as the project was accelerated, the waiting period was decreased.

For this tunnel, at least, even the original thirty minutes was not enough time for the dust to settle, and the men resisted re-entering the tunnel until they were forced. If the blast occurred during a shift, foremen prodded the tunnel workers back in with essentially no break, "Deacon" Jones recalled bitterly. "I couldn't stand it," he said.[11] Charles Jones explained that the day crew would "shoot" (blast) as they came out of the tunnel at the end of the shift. The night crew, his crew, would immediately enter

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10. George Robison, Hearings, p. 66.
11. "Deacon" Jones, quoted by Philippa Allen (as remembered from personal conversation), in Hearings, p. 18.

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the tunnel to begin work. The air at that time, Jones said, "was as full of smoke as it could be. I ran right up upon the shovel and butted my head against it, simply because I could not see it for the smoke and dust."[12]

The company made no more than a token effort to remove the dust from the tunnel. Rinehart & Dennis installed only a twenty-four inch canvas ventilation tube and an eighteen inch fan. Social worker Philippa Allen told the congressional subcommittee that all the workers judged the ventilation system to be "totally inadequate," and she added that the occupational disease specialist Dr. Hayhurst had agreed with them. Allen recalled:

> The men tell how they would go to the mouth of the tube, as they call it, to get a breath of fresh air.... There they would get the effect of the feeble flow of air coming into the tunnel; back a few feet it was lost in the clouds of silica dust. (13)

At the court trials no one denied that the ventilation tube was full of holes, making the ventilation system even less efficient than its small size would ordinarily allow. Allen compared its size to that of the ventilation system of another contractor, W. C. Boxley. In his tunnel, which was half the size of the Hawk's Nest tunnel, he had only twenty

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12. Charles Jones, Hearings, p. 43.
13. Philippa Allen, recalling Fayette court testimony, in Hearings, p. 20.

men, compared to several times that number in the Hawk's Nest tunnel. Yet he used a twenty-four inch ventilation tube with a twenty-four inch fan. Even this might not have been adequate. Dr. Hayhurst testified at the 1933 court trials that the "usual standard" of ventilation in mines was 100 cubic feet of fresh air from outside the tunnel per man per minute. If there were large quantities of dust, as in the case of the Hawk's Nest tunnel, even 200 cubic feet was insufficient. In addition, Hayhurst said, the alleged air velocity in the tunnel, at only six feet per minute, was not sufficient for the sixty to seventy men in each area.[14] Concerning the undersized fan, Arthur Peyton said that mining fans of the day were usually much larger, driving an air current which was approximately the size of the mine.[15]

Rather than allowing the dust to enter the air and then using a ventilation system to remove it, it would have been better to prevent its formation in the first place. The basic "tool" used to keep down the levels of dust in a working area is water. Although studies in 1914-15 had shown that wet drilling effectively reduced dust levels (and prevalence of silicosis), Rinehart & Dennis insisted on the

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14. Dr. Emery R. Hayhurst, testifying at Fayette County court trial of Raymond Johnson in 1933, recorded in Hearings, p. 101.
15. Arthur Peyton, Hearings, p. 59.

use of dry drilling in the Hawk's Nest tunnel. George Robison, a bench driller at Gauley Bridge, noted that water was not allowed on the bench drills because wet drilling was too slow; it took three times as long as dry drilling to do the same job.[16] The drill mechanic Hiram Skaggs agreed that though it would not have been costlier to run wet drills (aside from the time factor), it would have been safer because it would have left the silica as mud rather than as a lethal dust.

Engineer Arthur Peyton also felt that it would have helped if wet drills had been used instead of the ten dry bench drills. The only wet drills used were of the "drifter" type, which were used to bore holes straight ahead into the rock and which could not be used without water.[17] For holes being bored at an angle the dry ("sinker") drills were considered more efficient. Peyton estimated that if all the drills had been wet, it would have eliminated about seventy percent of the dust. Dr. Hayhurst put that percentage even higher, saying that ninety to ninety-five percent of the free silica dust would have remained in the relatively harmless mud form.

Besides allowing the formation of the silica dust and

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16. George Robison, Hearings, p. 66.
17. Hiram Skaggs, Hearings, p. 48.

making no effort to remove it, Rinehart & Dennis also failed to provide the workers with personal protective devices. The simplest of such devices is the dust mask or respirator, about which good information was available from the Bureau of Mines by 1926. The mining industry should have been generally knowledgeable concerning these effective respirators.[18] Yet Rinehart & Dennis refused to provide masks for the workers. Philippa Allen declared at the hearings: "As to the most important point in the neglected protection of the health of the men there was no difference of opinion. Clearly the men were not furnished respirators or masks," and the men were too ignorant to know they should be using them.[19]

The workers testified that only the engineers of the New-Kanawha Power Company were provided with respirators or masks. Arthur Peyton was among those power company worker-engineers who spent four hours daily gathering rock samples in the Hawk's Nest tunnel. After stating that the approximately two thousand Rinehart & Dennis employees did not wear masks, Peyton revealed that a few months after the commencement of construction, the New-Kanawha Company realized the danger of the dust in the tunnel. At that time

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18. William P. Yant, Hearings, pp. 134-136.
19. Philippa Allen, recalling testimony at Fayette court trials, in Hearings, p. 21.

the power company provided masks for use by the company engineers. Peyton himself had used a respirator urged on him and the rest of the engineering staff by Mr. R. E. Buckley, field chief of the New-Kanawha Power Company.[20]

So when the power company employers, who hired the engineers, recognized the dangerous health practices in the tunnel, they tried to do something about it. The contracting company, which hired the miners, did nothing. Since Rinehart & Dennis must naturally have come into contact with the company doing the engineering work (the New-Kanawha Power Company), Peyton agreed with Congressman Marcantonio that "it would have been within the knowledge of the general contractors that there was danger."[21] This was especially likely since the Rinehart & Dennis Company had had thirty years of experience in contracting such jobs; the company was not new to mining.[22]

The engineer Peyton also pointed out that the president of the contracting company, Mr. P. H. Faulconer, was sometimes present while the work was under progress, and he observed that the engineers used masks while the working men did not.[23] The Rinehart & Dennis employers acted in an

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20. Arthur Peyton, Hearings, p. 56.
21. Statement of Congressman Vito Marcantonio, Hearings, p. 61.
22. Philippa Allen, recalling testimony at Fayette court trials, In Hearings, p. 20.

apathetic and callous manner. One of the workers, having noticed the engineers wearing masks, had bought one himself. It cost him only two and a half dollars. Philippa Allen relayed to the congressional subcommittee the response of Rinehart & Dennis to this:

> Kies, purchasing agent for Rinehart & Dennis, was overheard to say to a respiratory salesman, 'I wouldn't give $2.50 for all the niggers on the job.' Kies was voicing the hatred and greed of this large company for which he worked. Ernest Lyes, a white man of 26, testified in court that he heard Kies say this. (24)

If Rinehart & Dennis had been willing to spend the money, what could they have done for the workers? When asked this question at the congressional hearings, Dr. R. R. Sayers of the Public Health Service gave a general answer. The best way to protect mine workers, Sayers said, was 1) to prevent the formation of dust, 2) to prevent the dust, when it does form, from getting into the air, 3) to remove the dust from the air when the first two methods are not completely satisfactory, 4) to replace the foul, dusty air with fresh, clear air, and 5) if all of these measures have not completely eliminated the dust, to provide personal protection devices to the miners.[25]

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23. Arthur Peyton, Hearings, p. 61.
24. Philippa Allen, recalling testimony at Fayette court trials, in Hearings, p. 9.
25. Dr. R. R. Sayers discusses preventive measures in Hearings, pp. 149-175.

At the court trials a year after completion of the tunnel, the occupational disease specialist Dr. Emery Hayhurst answered the same question more specifically. A mining company should 1) select to work underground only the most fit, as determined by pre-employment and periodic physical examinations, 2) remove promptly from underground work any men with lung or heart problems, 3) have the men work only five and a half days a week, and six to eight hours a day, including an hour off for lunch, 4) ensure good living and nutritional conditions, 5) provide a reliable and sympathetic medical service to take care of accidents and diseases, 6) use water, vacuum jackhammers, or dust traps on the drills, and vacuum suction devices for cleaning up the working area, to keep dust to a maximum of between two and three million particles per cubic foot, 7) keep the mine or tunnel well lit so that the dust can be seen, and take frequent dust counts, 8) keep gas fumes out of the working area, and 9) do not send men into the tunnel earlier than a few hours after major blasts.[26]

The pre-1930s studies in the mines supported Hayhurst's recommendations, and the investigations of the 1930s and 1940s further demonstrated the efficacy of these measures in

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26. Dr. Emery R. Hayhurst, testifying at Fayette court Trial of Raymond Johnson in 1933; recorded in Hearings, pp. 100-101.

preventing silicosis. By this later time there was tangible evidence that such preventive measures decreased the prevalence of silicosis. From the testimony of those involved in the digging of the tunnel at Gauley Bridge, West Virginia, one can deduce that very few, if any, of the available precautionary measures were taken. Doubtless other mining companies also were not yet using some of the available protective methods and devices in 1930-32. For example, in 1961 the Public Health Service made a very careful study of the records of one mine in Wisconsin to trace the progress of operational practices.[27] The records of the Ogleberg Norton Company first mention wet drilling in 1922, when ten wet drills were used for main-level development work. Again in 1927 and 1928 the reports mention wet drills as being used for shaft sinking. However, the workmen were still doing some dry drilling until 1937 when 100% wet drilling went into effect.

Yet the Wisconsin company made an effort to guard the health of the workers. The Ogleberg Norton Company purchased an X-ray machine in 1914, and replaced it in 1928 and 1950. According to the records, the company had been

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27. This Wisconsin study is discussed by the U.S. Public Health Service and the Bureau of Mines in Silicosis in the Metal Mining Industry (Washington, D.C.: Government Printing Office, 1963).

giving routine pre-employment and periodic physical exams in 1933. In 1923 Ogleberg Norton organized a safety department which by the late 1920s consisted of two safety engineers and three underground inspectors under a safety director. In 1933 the first ventilation engineer was hired. The first mention of the use of safety equipment refers to the use of wire-mesh goggles for protection of the eyes. There was apparently good natural ventilation in these Wisconsin mines, but by 1930 the company had installed one primary fan and eleven auxiliary fans in the mining area to supplement the natural ventilation. A second primary fan (of sixty inches) was added in 1931, and four more auxiliary fans were added in 1932.

It seems that these Wisconsin miners did not work under the best operational practices as they are now understood. But at least the employers were trying to make conditions safer. Most other companies were probably also working under a mixture of good and bad practices. When asked in 1933 by an attorney if the preventive measures he had listed were the ones "usually and customarily used in industries where they handle sandstone with the presence of silica in it," Hayhurst answered, "Some, and over half perhaps, of those are used in many industries to prevent silicosis."[28]

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28. Dr. Emery R. Hayhurst, answering question of Attorney

Certain other mines functioned under very good working practices. For example, the conditions in the mines of the Picher, Oklahoma, district were good even before 1930. The report for the year ending June 30, 1929, described the practices:

> Wet drilling is practiced by all mines, and only in a few instances are holes "collared" dry.... All blasting is done at the close of the shift, and the men are not allowed to return to the face until the following day. Only in exceptional cases is a shot fired during a shift. The muck piles in most mines are kept fairly wet. (29)

In addition, ventilation was thorough. Physical exams were performed on all workers once a year. If a man had first-stage silicosis, he was given a warning card. Many who received such cards left the mines. Others chose to stay until they had reached the second stage of silicosis, when they were not recommended for employment.

These Picher mines set a good example for others. Unfortunately, the employers of Rinehart & Dennis did not bother to take note of the example. As a result, the Hawk's Nest tunnel appeared to be an example of extreme negligence, a negligence which could not be ascribed primarily to ignorance.

Bacon at the Fayette court trial of Raymond Johnson in 1933, recorded in Hearings, p. 101.

29. U.S. Department of the Interior, Silicosis and Tuberculosis Among Miners of the Tri-State District--II, p. 27.

The engineer Arthur Peyton stated that the company used very poor equipment in the tunnel job and did not take any measures to correct the conditions even though the foremen admitted to him that the practices were poor.[30] The Bureau of Mines chemist William Yant agreed that, if the alleged facts were true, engineering negligence was obvious. He added that such conditions would not be permitted in a federal project under the jurisdiction of the Bureau of Mines. Dr. Hayhurst also felt that "these men need not have died" since safety measures were available.[31]

The social worker Philippa Allen asked rhetorically "Why do you think the contractors from Charlottesville, Virginia, dared not furnish their workers with safeguards of masks and wet drills?" She then answered her own question:

> Because they thought they would finish the job and be out of the state before the men began to die. Silicosis usually takes from ten to twenty years to develop in one's lungs. Kies spoke again for the company when he said to Hawkins, the assistant superintendent, "I knew they was going to kill these niggers within five years, but I didn't know they was going to kill them so quick." (32)

Allen completed her hearings statement by saying:

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30. Arthur Peyton, Hearings, p. 59.
31. Dr. Emery R. Hayhurst, quoted by Philippa Allen in Hearings, p. 20.
32. Philippa Allen, recalling 1933 Fayette court testimony of Rinehart & Dennis employee George Houston, in Hearings, p. 9.

> In summary, the men did not and could not have known of the danger they underwent. The company did know the danger they were sending these men to face. They deliberately failed to furnish sufficient protection. The results have been devastating in their deadliness. (33)

Why was this negligence allowed by the government when the results were so deadly? Why did the U. S. Bureau of Mines and the West Virginia Department of Mines fail to prevent such tragedies as occurred at Gauley Bridge? Arthur Peyton was one of the men who charged the State Department of Mines with negligence for not forcing the contracting company to institute safer working conditions.[34]

United States Senator Rush Dew Holt of West Virginia, on the other hand, while agreeing that Rinehart & Dennis should be accused of negligence, argued that the Federal Bureau of Mines and the State Department of Mines should not be blamed in view of their limited powers. The U. S. Bureau of Mines (and the State Department of Mines) had no real power to enforce safety regulations in the Hawk's Nest tunnel in 1930-32 because building that tunnel was technically a construction job, not a mining operation.

The Department of Mines did, however, make an attempt to evaluate and improve working conditions in the Hawk's Nest tunnel. Inspectors were sent to observe operational

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33. Philippa Allen, Hearings, p. 21.
34. Arthur Peyton, Hearings, p. 65.

practices and to measure dust levels. To keep their poor practices and unhealthy conditions from being exposed, Rinehart & Dennis foremen allegedly organized warning systems, including the posting of lookouts at the tunnel entrance. According to Arthur Peyton, Senator Holt, Sam Butner, Laird King, and many others who testified in court, when the inspectors came around to look at the tunnel, dry drilling was halted, gasoline motors were kept out of the heading, and the stale, dusty air was quickly removed from the tunnel through special 800 to 1000 foot long "boosters." These last devices were used only when the mine officials were inspecting because a drill had to be turned off in order to turn on a booster.

Robert M. Lambie, chief of the West Virginia State Department of Mines during the Hawk's Nest tunnel construction, testified in the court trials that the tunnel was not hazardously dusty. Yet one of the attorneys for the employees, James Mason, said that Lambie had called the Hawk's Nest tunnel conditions "deplorable" during a speech at the Coal Institute of Madison, West Virginia.[35] In addition, the chief engineer of the New-Kanawha Power Company, Owen M. Jones, had received a letter on May 18, 1931, from Lambie himself which said that the dust level in

35. James Mason, Hearings, p. 143.

the tunnel was highly dangerous and that the workers should use respirators.[36] According to Senator Holt, Department of Mines pressure finally induced the company to install its token eighteen-inch fan with the twenty-four-inch duct, but Lambie had let himself be persuaded by the contractors that respirators were in fact not necessary.

Employees at Gauley Bridge, West Virginia, were, then, afforded by the official government mining agencies only minimal protection against poor operational practices. The legislation establishing these agencies ignored the situation of underground workers on "construction jobs." It will be seen that, similarly, such industrial safety legislation as did exist ignored industrial diseases, leaving the workers with no protection against the company and no promise of compensation when the company's poor practices had deadly consequences.

36. Arthur Peyton and Philippa Allen, recalling Fayette court cases of Raymond Johnson and Donald Shea, in Hearings, pp. 5, 54.

IV. THE LAW AND THE COURTS

Attempts had been made in the 1920s to increase government protection of laborers. During that decade, for example, the West Virginia State government passed regulatory safety rules regarding mines. It was legal negligence on the part of an employer not to inform his employees of the dangers inherent in the job. The company had to give each worker a copy of the mining laws and of the rules of that particular mine.[1] No petroleum product could be used as motive power in any mine.[2] The mine foreman was supposed to measure the air current in the mine with an anemometer at least twice a month.[3] The company was to provide adequate ventilation, that is, no less than one hundred cubic feet of air per minute for each person working in the mine. No more than sixty persons were supposed to work in the same air current, and any noxious or dangercus gases were to be carried out of the working area.[4] Concerning dust the West Virginia Code said:

1. West Virginia, Code of 1932, Editorial Supervisor Michie A. Hewson (Charlottesville: The Michie Company, Law Publishers, 1932), Chapter 22, article 2 (section 52, nc. 2431), p. 650.
2. Ibid., (section 10, no. 2389), p. 651.
3. Ibid., (section 48, no. 2427), p. 657.
4. Ibid., (section 4, no. 2383), p. 649.

> In all mines, accumulations of fine, dry coal dust shall, as far as practicable, be removed from the mine, and all dry and dusty operating sections kept thoroughly watered down or rock dusted or dust allayed by such other methods as may be approved by the state department of mines. (5)

Unfcrtunately all of these regulations applied only to mining per se, and the definition of "mine" given at the beginning of the Code's chapter on mines and mining seems to refer only to coal mining.[6] The laws were therefore not explicitly extended to other mine-like jobs, such as the construction of the Hawk's Nest tunnel. But the Rinehart & Dennis Company obviously realized that these regulations could be applied to their project. If in establishing unsafe operational practices the Rinehart & Dennis Company did not actually violate the letter of the law, it most assuredly did violate its spirit.

The 1930 West Virginia Code did not specifically protect the Hawk's Nest tunnel workers against dangerous working practices, inadequate medical services, or poor living conditions, and even the mine inspectors were made powerless in that tunnel by the law. In addition, once the employees became affected by silicosis, they could expect very little satisfaction from the law. When social worker Philippa Allen visited the Gauley Bridge mining camps, she

5. Ibid., (section 11, no. 2390), p. 651.
6. Ibid., (section 1, no. 2380), p. 648.

was accosted on all sides with pitiful pleas of desperate workers and their families. "What are you going to do to help us?" they asked. "What can be done?" "Won't you help us?"

In Vanetta, Allen talked to Thelma Andrews, formerly of Salisbury, North Carolina. Mrs. Andrews was the widow of Sidney Andrews, who had died at age twenty-seven in the Coal Valley Hospital. This woman had sued the company twice, but never received any compensation. "Deacon" Jones had also tried to sue, but to no avail. He had no alternative but to await death in poverty. Jake Swetman, too, tried to sue. He had come from Orangeburg, South Carolina and had worked for twenty months in the tunnel, shifting among the jobs of drilling, mucking, and nipping. Having been told in 1933 by a Charleston doctor that he had first-stage silicosis, Swetman had prepared his suit, but it was never filed by the lawyers, and the sick, dying man never received any compensation.[7]

These men and their families had finally come to recognize the deadly working conditions under which they had been constructing the Hawk's Nest tunnel. Now that the project was finished, they were to realize how little the

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7. Philippa Allen, recalling personal interviews with Thelma Andrews, "Deacon" Jones, and Jake Swetman, Hearings, p. 19.

West Virginia state laws had to offer them in the way of compensation for their suffering and abbreviated lives.

Fair compensation for on-the-job injuries had long been a problem in all industries. As late as 1954, one American worker was killed or permanently disabled every three minutes, and another worker was injured every eleven seconds. Computed less conservatively, on the basis of an eight-hour working day, one worker was killed or crippled every minute during the working day, and another was injured every four seconds. Thus during the 260-day work year there were sixteen thousand fatalities, ninety-one thousand permanent disabilities, and two million temporary disabilities due to injury. The average frequency of injury among manufacturing groups in 1954 was fifteen disabling injuries per million employee-hours worked; that among construction workers was forty-one and among coal miners, fifty-three. The average time lost per injury in mining was one hundred and fifty days. Samuel Gompers once pointed out that since 1820, when mining records began to be compiled, more lives had been lost in the mines than in war.

Before the passage of workmen's compensation laws in the early twentieth century, a worker could receive indemnity for an injury only by winning a court suit against the employer. If he died, no indemnity could be secured

because suits brought by the worker's survivors were not legally meaningful. In these court suits, the worker had to prove negligence on the part of the employer. In defending himself against such charges the employer could usually dismiss liability claims by resorting to one of several defenses, e.g., contributory negligence on the part of the worker or of a fellow-worker, or apparent advance knowledge by the worker of the inherent hazards involved in the job.

In the Progressive Era of the early twentieth century, the common law method of handling the problem seemed unsatisfactory because employee recovery was frequently inadequate and uncertain, the court cases took a long time, the settlements were inconsistent, employees often suffered from being treated in court as inferiors of the employers, more money went to the lawyers and administrators involved in each case than went to the injured worker, the court trials resulted in worsened management-labor relations, there was no financial incentive to study or put into effect safer operational practices, and the permanently injured workers were a burden on society and on their families. Workmen's compensation, which evolved to take the place of lawsuits, was based on a new principle which denied the usual common law understanding of the Master and Servant relationship. This new principle was liability without

fault. Employee injuries were to be considered one of the costs of production for the employer and were to be paid without assigning culpability for industrial accidents.

In 1908 the first effective American compensation law was passed to protect federal civil service employees. At that time also, Montana passed a bill providing compensation to injured coal miners, but its legality was denied by the Montana courts. Finally in 1911 New Jersey passed the first state compensation law which was approved as constitutional by the courts, and between 1911 and 1915, thirty states enacted similar laws. By 1920 forty-two states, three territories, and the federal government had enacted such laws. Unfortunately, the compensation laws, with the exception of that of Massachusetts, covered "accidental injuries" only and ignored occupational diseases. It was realized only in the mid-1930s that a disease like silicosis could as justifiably be attributed to the circumstances of employment as the more obvious machine-severed arm or death from explosion.

In the Hawk's Nest tunnel incident most of the workers did not even try to sue the Rinehart & Dennis Company. Philippa Allen estimated that although approximately 2000 men worked in the tunnel, only 555 diseased workers or surviving families had filed suits or settled out of court

before 1936. Many of the 1500 others did not sue because they had scattered all over the country after leaving Gauley Bridge. Few knew what their health problem was, who was to blame for it, or what they could do about it.

Of those who remained in the Gauley Bridge area for a while after the project was finished, many did try to get some sort of indemnity. Most of the workers knew, however, that they were unlikely to succeed in court. For this reason most did not try to press their suits but instead allowed them to be settled out of court.

Three hundred of the suits were settled out of court as a group. The special commission of Doctors Harless, Hughey, and Hayhurst determined that only half of these three hundred men had silicosis. (According to Philippa Allen, most of the rest of the workers did later develop more convincing symptoms and tried to resue.[8]) for the roughly 170 certifiably diseased men, employee lawyers were given a lump sum of $130,000 during the summer of 1933. Of this, $65,000 allegedly went to the lawyers themselves. The remaining $65,000 was distributed among the victims according to stage of silicosis, marital state, and race--an average of $389 each.[9]

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8. Philippa Allen, Hearings, p. 4.
9. James Mason and Philippa Allen, Hearings, pp. 6, 140.

Philippa Allen recalled talking to the widow of Lindsey Jones, who died on June 23, 1932, after working nine to ten months as a drill worker at Gauley Bridge. Nancy Jones was ashamed to tell Allen how meager the settlement was. "Finally," Allen related at the hearings, Jones had "confessed they had valued her husband at $188.85. 'I don't know what that eighty-five cents was for,' she added bitterly," according to Allen.[10]

Many of the ignorant workers made the mistake of signing releases before settlements were made. George Robison, for example, had his silicosis diagnosed by Doctor Harless and then approached the lawyer Mason in Charleston to take his case. Mason told Robison that he could get $25,000 in indemnity, out of which Robison would receive half. Mason never did take Robison's case. Robison testified that he had been told by men who claimed to be lawyers that he would get no money at all if he did not sign a release in return for a dollar: "I wanted to get something at once because I wanted to leave right away," Robison said. "If one signed the release he was given a dollar. He gave me a pencil, and I signed, and he took the pencil back, and I didn't get anything at all, sir."[11]

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10. Philippa Allen, recalling personal interview with Nancy Jones, Hearings, p. 18.
11. George Robison, Hearings, p. 69.

Most of the lawyers involved in the Hawk's Nest tunnel cases seemed to regard the workers as the company doctors did: they were considered easily-exploitable, ignorant men who were scarcely worth serious consideration as human beings. Even at the law offices of Townsend, Bock & Moore, where in 1934 Philippa Allen had been aided in her search for material, she received only non-committal answers to her questions on the case settlements. While she asked her questions, Allen claimed, "the lawyers sat mysteriously silent, smiling like sphinxes." Finally Ben Moore answered, saying that he and his partners were "not at liberty to answer" her questions. He said that there was "a certain professional obligation to the other side not to disclose any facts they might not want given out." He then added, "All we can say....is that the settlement was comparatively small."[12]

As for those cases which did actually go to court, it seems that the Rinehart & Dennis Company sometimes interfered with proper legal procedures. The reporter Gilbert Love, who had spoken at length with one of the attorneys for the Gauley Bridge employees, A. A. Lily, mentioned the suspicions of jury-fixing in the first trials

12. Philippa Allen, recalling personal interview with lawyers Townsend, Bock, and Moore, Hearings, p. 14.

in the Fayette County court. According to another employee attorney, James Mason, ten of the jury members agreed to give the plaintiff $25,000; two of them wanted to give no indemnity and refused to consider or discuss the case. This hung jury was discharged, Mason said, and later one of the two dissenting jurors was fined by Judge Erie for contempt of court because of his familiarity with the defendant, i.e., the company.[13] "It was stated," Love said, "that the jurors were allowed to go home at night and that people interested in the suits were waiting outside the room with automobiles" to give the jurors rides home.[14]

Mason stated that he himself had done everything possible to help the tunnel workers, of whom he represented ninety-six. For example, he pointed out, he had challenged the meager $130,000 settlement given in the out-of-court suits. He had agreed to the sum only when informed firmly that Rinehart & Dennis would give no more money. The cases were closed in August of 1933.

Two months later, Mason testified, he had discovered that some of the other attorneys had been paid a total of $20,000 to accept the settlement. Still later he learned that a secret contract agreeing to this had been made

13. James Mason discusses the illegal actions of the Rinehart & Dennis Company in Hearings, pp. 139-147.
14. Gilbert Love, Hearings, pp. 77-78.

between the Rinehart & Dennis general manager E. J. Perkins and two of the attorneys for the employees. When Mason investigated this payment, one of the attorneys offered to distribute his half of that money among the clients. President Faulconer of the Rinehart & Dennis Company admitted the $20,000 payment in a letter to Mason. But he made little effort to explain the payment, saying only that it had been paid "in good faith." It was the opinion of Mason that "the payment of that money, [and] the suspicions of tampering with the jury system, was about the most damnable outrage that had been perpetrated in any State up to that time."[15]

Rinehart & Dennis allegedly engaged not only in legal deception of the workers, jury tampering, and payoffs, but also in the suborning of perjury during the trials. Only two workers took the company's side on the witness stand. One of these was a foreman who later died of silicosis. The other was a black worker who testified that the tunnel was not dusty because drilling had been done wet. According to Philippa Allen, this worker, Albert Young, later changed his story in court. As Philippa Allen remembered it, "Before he told his story the first time, he said, he was promised a job and pay by an official of the contracting company if he

15. James Mason, Hearings, p. 140.

would testify for the company, and 'threatened with the penitentiary' if he did not do so."[16]

Rinehart & Dennis were unable to subvert the law totally--some of the suits were at least partially successful and some of the victims did receive an indemnity. The extent of employer liability for industrial diseases had not yet been worked out by the West Virginia courts when the Charles Jones family tried to sue the company for the loss of their youngest son, Shirley. In his 1936 book on the Administration of Workmen's Compensation, written under the auspices of the Legal Research Committee of the Commonwealth Fund, Walter F. Dodd called this, the first of the suits against Rinehart & Dennis, "the most important recent case" dealing with the question of the right of an employee to sue at common law for disease resulting from employer negligence.[17]

This question of the right to sue was the major issue debated at the Fayetteville court house between Hubard & Bacon, the lawyers for the plaintiff, Mrs. Charles Jones, and the Company's lawyers, Brown, Jackson & Knight; W. I. Lee & Dillon; and Mahan & Holt.[18] The final decision on the

16. Philippa Allen recalling Fayette court testimony of Albert Young, Hearings, p. 5.
17. Walter F. Dodd, Administration of Workmen's Compensation (New York: The Commonwealth Fund, 1936), note, p. 758.

right to sue was made not by the judges of the Fayette County Circuit Court, but by the Supreme Court of West Virginia, to which an appeal had been made. At the Supreme Court of Appeals, on February 14, 1933, it was decided that the Jones' did have the right to sue. This case alerted the company to the potential for claims against it and it thereafter took steps to prevent successful litigation.

At that appeal, the plaintiff Mrs. Charles Jones was named as acting for her son, Shirley, a worker employed by Rinehart & Dennis.[19] The main defendant was named as Mr. E. J. Perkins, the vice president and general manager of the Rinehart & Dennis Company and the supervisor of the project. Jones had accused Perkins on six counts, including negligent and willful failure to provide the decedent with a safe place to work, with proper rules, with experienced foremen, with proper equipment, with sufficient ventilation, and with knowledge as to the hazards inherent in the job. In each of these counts, Jones assigned to Perkins and to Rinehart &

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18. According to a News-Week article of January 25, 1936, the plaintiff's attorneys used effective "visual aids" in this Fayette County court case. They apparently "threw handfuls of silica dust into the air to show jurors how it hung like an ectoplasmic pall. They also arranged a courtroom procession of doomed silicosis sufferers--'the parade of the living dead'." (From "Silicosis: Tunneling Through An Atmosphere of Deadly Dust," pp. 33-34.)

19. See Jones v. Rinehart & Dennis, 168 S.E. 482 (W. Va. Ct. App. 1933).

Dennis the blame for the death of her son.

The Rinehart & Dennis Company claimed that under the terms of the State Compensation Law it was exempt from liability for any work-related injury or disease, presumably because a worker suffering such injury was compensated through that Law. Jones' lawyers argued that because in fact the Law did not provide for compensation for diseased workers, the Company was not removed from common-law liability in such cases.

The State Supreme Court's upholding of Jones' right to sue was based on four propositions. First of all, the Court said, earlier cases in West Virginia and other states had established clearly the general right of an employee to act in the common law courts against an employer who had through his negligence caused the worker to contract a disease. Secondly, if the employee legally could have sued the employer at common law, but had died of the disease contracted during and as result of the employment, then, according to a West Virginia statute, the personal representative of the decedent retained the right to press the suit. Thirdly, disease, whether or not the result of employer negligence, was not compensable under the West Virginia Compensation Act unless it was the result of a "definite, isolated, fortuitous occurrence." The West

Virginia Code ignored the issue of compensation for occupational diseases; always the compensation was for "injuries" resulting from "accidents." The State Supreme Court decided during the Jones appeal that the lack of reference to occupational diseases in the West Virginia Compensation Acts only further supported the contention that disease was not compensable under those Acts. The Court stated, therefore, that the West Virginia compensation statutes were not meant to provide compensation for disabilities which resulted from long-term exposure to certain working conditions.

The fourth proposition made by Jones' lawyers, and affirmed by the Supreme Court, was the key to the legality of the suit at common law. Because the Law failed to provide compensation for <u>disease</u> caused by working conditions, the plaintiff argued, the same Law could hardly exempt the employer from liability for such disease. The problem was in the interpretation of the workmen's compensation laws. Section 2516 stated that:

> Any employer subject to this chapter who shall elect to pay into the workmen's compensation fund the premiums provided by this chapter shall not be liable to respond in damages at common law or by statute for the injury or death of any employee however occurring, after such election and during any period in which such employer shall not be in default in the payment of such premiums and shall have complied fully with all other provisions of this chapter: Provided, that the injured employee

> has remained in his service with notice that his employer has elected to pay into the workmen's compensation fund the premiums provided by this chapter. The continuation in the service of such employer with such notice shall be deemed a waiver by the employer.... (20)

In other words, so long as the employer was dutifully and regularly paying his premiums to the workmen's compensation fund, his workers would be covered by that fund, and he was no longer liable for any of their injuries. Such an employer was liable orly if he failed to fulfill the requirements of the Act, and only if the injury was the result of his own negligence. Otherwise, indemnity to the injured workers or their dependents was to be taken care of by the workmen's compensation fund as set forth in section 2526: "The commissioner shall dispense the workmen's compensation fund to the employees of such employers as are not delinquent in the payment of premiums for the month in which the injury occurs..."--on the conditions that the employee had actually been injured during and as a result of his job, and that the employer had been following the rules of the Act.[21]

The Law had been interpreted to mean that an employer who failed to follow the requirements of the Act was liable

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20. West Virginia, <u>Code of 1932</u>, Chapter 23, article 2 (section 6, no. 2516), p. 682.
21. Ibid., Chapter 23, article 4 (section 1, no. 2526), p. 692.

not only for his own negligence but also for those of any of his officers, agents, or other employees. The employer was denied the common law defenses of contributory negligence or assumption of risk and negligence of a fellow servant.[22]

Rinehart & Dennis had argued that the phrase "however occurring," in reference to the injuries for which the employer was not liable (section 2516), meant that any disability, including disease, whether compensable or not, was included in this protective clause. The Company claimed that, by this Law, it could not be held liable for any work-related disability, whether that disability was compensable or not (by other sections of the law). The dissenting Supreme Court Judge Hatcher, who agreed with the Rinehart & Dennis lawyers, stated that section 2516 stood as a contract separate and distinct from section 2526. Although section 2526 failed to specify that compensation money should go to a victim of disease, that did not contravene the statement in section 2616 which said that an employer following the rules of the Compensation Act was exempt from liability for injuries to his employees, "however occurring." Hatcher explained:

> If section 2526 does not include a certain class of occupational injuries which should be compensated, that omission is ascribable solely to

22. Ibid., discussion of the law, p. 684.

> the Legislature (acting for the state). The omission, if inadvertent, should be corrected by amendment and not by subtraction from the terms of an executed contract under section 2516.

This claim was disputed by the majority of the judges and seemed to be destroyed by the comment and discussion which followed the statement of the workmen's compensation laws in the West Virginia Code book. In this discussion it was pointed out that one of the purposes of the Act was to protect the employer from liability for an injury which occurred during the course of and as a result of the victim's employment. This protection covered all "injuries," "however occurring," that is, whether they occurred accidentally or as a result of negligence. The use of the key term "however occurring," then, meant not that any kind of injury (including disease) was included, but that the cause of injury (accident or negligence) was not to affect the protection of the employer from liability.

The Court majority argued that the meaning of the term "however occurring" must be determined within the context of the Act as a whole. The backgrourd and purpose of the West Virginia Act, and the expressed limits to compensation in the statutes of other states, suggested that disease should be considered non-compensable by workmen's compensation in West Virginia. In addition, the purpose of the West Virginia statute was to protect the employer against

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liability suits for injuries for which the victim was to receive an indemnity cut of the compensation fund, to which the employer had given money for the purpose of dealing with such traumatic injuries.

The majority of the Court argued that since a company's premium rate increased with the rate of compensable injuries among its employees, immunity of employers from liability for disease (without that disease being compensable) released the employer from a financial incentive to treat his workers well. This "would tend to foster negligence of a kind likely to produce disease." "It must not be deemed," the Court majority opinion continued, "that such right of action is taken from employees unless the statutory language is clear and concise and not subject to any other reasonable construction."

In other words, the Court claimed, it was the intent of the statute to exempt employers from liability in the case of compensable injuries, but not for those cases of non-compensable employee disease contracted as a result of employer negligence. As the judges expressed it, "the compensation act exonerates employers from common law liability only in compensable matters." The Supreme Court of Appeals, with one dissenting vote, thus affirmed the action of the Fayette County court in overruling the

employers' claim that they could not be sued at common law for negligence in the death of Shirley Jones.

Jones had been induced to sign a release before receiving his indemnity. "We wanted them to tell us what they would give us before we signed," he said, "but they had boosters hauling people around for Bacon and they claimed Bacon would pay us $7000 each."[23] When the Joneses won the court suits against Rinehart & Dennis for the deaths of their three sons and the illness of Charles, they were fortunate to get the much lower payment of $800 for each of the four. Other workers, Charles Jones pointed out, had been granted through the courts (or in out-of-court settlements)[24] only $300, $200, or even $60. When they received their money from the court suit in July of 1933, the Joneses bought a house, two cows, and a heifer for $1700. They also used part of the money to pay off a number of debts to the grocer, the landlord, and others, bills which had accumulated while the court suit was pending against the company. The meager compensation payment was therefore soon gone. Before long the Joneses became dependent on federal funds for their daily existence.

Others were even less fortunate. Not only did some of

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23. Charles Jones, Hearings, p. 47.
24. Ibid., p. 46.

the workers have to settle for humiliatingly low settlements, but others could not get their suits through the courts at all--especially after the spring of 1935, when the case of Scott v. Rinehart & Dennis Company rendered the common law remedy valueless for the Gauley Bridge workers.[25] in this case it was decided on appeal to the State Supreme Court that the one-year statute of limitations ran from the time of exposure to the cause of the disease, not from the time of the manifestation of the disease.

The Hawk's Nest tunnel worker Lewis Scott had sued Rinehart & Dennis for damages allegedly due him because he had contracted silicosis. The Supreme Court debate focused on the interpretation of a West Virginia statute whose essential meaning had remained unchanged since it was introduced in the Virginia Code of 1819. In the Codes of 1923 and 1932 section 5404 read as follows:

> Every personal action for which no limitation is otherwise prescribed shall be brought four years next after the right to bring the same shall have accrued, if it be for a matter of such nature that, in case a party die, it can be brought by or against his representative, and if it be for a matter not of such nature, shall be brought within one year next after the right to bring the same shall have accrued and not after. (26)

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25. See Scott v. Rinehart & Dennis 180 S.E. 276 (W. Va. Ct. App. 1935).
26. West Virginia, Code of 1932, Chapter 55, (section 12, no. 5404), p. 1643.

The discussion following the presentation of the statute in the Code of 1932 pointed out that it had been interpreted to mean that "One year is the bar prescribed by the statute of limitations for the recovery of all damages for an injury to the person in all cases except actions for death by wrongful act."

Lewis Scott and his lawyer, J. B. Bouchelle of Charleston, challenged the company's plea of limitations. They argued that such limitations could not apply to cases of silicosis because the disease usually became manifest only years after exposure. Scott said that it was more than a year after he left the Hawk's Nest tunnel that he learned of his diseased condition. He explained that he did not and could not reasonably have been expected to know of his silicosis until three months before he brought his action against Rinehart & Dennis.

The Court of Appeals, however, in a decision written by the same Judge Hatcher who had dissented in the case of Jones v. Rinehart & Dennis, overruled the plaintiff's (Scott's) demurrer. The Court sustained the defense on the ground that, as had been held consistently by West Virginia courts, "right of action accrues when the wrong is committed, and in the absence of some act of concealment by the wrongdoer, the mere ignorance of the injured party of

the actionable wrong will not suspend the statute."

This decision follows logically from the West Virginia Code book's discussion of section 5404. The Code book pointed out that section 5404 had always been interpreted to mean that the statute of limitations ran from the date of the negligent act which led to the injury. Unless the plaintiff could prove that the defendents had tried to prevent his discovery of the wrong and could demonstrate that he had good reasons for failing to discover that wrong, the plaintiff could not press a suit for damages against the employer more than a year after the infliction of the injury.[27]

The West Virginia Supreme Court expressed sympathy for Lewis Scott and his family but the judges explained that they had an obligation to follow the law. Occupational injuries and diseases had been recognized for a long time, yet the legislators had not amended the statute to take account of the complication of latent employment injuries which might manifest themselves only after the statute of limitations had expired. Until the laws were changed, the judges could do nothing, they said. "No new situation is created here," Hatcher wrote in the Court decision, "and there is not presented any occasion for changing the

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27. Ibid., p. 1644.

well-established rules of law.... Any change in the statute as it has been judicially construed is a legislative matter."

The Joneses, in their suit against Rinehart & Dennis, had won a partial victory. They were not granted money out of the workmen's compensation fund. On the other hand, the employer Rinehart & Dennis was to be held liable at common law for the non-compensable illnesses of four members of the Jones family. This small victory was the result of a set of outdated laws--but at least the Joneses were able to get some restitution.

The Scott case demonstrated even more obviously the frustratingly conservative nature of the law. The state Legislature continued to fail to recognize the need for change and expansion of the statute of limitations. It was not only Lewis Scott, the direct loser in the appeal, who suffered from the decision. The West Virginia courts threw out many other Hawk's Nest worker suits when the statute of limitations was invoked in May of 1935 by the Supreme Court in Scott's case. Without denying that these workers had silicosis, and without disputing that it was the fault of the company that they did, the lawyers for Rinehart & Dennis based their cases on the technical defense of the statute of limitations. This defense worked. At the time of the

congressional investigation, at least a hundred Hawk's Nest worker lawsuits had been thrown out by the Supreme Court on that basis.[28]

Thus West Virginia laws failed not only to protect the tunnel workers against unsafe working conditions, but also to provide the workers with fair retribution and compensation when those conditions had deadly consequences. The law served the Rinehart & Dennis employees neither during nor after the construction of the tunnel. As will be seen, this meant that the workers suffered under appalling living conditions while working in Gauley Bridge, and when the project was completed they were left with diseased bodies and no means of improving their wretched condition.

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28. Ray Tucker, "Silicosis Draws Spotlight," New York Times, 11 February 1936, sec. 4, p. 7.

V. PAY AND LIVING CONDITIONS

For three major reasons the underground workers in the Hawk's Nest tunnel protested neither against the poor health services and operational practices nor against the widespread deception and exploitation by the executives of the Rinehart & Dennis Company and their construction bosses, doctors, and lawyers. In the first place, many of the men probably did not even think of protesting. As ignorant, poorly educated men, they were unaware of minimum health standards and of the legal rights and benefits to which they were entitled.

Secondly, even well-informed and irate workers had no vehicle for their protest. Having been attracted (or recruited) from many different states,[1] these men were far from their friends and relatives. As strangers in Gauley Bridge, they had no standing in the community, and there was no friendly organization in the area to which they could bring their grievances.

Thirdly, the workers did not protest for fear of losing

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1. According to Philippa Allen, the men came "from Pennsylvania, Georgia, North Carolina, South Carolina, Florida, and from States as far inland as Alabama, Kentucky, Ohio. Most of them had been recruited by scouts of the company who went through the States giving glowing accounts of 'steady work' in Fayette County." (Hearings, p. 9).

their jobs. The Depression had drastically reduced employment opportunities. A large number of mines had closed down in 1929 and 1930, and the men came to Gauley Bridge because the tunnel seemed to offer an opportunity for steady work. George Robison's account of how he got to Gauley Bridge applied to many of the workers. Robison had been in Tennessee when a friend told him of the tunnel job. Since he had been out of work for two years, Robison went to West Virginia even though he knew the wage was low. Under the prevailing economic conditions, it was difficult to resist or relinquish any paying job.

Each of the two working shifts at Gauley Bridge was supposed to be ten hours long, but with clean-up the men actually worked twelve hours daily. For each of the ten paid hours a day the men were at first paid forty cents. Because of the stream of cheap labor constantly available, however, the company was able to reduce this hourly wage to twenty-five cents.[2] The standard daily check of $2.50 could be redeemed only at the company commissary. If a worker wanted the money before the Saturday of each week, he had to pay a ten percent fee to cash his check. Out of the weekly salary also came fifty to seventy-five cents a week for a sleeping space in one of the company shacks, fifty cents for

2. Ibid., p. 9.

coal, fifty cents for health services, and twenty-five cents for electricity.[3] These fees were sometimes higher for "the colored," who received an even lower salary for their work. The blacks were forced to use company housing and dining facilities. They had to pay the fees even if they did not use the coal, and even though the only electrical appliance they used was one small lightbulb for each shack. All workers had to pay the hospital and doctor fees, even though the blacks were allegedly denied equal access to the health services, including a simple visit by the company doctor.

The condition of the required company housing was appalling. The arrival of the tunnel workers tripled the population of the area. There was inadequate housing space in Gauley Bridge, and the townspeople were so resentful and mistrustful of the workers that they opposed the construction of new housing in the town for them. The company therefore hastily threw together some shacks outside town, near Hawk's Nest, to house the tunnel workers.

Hubert Skidmore described these shacks in his 1940 novel Hawk's Nest, based almost entirely on the evidence brought forth during the court trials and the congressional hearings. Certain open areas in Gauley Bridge were deemed

3. George Robison and Philippa Allen, Hearings, pp. 68, 8.

unsuitable for the miner shacks. Out near Cotton Hill there was inadequate space. An alternative possibility was an area near the confluence of the New River and the Kanawha, where Old Gauley had stood before it was burned down during the Civil War. But this space was too close to the townspeople, who disliked the imported itinerant workers. The best place to build the shacks seemed to be up the mountain, on the knoll between Cane Branch and Big Creek, overlooking the branching of the Kanawha. In this area the company erected a double row of shacks to house the men working in headings no. 1, no. 2, and no. 3.

Similar shacks were built near the foot of Lovers's Leap for the families of the blacks working in heading no. 4. A third camp was built nearer to no. 4, just below Hawk's Nest, for the housing of white workers. Some white men found private housing but the blacks were forced to live in the company shacks. Some of the blacks, in an effort to avoid the company housing fees, set up homes in gullies beneath rock ledges, or in old barns. When discovered, however, they were forced to join the other black workers in company housing and company dining halls.

These hastily built shacks had no insulation beneath the floors. They were constructed of wide planks nailed to two-by-fours with some stripping to reduce the drafts coming

through the cracks. The basic floor plan was simple. Most of the shacks consisted of two rooms of equal size separated by a thin wall, with a window at either end and one door in front and one in back. During the early weeks of the project a black family had one of the two rooms to itself, but soon there were two families per room, or four families per shack. In the housing for unmarried black men, the furniture in each ten-by-fourteen foot undivided shack consisted of four bunk beds, one in each corner. None of the beds had a mattress; the men slept on straw. No fewer than two men slept in each bed, and there were two beds per bunk, so in each tiny room there lived about sixteen men. A single lightbulb in each shack provided such light as there was. The wooden planks gave inadequate protection from the cold, the closest water was two miles away, and there was insufficient floor space for all the men to dress at once. Nonetheless, the men did not publicly complain. They could not afford to lose their tunnel jobs or the meager shelter provided for them.

Unfortunately, the dreadful living conditions probably served to exacerbate the unhealthy effect of the poor working conditions. The Joplin study of 1914-15 reported that while the rock dust in the mines was the primary cause of workers' respiratory troubles, their health was also

undermined by poor housing, exposure, unsafe working conditions, the use of common drinking receptacles, and overwork. Had Rinehart & Dennis provided a better living situation, the workers would doubtless have remained healthier. The company was indifferent about the lives of the workers and probably exacerbated their health problems by providing only a minimal subsistence for them and, further, by mistreating them on and off the job.

At the congressional hearings of 1936, Philippa Allen testified that "We heard of instance after instance of brutal treatment and discrimination." Charles Jones' wife had once bitterly told Allen that the men in her family "was treated worsen if they was mules."[4] The blacks allegedly were kept in a state of constant fear not only by the foremen on the job, but also by the "shack rouster", a man named McCloud. The contracting and power companies had induced Fayette County officials to deputize McCloud. To "keep peace and order" on the hill where the black workers lived, he chose the method of harassing and pushing "the niggers."

George Robison described as follows McCloud's activities on the hill:

4. Mrs. Charles Jones, quoted by Philippa Allen, Hearings, p. 8.

> If a colored man was sick and really couldn't go to work in the morning, he had to hide out before the shack rouster came around. That fellow had two pistols and a blackjack to force the men to go to work. He was a fat man and we called him what we called most of the other white men around there, "Cap".... We couldn't resist him.... If we didn't go with him or go to work he would club us and make us go, and if we resisted him he would shoot us, so there really wasn't anything to do but to do what he told us to do. (5)

Others claimed that McCloud encouraged the blacks to gamble, taking for himself a percentage of their winnings, and that he threatened the men with arrest, as well as with physical punishment, for disobeying him.

It is conceivable that these witnesses exaggerated the shack rouster's reign of terror. While most of the black workers did feel threatened by McCloud, several admitted that he had never actually shot or beaten anyone. Nonetheless, McCloud's threats did induce the men to continue to work in the tunnel even when they were sick. By this action alone, McCloud was responsible for seriously damaging the health of the workers in his attempt to maintain a high level of discipline.

If a miner really was too sick to work, McCloud allegedly ran him off company property. Since there were hundreds of men waiting to take the place of a weak worker, Rinehart & Dennis did not long tolerate those who could not

5. George Robison, Hearings, p. 67.

work full time all the time. As soon as a man began to show weakness or sickness, he was fired and forced to leave the company housing--even in the middle of winter, and even if the destitute man was so physically weak he could not stand up on his own.

Some of the fired men tried to make their way back to their native states, to the families they had left behind. Others stayed in West Virginia and tried to get another job, usually with little success. Robison, for example, complained that he could not get a job elsewhere because as soon as he was examined by other company doctors in the area they knew he had been "working in that tunnel."[6] Charles Jones also tried to get another job, and he too was turned away. At the Kropper Coal Company, for example, the company doctors who examined him would not tell him what was wrong, "they just laid my card down on the table and said, 'We are through with you'."[7]

C. M. Skinner, who had done repair work in the Hawk's Nest tunnel, got sick in the fall of 1933 and lost forty-four pounds. When he went to see a company doctor, Simmons, he was told first that he had asthma, then high blood pressure. After that he lost his class A physical

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6. Ibid., p. 70.
7. Charles Jones, Hearings, p. 41.

rating, and could not get a job because he could not pass the physical examination. There were many others who did not actually die of silicosis while working in Gauley Bridge but who were so physically disabled by the disease that they could not get another job to support themselves.

Philippa Allen testified in 1936 that for the jobless Gauley Bridge silicotics and for the large families left behind by the dead victims of the disease, "the relief situation is pretty bad." The relief office was fourteen or fifteen miles from Gauley Bridge, and the men, or their survivors, had to walk or hitchhike the distance weekly. Sometimes, Allen reported, these poor people would finally make it to the relief office, only to be told that the relief officer could not help them. These unlucky people then had to depend on the kindness of others who were able to find work.[8]

George Robison was lucky enough to get some relief money each time he walked the fifteen miles. For his family of five he was usually given $3.50 a week, reduced for a while to $1.50 a week. He was able to get supplemental support from his generous and more fortunate neighbors.[9]

The family of Charles Jones was also fortunate enough

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8. Philippa Allen, Hearings, p. 25.
9. George Robison, Hearings, p. 70.

to receive some relief money from the government in addition to the small compensation they received from the company. The Joneses had used the compensation money to pay off their debts and to buy a new four-room house and some cows. The relief money had to provide the family's daily support.

Three wage-earners in the family--Shirley, Owen, and Cecil--were dead, and the fourth, Charles, was too sick to work. Yet six dependents lived with Jones and his wife: their surviving three young children, their daughter-in-law (Cecil's widow), and Cecil's two children. To these two families, which totalled eight persons, the federal government, through the Federal Emergency Relief Administration, gave four dollars a week. The FERA allegedly refused to mail the money to the Joneses because of the extra cost of the stamps, so Mrs. Jones and her daughter-in-law had to walk or hitchhike the long miles to the relief office at the end of every week to get their checks. "We can hardly live on what we get," Mrs. Jones said. "I go to bed many nights crying and wondering how I will get food for the next day."[10] She did some washing to earn an extra dollar or two for the family, and one of the dependents did some janitor work to help pay taxes on the house. Mrs. Jones had asked for more money, but had been

10. Mrs. Charles Jones, Hearings, p. 39.

told that she was receiving a sufficient amount.

In fact, the $2.00 per week received by each Gauley Bridge family was low for West Virginia (where the average monthly relief received in 1932-34 was $17.67) and for Fayette County (where the average monthly relief was $17.32). The FERA knew that the relief situation in the Gauley Bridge area was terrible. In 1934, West Virginia statistician Leon Brower reported to the FERA on the village of Vanetta.[11] When the project was finished in September of 1932, he wrote, 101 persons still lived in Vanetta. Since these were not the black workers forced to live in the company camps, their housing conditions were less crowded. They, too, lived in hovels, but the forty-three adult males, forty-four adult females, and fourteen children were spread out among sixty-one shacks. All but ten of the men suffered from silicosis. Of the fifteen men who supported the community, fourteen had silicosis. Many of these men were too weak to work every day, especially since they had to walk the eighteen miles to their job, a road construction project.

Because of the "spasmodic and irregular" relief, these people never had enough to eat or wear, Brower reported. For days at a time families had nothing to eat and were kept

11. Leon Brower, FERA report, Hearings, pp. 112-114.

from starving only by the generosity of their more secure neighbors. During the winters these people were lucky if they had one meal a day. Their diet consisted of white and red beans, corn bread and syrup, and, when they could get it, cheap white pork. The children had had no milk at all for two years, Brower wrote in 1934. The clothing situation was as bad as the food problem. Because of inadequate clothing, "there were numerous cases of slightly frozen limbs."

Brower noted that "Direct relief was seldom given. Many families received commodities, but very irregularly. Just three men were given CWA work and these three worked a few weeks only." Brower also verified the workers' later testimony that the relief office was fourteen miles away and that many arrived there only to find that they could get no help.

Leon Brower urged better treatment of these pitiful men and their families. They would not, he pointed out, remain long under the FERA because they could not be classified as "normally employable unemployed." But for the period during which the federal government had to take care of the diseased Gauley Bridge people, Brower made a few suggestions. Nobody should have to work against medical advice, everyone who needed it should be given adequate

direct relief, the housing and sanitation of the Gauley area should be improved, a public health nurse should be on duty in the area, and anyone who wanted to return to his home town should be encouraged and aided, for the sake of the surviving families more than for the dying men. "It is," Brower noted, "inadvisable socially to keep a community of dying persons intact."

Obviously the situation of the Hawk's Nest tunnel workers, especially the black workers, was terrible, but it must be remembered that in their low wages, poor living conditions, or low level of relief they were scarcely unique in the 1930s. The low wages and compulsory fees, though obviously brudensome for the Hawk's Nest tunnel workers, were by no means unusual for the Depression years. By 1933, for example, the hourly wage for bituminous coal miners (who had earned eighty-five cents an hour in 1923) had been reduced to fifty cents. The average coal miner worked thirty hours a week, for which the weekly wage, not including deductions for company or personal expenses, was fifteen dollars.[12] At Gauley Bridge the men were apparently paid for fifty or sixty hours a week. Thus, even at the

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12. U.S., Department of the Interior, Coal Mines Administration, A Medical Survey of the Bituminous-Coal Industry (Washington, D.C.: Government Printing Office, 1947).

lowest Hawk's Nest hourly wage of twenty-five cents, the weekly salary was twelve and a half to fifteen dollars. In addition, according to Walter Dodd, author of a 1936 book on workmen's compensation, it was "practically a universal custom" for mining company employers to deduct a fixed amount from the wages of the employee for health services. The normal wage deduction for the services of a company physician and for treatment in a hospital was from $1.75 to $2.35 per month for single men, and about double that for married men.[13] So even though the real wages at Gauley Bridge were low, the weekly income of the tunnel workers was not significantly less than that of other miners during those some years, although they had to work longer hours to make it.

Some miners, in fact, claimed that they worked for less than twenty-five cents an hour. The West Virginia miner Aaron Barkham later told author Studs Terkel that conditions for miners had been bad enough before 1929, but that "when the Crash come, they got about ten cents an hour--that is, if they begged the supervisor for a job."[14]

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13. Dodd (Administration of Workmen's Compensation, p. 439) cites Pierce Williams (The Purchase of Medical Care through Fixed Periodic Payments) as the source of his information.
14. Aaron Barkham, quoted by Studs Terkel in Hard Times: An Oral History of the Great Depression (New York: Avon Books, 1970), p. 237.

Nor were long, hard hours unique to the Gauley Bridge workers. Buddy Blankenship, a miner elsewhere in West Virginia, told of riding on horse-back the eight miles to his job in 1931 and 1932. He and his co-workers would work daily from six in the morning to ten at night--sixteen hours--for $1.75 a day. The wages earned had to be spent at the company store: "We had to trade it out in the store, or we didn't get to work no more," Blankenship asserted. "It was a company store. What we made, we had to go next evening and trade it off. If we didn't, they'd lay us off. They didn't let you draw no money at all. It was scrip."[15]

Edmund Wilson described the plight of coal miners in Ward, West Virginia. During the 1930s the company paid the miners $2.60 to $3.00 for their ten-hour day. The wage, as at Gauley Bridge, was not in legal United States currency but in company scrip which was worth only about sixty cents on the dollar.

> The company forces the miners to trade at the company store--the only store of course on its property--and goods are sold there at so much higher prices than at non-company stores only three miles away that the miners never come any nearer than sixty percent to their money's worth. (16)

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15. Buddy Blankenship, quoted by Terkel, Hard Times, p. 233.
16. Edmund Wilson describes the mining town of Ward, Virginia, in Milton Meltzer, Brother Can You Spare a Dime? (New York: Alfred A. Knopf, 1969), pp. 114-116.

The wretched living conditions of the Hawk's Nest workers can also be compared with those of the Ward miners. Two or three miner families lived in each small, flimsy, company-owned house in Ward, Wilson wrote. Most of these families consisted of ten to twelve persons. For days at a time the children went without food, and they had so little to wear that they walked around more or less naked. When they did eat, their diet consisted of sowbelly, potatoes, and pinto beans.[17]

Mary Owsley, the wife of a Kentucky miner, complained about the life of the women, which was, of course, also hard. Four families would share a water pump. In the wintertime, she said, a foot of ice would cover the pump, and someone would have to get up at three o'clock in the morning to melt the ice off the pump with hot water from the day before. "Just for the simple want of a shed over a water pump," Owsley mused bitterly many years later. "It might deflate the company's bank account."[18]

Throughout the mining states men were paid poor wages and forced to give the money back through the company store. The living conditions--housing, food, and clothing--were terrible everywhere during the Depression. The company

17. Ibid., pp. 114-116.
18. Ibid., p. 235.

employers were consistent in their lack of interest in the health and well-being of their workers--often enough because the companies, too, were struggling for their own existence.

The Gauley Bridge affair took place during the Great Depression. Many Americans were forced to adapt to living conditions which were as wretched as those of the Hawk's Nest workers. Miners also had to worry about surviving the frequent mine disasters, which could kill more than a hundred men at one time. The Hawk's Nest tunnel workers, too, had to concern themselves with all these problems. Their poor living and working conditions were not the result of an aberrant cruelty on the part of one vicious company, but were instead the result of social attitudes, company policies, and economic conditions during the Depression. Even so, they suffered more than most miners because their exposure to the heavy concentration of silica dust rendered them too weak to get another job, and too permanently diseased to have much hope for the future. Although far from alone in their misery, they were especially unfortunate in the degree of company irresponsibility and the extent of death and suffering which resulted from the project.

VI. CONCLUSIONS: LEGISLATIVE CONSEQUENCES

During the general congressional debate on the Labor Department appropriation bill in April of 1936, Representative Glenn Griswold called the attention of the House to the Connery Resolution, House Resolution 449, which was at that time pending before the Rules Committee.[1] H.R. 449 proposed that a board, appointed by the Secretary of Labor, investigate "the conditions of workers employed in the construction and maintenance of public utilities." Griswold pointed out that the investigation of silicosis at Gauley Bridge was related to the appropriations discussion, and he asked that the report of the "Marcantonio committee" be inserted in the Congressional Record. With no objection, that report, addressed to Chairman William P. Connery of the House Committee on Labor, was inserted.

The five subcommittee members had held hearings on the Gauley Bridge affair between January 16 and February 4 of 1936. They had ascertained that the Hawk's Nest tunnel was constructed by the contracting firm of Rinehart & Dennis of Charlottesville, Virginia, for the New-Kanawha Power

1. The report of the Marcantonio subcommittee was presented and discussed in the House on 1 April 1936. See Congressional Record 80:4752.

Company, a subsidiary of the Union Carbide Company, to divert water from New River to a hydroelectric plant at Gauley Junction. The investigatory committee found that the rock which was being drilled contained up to 99% silica and that "this is a fact that was known, or by the exercise of ordinary and reasonable care should have been known, to the New-Kanawha Power Company and the firm of Rinehart & Dennis." The subcommittee members noted that the continuous breathing in of silica dust can cause the deadly respiratory disease of silicosis. They pointed out that this incapacitating or fatal "effect of breathing silica dust is well known to the medical profession and to all properly qualified mining engineers....For more than twenty years the United States Bureau of Mines has been issuing warnings and information while conducting the educational campaign on the dangers of silicosis and means of prevention."

Marcantonio's subcommittee reported that the Rinehart & Dennis Company had demonstrated "an utter disregard" for the "approved methods of prevention": wet drilling, adequate ventilation, the use of respirators by the workers, etc. Because the company did not use these methods, the level of dust in the tunnel was so high that visibility was only a few feet and the workmen left the tunnel covered with dust. "The whole driving of the tunnel was begun, continued, and

completed with grave and inhuman disregard of all consideration for the health, lives, and future of the employees," the subcommittee reported. "As a result of their employment and the negligence of the employing contractor," 476 of the workmen died of silicosis and 1500 more were "doomed to die from the ravages of the disease."

The investigatory report noted that Rinehart & Dennis President P. H. Faulconer and Vice President E. J. Perkins had both refused to appear before the subcommittee. These contracting company officials had stated that "they had no knowledge of any deaths from silicosis contracted on the work." Faulconer claimed that "Only forty-eight men died during the work here. I don't know how many had silicosis but most of them died of pneumonia. And during that epidemic we had a lower death rate in our construction camps than the rest of this county."[2] The defense of the contractor was presented in the January 1936 Engineering News Record. The records of the contractor were said to indicate that only sixty-five men died during the thirty months of drilling.[3] Cf these sixty-five, fifteen were accounted for by accidents, two by manslaughter (resulting from fights), thirty-five by pneumonia, three by

2. "Silicosis," News-week, 25 January 1936, p. 34.
3. "Perils of Rock Dust," New York Times, 28 January 1936, p. 18.

tuberculosis, four by heart trouble, and one by typhoid. The rest of the deaths were unclassified.

The House subcommittee which investigated the Gauley Bridge affair ignored the Rinehart & Dennis denials, just as the company executives had ignored requests to appear before the subcommittee. Rinehart & Dennis officials seemed to have something to hide. This was suggested not only by their declining to appear during the congressional hearings, but also by their alleged practice of burying dead tunnel workers hastily and secretively, tampering with the court trials, using the deceptive euphemism "tunnelitis" for silicosis, and changing Hawk's Nest tunnel working procedures when inspectors arrived. Basing its findings on the testimony at the 1936 hearings, the investigatory subcommittee of the House Labor Committee harshly condemned Rinehart & Dennis and told Congress that

> The record presents a story of a condition that is hardly conceivable in a democratic government in the present century. It would be more representative of the Middle Ages. It is the story of a tragedy worthy of the pen of a Victor Hugo--the story of men in the darkest days of the depression, with work hard to secure, driven by despair and the stark fear of hunger to work for a mere existence wage under almost intolerable conditions. (4)

Unfortunately, appalling as they were, these

4. Congressional Record 80:4752.

"intolerable conditions" were not unique to Gauley Bridge. Silicosis, perhaps the most menacing of the industrial diseases, was "likely to occur in thirty states," Representative Griswold said. "There are today in this country 1,000,000 people who are potential victims of silicosis. There are actually 500,000 people in the United States with silicosis."[4]

The life of the underground worker was a hard one. At the time of the congressional investigation of Gauley Bridge, thousands of miners were dying in United States mines each year, and, for each one of these, forty or fifty were injured--all because no one who had the power to change the system cared enough to do so. Most Americans accepted the explanatory statements of the employers. Too much attention placed on safety would be expensive and would therefore stifle the growth of industry, they said. Nothing could be done about the dangers of mining, and those who chose to enter the mines had to realize that the risks were part of the job.

Many comfortable Americans did not realize that most miners were trapped in that occupation. The "formless prison" of the mountains isolated them from the outside world. The mountains "imbued a kind of ignorance, tcc, that makes the world beyond a strange and forbidding land not to

be entered easily. Fathers and their sons, and their sons after them, go to work in the coal mines, and thus it has been in all the days of their lives."[5] As United Mine Workers President John L. Lewis said to Congress in 1947,

> Men do become inured to hazards. Men who continually hope hour after hour, day after day, that nothing will happen, they will not be killed, finally persuade themselves that they are not going to be killed and they have a driving incentive not to lose the work because of the requirements at home, and they continue to accept the hazard and take a chance. (6)

In addition to the pressure to keep earning money and the continual prayers that one would survive the day, that someone else would be the victim, there was also "the obedience syndrome, the compulsion to follow the wishes of the father, the boss, the mine manager."[7] It was difficult for a man to get out of the mines and virtually impossible for him to change the conditions in those mines.

For Lewis, all this emphasized the need for collective action in the form of unions. The United Mine Workers later used strikes to accomplish such goals as shortened miner working days and lowered standard tonnage levels. But during the period of the construction of the Hawk's Nest

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5. Joseph E. Finley, The Corrupt Kingdom: The Rise and Fall of the United Mine Workers (New York: Simon and Schuster, 1972), p. 215.
6. John L. Lewis, in Finley, Corrupt Kingdom, p. 217.
7. Finley, Corrupt Kingdom, p. 230.

tunnel, unions, including the United Mine Workers, were struggling for their existence. The mining industry (of which the Hawk's Nest project could be considered a part) was still notorious for its poor treatment of employees. In its level of concern for the workers and its degree of implementation of safety standards and equipment, the mining industry was at the bottom rung of industrial advancement.

Only laws could bring real change, and only genuine public awareness could bring effective laws. Unfortunately, public awareness of industrial safety problems rarely came without the prodding of tragedy, and sometimes even hundreds of lost lives were not enough to stir legislators to action. Four years after the Hawk's Nest tunnel project was completed, however, the deaths had not been forgotten. The sufferers themselves were being helped by the Red Cross, the National Gauley Bridge Committee, and other organizations. More important, the Gauley Bridge incident became a springboard for the passage of progressive industrial safety legislation during the 1930s. Because of Congressman Vito Marcantonio, Representative Griswold said to the House, the incident was "the vehicle" by which the silicosis situation was "brought to the attention of the country."[8]

A Business Week article of April 25, 1936, expressed

8. Congressional Record 80:4751.

this new awareness by optimistically stating in the opening sentence that "Both government and industry have now gone seriously at work to fight silicosis."[9] Serious consideration of the silicosis problem was deemed necessary because of the overwhelming ignorance concerning the disease on the part of workers, employers, physicians, insurance companies, legislators, judges, and jurors. The article listed four reasons for the action of 1936 after years of debate over silicosis: 1) the recent increase in common law damage suits against employers by alleged victims, 2) the increase in costs to employers in states which had workmen's compensation laws and the resulting closure of plants and mines because of inability to compete with those in other (non-compensating) states, 3) the unemployment resulting from job discrimination against those who demonstrated physical weakness or poor lung condition during physical examinations, and 4) the Gauley Bridge incident, which impressed on the public the idea "that something should be done about these dust diseases." The legislators saw that there were now grounds for taking action on industrial diseases, especially silicosis.[9]

On April 14, 1936, Secretary of Labor Frances Perkins

9. Business Week discussed the impact of the investigation of the Gauley Bridge incident in "Act on Silicosis Problem," pp. 26-27.

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called representatives of employers, employees, insurance companies, and medical and engineering professionals to the First National Silicosis Conference. The report of this conference clarified many aspects of the silicosis problem. The representatives discussed the etiology of the disease, its relationship to tuberculosis, and medical and engineering preventive methods. The leading companies in the steel, mining, glass, foundry, refractory, and related industries set up the Air Hygiene Foundation of America. Doctors, engineers, and lawyers started studying the silicosis problem.

State governments organized committees to study silicosis. In 1935 alone, Maryland, Michigan, and New Hampshire set up general investigatory committees on industrial diseases, and California organized a committee specifically to study silicosis. A United States Department of Labor Bulletin of early 1937 predicted that these committees, along with the generally increased public awareness of the problem, would lead to renewed interest in occupational diseases such as silicosis in the legislative meetings of that year.

In 1935 and 1936 a great deal of attention was given to the subject of compensation for industrial diseases. By 1936, forty-six of the forty-eight states had workmen's

compensation laws. Sixteen states provided compensation for occupational diseases.[10] The state of Kentucky enlarged its compensation law in 1934 to allow for voluntary subjection to the law with regard to silicosis. North Carolina's law of 1935 included compulsory compensation for silicosis, and gave the victim three years after the last exposure to silica dust in which to report the disease. In high-risk industries, periodic physical examinations were required. Rhode Island's new law of 1936 included compensation for silicosis, as did the new law of New York. The New York Code of that year also extended the safety regulations, mandating the use of dust-eliminating equipment. Nebraska's 1935 law offered compensation for silicosis, with a two-year statute of limitations. The new, expanded law of 1936 in Illinois also included silicosis, with a three-year time limit.

The West Virginia silicosis compensation law of 1935 resulted largely from the Gauley Bridge lawsuits and the attention given them by the radical press. Before that time, legislators were reluctant to advocate changes in the

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10. The sixteen states were California, Connecticut, Illinois, Kentucky, Massachusetts, Minnesota, Missouri, Nebraska, New Jersey, New York, North Dakota, Ohio, Rhode Island, West Virginia, and Wisconsin. See U.S., Department of Labor, Occupational-Disease Legislation in the U.S., 1936, by Charles F. Sharkey, Bulletin No. 625 (Washington, D.C.: Government Printing Office, 1937).

compensation law. At the congressional hearings of 1936, Rush Dew Holt, who had been a member of the West Virginia State Legislature during the early 1930s, said about the silicosis compensation problem: "All through West Virginia there has been much silence about this particular operation. Whenever anything was discussed in the legislature it was discussed quietly because of the danger of stepping on the toes of some industrialist at that particular time."[11] United States Senator Holt said in 1936 that industrial leaders had joined with politicians to prevent the investigation of the silicosis problem in the State Legislature. When West Virginia State Senator Fleming introduced the silicosis compensation bill in 1933, it was held up on a point of order. Senator Holt, who called the Hawk's Nest project "one of the most barbaric examples of industrial construction"[12] in history, expressed his belief that the Rinehart & Dennis Company was against the silicosis bill at first,

> and it actually fought it, but when the supreme court of our State decided that the men had a right to sue I found that in the next session of the legislature the delegates from that section which had gone against making silicosis compensable turned and were then willing to make it compensable in order to protect the

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11. Senator Rush Dew Holt, Hearings, p. 125.
12. Senator Holt, quoted in "Senator Holt Backs Silicosis Inquiry," New York Times, 23 January 1936, p. 2.

company. (13)

Finally, in March 1935, the West Virginia State Legislature passed a bill to make silicosis compensable.[14] If an employer elected to pay the compensation premiums, posted notices informing his employees of that fact, and did not deliberately cause an employee to contract silicosis, he was to be exempt from common law damage suits. The employee could collect compensation if he had worked for the same company under hazardous silica dust conditions for at least two years, made his claim within one year of his last exposure to the silica dust, and did not contract the disease as a result of willful self-exposure or willful disobedience of the regulations of the mine.

The West Virginia Act specified the characteristics of the three stages of silicosis and the compensation to be awarded for each. For first stage silicosis, the employee was to receive $500 compensation, and for second stage silicosis, $1,000. If the employee was suffering from third stage silicosis, the amount of compensation varied and would be decided largely on the advice of the "silicosis medical board," which was to study the medical questions of each case.

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13. Senator Holt, Hearings, p. 122.
14. U.S., Department of Labor, Occupational-Disease Legislation in the U.S., 1936, pp. 223-228.

The West Virginia Silicosis Compensation Act was far from perfect. In many ways it was biased against the employee, especially in its short time-limitation provisions. In addition, since section 15 of the Act specified that the provisions would not apply to cases of silicosis caused by exposure to silica dust before the bill took effect in June of 1935, the Gauley Bridge victims could not themselves benefit from the new law. However, the Gauley Bridge incident had raised public awareness of industrial diseases and had inspired legislative action.

As a result of all this legislative action, the silicosis situation improved significantly in the United States. A Public Health Service paper entitled "The Accomplishments in the Epidemiologic Study of Silicosis in the United States" was presented at a symposium in 1955, twenty years after the passage of the West Virginia silicosis compensation law. The general conclusions of the study were that while silicosis remained the major occupational disease in the country, tuberculosis had declined among silicotics, and, "because of present-day compensation laws and enlightened employment practices, the disease no longer has extreme and unique social consequences."[15]

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15. U.S., Public Health Service, Silicosis in the Metal Mining Industry, p. 2. This is the same reevaluative study of 1958-61 discussed below.

A more thorough study, "the most extensive thus far undertaken in the metal industry of the United States," was a consequence of the symposium presentation of 1955. The Public Health Service and the Bureau of Mines conducted this reevaluation of the silicosis problem between March of 1958 and September of 1961. It was concluded in this study that the metal mining industry had made considerable progress in the prevention of silicosis. The average incidence rate was down to 3.4%, though the 0 to 12.4% range of incidence in different mines showed that the disease was unevenly distributed. This suggested that adequate preventive measures were not uniformly practiced, although they had proven effective where used.

The 1958-61 reevaluation reported that the overall silicosis rate was 40% lower than in 1939. Among miners who had been employed less than ten years in 1958, the silicosis rate was 80% less than in that category in 1939. In the ten to nineteen years group, the rate was 73% less. Most of the victims of silicosis in the 1950s were men who had worked in the mines before the mid 1930s. Few of those men sho had started working after that time developed silicosis, even after twenty years of mining work. Conditions in the mines,

the report said, seemed to be improving.

Hopefully men will never again have to suffer from silicosis as they did in one small West Virginia town in the 1930s. Gauley Bridge was one of the worst industrial tragedies in American history. By civilized standards there was no excuse for the appalling living conditions, the callously unsafe working practices, the horribly inadeguate health services, the lack of legal protection and compensation, or the medical and legal deception and exploitation of the workers in the Hawk's Nest tunnel. The Hawk's Nest project is a perfect example of employer greed and moral insensibility which exacted an immeasurable toll on the lives of thousands. For this, Rinehart & Dennis must take blame.

Although the project clearly demonstrated the blatant abuses to which unrestrained industrial power can lead, it is, unfortunately, not the only example of such abuses. The Gauley Bridge incident must be seen in the context of its own time. One must be aware of the widespread effects of the financial pressures of the Great Depression and of the lag between medical and engineering knowledge and its application in practice. Perhaps more important was the general acceptance of the hard lot of a miner or tunnel worker and the low regard of most employers for the lives of

their employees. It was commonly believed that some suffering and loss of life was unavoidable in the mining and construction industries. With neither government nor labor unions exercising effective control over industry, exploitation of workers such as occurred in the Hawk's Nest tunnel was all too common.

Despite the fact that other Americans had their own problems in the 1930s, the country did act in response to Gauley Bridge. The incident increased public awareness of industrial diseases, convinced legislators that it was time to seriously consider the silicosis problem, and generally strengthened the growing demand for progressive legislation to effect social change.

The legislation which came out of this period has helped to protect others from such tragedies as Gauley Bridge. Conditions have improved, though they are not perfect. Even today we are faced with problems which are not unrelated to Gauley Bridge. Thirty years after the Gauley Bridge exposure, in spite of our more advanced medical and engineering knowledge, our more progressive laws, and our greater awareness of occupational hazards, newspapers are still telling the stories of men dying in the mines or suffering from asbestosis because of unsafe working conditions.

Remnants of the conditions of the Gauley Bridge days are still with us, but, as a result of such tragedies as that of the West Virginia tunnel, we have learned and we have advanced. As George McGovern wrote in a book on another mining tragedy,

> If, in justice to the innocent dead, we are constrained to seek meaning in what befell there, perhaps it is timely to settle for the "kinship of humanity"..., the most familiar yet disregarded of all lessons, that whether we choose to be or not, each one of us is his brother's keeper. (16)

We cannot relieve the sufferings of the tunnel workers of 1930-32. We can only say that perhaps the miseries, and the lives lost, have attained some meaning in establishing in industry a new and greater regard for the value of human life.

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16. George S. McGovern and Leonard F. Guttridge, The Great Coalfield War (Boston: Houghton Mifflin Company, 1972), p. 348.

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