

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
BEAUMONT DIVISION

FILED
U. S. DISTRICT COURT
EASTERN DISTRICT OF TEXAS

JUL 31 1970

JAMES R. COONEY, CLERK

BY Margaret L. Linn
DEPUTY

CLARENCE BOREL

VS.

CIVIL ACTION NO. 6449

FIBREBOARD PAPER PRODUCTS
CORPORATION, ET AL

ADDITIONAL ANSWERS OF THE DEFENDANT, JOHNS-MANVILLE PRODUCTS
CORPORATION, TO PLAINTIFF'S FIRST SET OF INTERROGATORIES.

TO: PLAINTIFF, CLARENCE BOREL AND MR. WARD STEPHENSON,
STEPHENSON, THOMPSON & MORRIS, STEPHENSON BUILDING,
ORANGE, TEXAS, HIS ATTORNEY OF RECORD.

COMES NOW the Defendant, Johns-Manville Products Corporation
and pursuant to the Court's Order over-ruling certain objections to
Interrogatories submitted to Defendant by Plaintiff, files these its
Additional Answers to such Interrogatories within the time permitted
by the Court.

Based on information obtained from Defendant's employees,
with the advice of its counsel, Defendant has attempted to furnish
the information requested in the Interrogatories, but it reserves
the right to amend or supplement its answers if it finds that inad-
vertent omissions or errors have been made, or if additional or more
accurate information becomes available. Such answers to each In-
terrogatory bears the same number as the request:

INTERROGATORY NO. 5.

Industrial insulation products containing asbestos in the
nature of those indicated in Exhibit "A" hereto and which were desig-
nated in response to Interrogatory No. 1, were sold by the Defendant
during the years 1959 through 1967. Many of these products were also
sold during the period 1940 through 1959. The products were sold to
the trade by a sister corporation, Johns-Manville Sales Corporation,
a Delaware corporation. Johns-Manville Sales Corporation sold such
products primarily to distributors, but occasionally directly to

PLAINTIFF'S
EXHIBIT

08165.00

PLAINTIFF'S
EXHIBIT

NV-024963

owners of installations, all tiers of contractors, subcontractors and equipment manufacturers, etc. Such products were sold in boxes and/or cartons and/or packages and/or skids and/or bales. The products were generally universally used throughout the United States.

INTERROGATORY NO. 6.

The products were not used primarily in any specific location or area.

INTERROGATORY NO. 8.

Defendant understands this Interrogatory to relate to persons working with and/or installing and/or applying industrial insulation products after they leave Defendant's place of manufacture. Accordingly, Defendant answers that it is participating, directly or indirectly in the studies described in Defendant's response to Interrogatory No. 3.

INTERROGATORY NO. 9.

Defendant states that no one is "exposed" to the use made of its products once they have been applied and/or installed. Assuming this question relates to persons working with and/or installing, and/or applying industrial insulation products after they leave Defendant's place of manufacture, then Defendant says it has participated in, and contributed to, the informational and educational program of the National Insulation Manufacturers Association. This program is designed to educate the insulation contractors' industry with respect to the health aspects of fibrous materials through regional meetings of insulation contractors' associations (IDCNA meetings). The purpose of these meetings is to aid the contractors in minimizing or eliminating the inhalation of - among other matters - asbestos dust and fibers by those working with and/or installing and/or applying the products of Defendant and other manufacturers, i. e. industrial insulation applicators. In 1967, and again in 1968, programs have been presented at the regional meetings of industrial insulation contractors. Approximately 400 industrial insulation contractors have attended each year. These programs include a verbal review (of approximately three hours duration) of the biological effects of

no reports have been published to date. Additionally, an epidemiological study on the biological effects of asbestos dust among the Port of Genoa and LaSpezia Arsenal insulation workers, among others, is being conducted by the Clinica Del Lavoro, Milano, Italy, under the sponsorship of the Institute of Occupational and Environmental Health, which Institute in turn is funded by the Quebec Asbestos Mining Association. An affiliate corporation of Defendant is the principal contributor to the funding of the Quebec Asbestos Mining Association. This study was initiated early in 1968, and is scheduled to be completed within three to four years from its inception. There are no written reports of such study yet available.

It was not until about 1963 when Dr. Irving J. Selikoff et al., made public the contents of a paper entitled "Asbestosis Among Insulation Workers" that anybody in the asbestos industry or in the scientific or medical world apprehended the possibility that there might be any danger to the health of those working with and/or installing and/or applying industrial insulation products such as those of Defendant.

Since Interrogatory No. 9 is limited to whether Defendant or any of its employees conducted studies Defendant is not answering here with respect to studies other than those in which Defendant or an affiliate of Defendant has participated directly or indirectly.

There is presently in existence a proposed program to take dust counts at certain construction sites where employees of Defendant or of its affiliates are employed. It is contemplated that this will be done in conjunction with the study now being conducted by the Insulation Industry Hygiene Research Program.

INTERROGATORY NO. 11.

Defendant recognizes that in 1907 Dr. H. Montague Murray stated that seven years earlier he had found spicules of asbestos in the lung tissue of a single patient. Defendant states that it cannot answer the question posed in the second sentence of this Interrogatory as it constitutes a non sequitor because it relates to the year 1900 and not 1907 and because Dr. Murray's findings did not deal with "the

dangers to those using...asbestos products". Dr. Murray's findings did not recognize or discuss any such problems.

INTERROGATORY NO. 12.

With respect to the questions posed in the first sentence of this Interrogatory Defendant answers that it recognizes that Dr. W. E. Cook found evidence of asbestosis and that such discovery was published in the British Medical Journal of July 26, 1924, and republished in 1927. Defendant states that it cannot answer the question posed in the second sentence of the Interrogatory because it is a non sequitor since Dr. Cook's study did not relate to or make any mention of a possible problem of asbestosis with respect to persons using finished products.

INTERROGATORY NO. 13.

Yes. Defendant states that it cannot answer the question posed in the second sentence of this Interrogatory because it is a non sequitor in that the legislation did not in any way relate to or appreciate or suggest the possible effects of asbestos on those using asbestos products. The legislation was confined to "in factory" asbestos exposure as stated in the first sentence of the Interrogatory.

INTERROGATORY NO. 17.

No.

INTERROGATORY NO. 19.

No.

INTERROGATORY NO. 23.

Defendant is, and since its creation has been, a wholly owned subsidiary of Johns-Manville Corporation. Defendant and/or Johns-Manville Corporation contributed funds to sponsor animal research on the effects of asbestosis at the Saranac Laboratory of the Trudeau Foundation in upstate New York commencing in 1929. The funds were contributed by Defendant and/or Johns-Manville Corporation in the form of premium payments and assessments to the Metropolitan Life Insurance Company, which was the immediate sponsor. The amount of such contributions is not known to, nor determinable by, Defendant.

In early 1931 a report on these animal experiments was published by Dr. Leroy U. Gardner (the original director of this project) in Vol. 13 No. 3 (March, 1931, issue) of the *Journal of Industrial Hygiene*. This report was entitled "Studies on Experimental Pneumonokoniosis Inhalation of Asbestos Dust. Its Effect upon Primary Tuberculous Infection." A copy of such report is available at the principal offices of Defendant at 22 East 40th Street, New York, N. Y., for inspection and copying by Plaintiff's attorney.

In 1929, shortly after the launching of the Saranac Studies, the parent of Defendant and/or Defendant and other companies in the asbestos industry asked the Metropolitan Life Insurance Company to determine whether asbestos dust was an occupational hazard and, if so, the nature of the hazard and what could be done to control it. The amounts of Defendant's and/or its parent's contributions in the form of increased premiums and assessments is not known to, nor determinable by, Defendant. The Industrial Hygiene Division of the Department of Public Health of the McGill University Medical School in Montreal assisted Metropolitan Life in this research. The results were published in 1935 in the *Public Health Reports*, Vol. 50 No. 1, issued by the U. S. Public Health Service in an article entitled "Effects of the Inhalation of Asbestos Dust on the Lungs of Asbestos Workers." The cost of publication was paid for by general tax funds. Copies of the report are presumably available to the Plaintiff's attorney at the Office of the United States Public Health Service.

As a result of the aforesaid Metropolitan Life study, additional health research on the effects of prolonged and excessive inhalation of asbestos fiber on human beings was undertaken at the Saranac Laboratory. The Quebec Asbestos Mining Association ("QAMA"), of which a sister corporation of Defendant was and is a principal member, contributed to this new research. The amounts of such contributions are not known to, nor determinable by, Defendant but Defendant's sister corporation, as a principal member of QAMA, furnished a significant portion of the total amount. A report on this research was delivered at the Seventh Saranac Lakes Symposium

in 1952, and was entitled "Pulmonary Function Studies in Men Exposed for Ten or More Years to Inhalation of Asbestos Fibers." It was co-authored by Dr. Fernand Gregoire, presently Director of the Clinique Lavoisier, Montreal, and Dr. George W. Wright, presently Director of Medical Research, St. Luke's Hospital, Cleveland. A copy of such report is available for inspection and copying by Plaintiff's attorney at Defendant's principal offices in New York City.

Another report arising out of the industry-sponsored studies at Saranac Laboratory was entitled "Experimental Studies of Asbestosis." It was written by Dr. Vorwald, Thomas M. Durkin and Dr. Philip C. Pratt, and appeared in the A.M.A. Archives of Industrial Hygiene and Occupational Medicine in January, 1951, at Vol 3 Page 1. This paper is presumably available to the Plaintiff's attorney through the American Medical Association.

In the early 1950s an animal research project to investigate the reported association between asbestos exposure and lung cancer was begun at Saranac Lake and funded by QAMA. The amount of the funding is not known to, nor determinable by, Defendant but a sister corporation of Defendant furnished a significant portion of such funding. A report entitled "Asbestosis and Pulmonary Cancer" was released in 1952 and is available for inspection and copying by Plaintiff's attorney at Defendant's principal offices in New York City.

A second such project was an epidemiological study of lung cancer among asbestos miners in the Province of Quebec in Canada. This study was also sponsored by QAMA and, again, a significant portion of the funding was furnished by a sister corporation of Defendant. The amount of the funding is not known to, nor determinable by, Defendant. The study was conducted by Dr. Daniel C. Braun and Dr. T. David Truan for the Industrial Hygiene Foundation of America, Pittsburgh, Pa. The study was completed in 1957 and published in the June, 1958, Vol 17 issue of the A.M.A. Archives of Industrial Health at Page 634 and was entitled "An Epidemiological Study of Lung Cancer in Asbestos Workers." This study is presumably available

to the plaintiff's attorney through the American Medical Association.

Inter-tracheal injection experiments on test animals were conducted by the Industrial Hygiene Foundation (and completed in July, 1968) using asbestos fiber taken from a mine of a sister corporation of Defendant. Johns-Manville Corporation contributed \$1,250 to this study. This study is entitled "The Pulmonary Response to Coalinga Asbestos Dust." A copy of this study is available for inspection and copying by Plaintiff's attorney at the principal offices of Defendant.

In 1967 and 1968 Johns-Manville Corporation sponsored a study of the effect of automobile brake drum dust on the lives of laboratory animals. Johns-Manville Corporation contributed \$1,250 to this study. A study entitled "The Pulmonary Response to Brake Drum Dust" was reported in 1968 and is available for inspection and copying by Plaintiff's attorney at the principal offices of Defendant.

Johns-Manville Corporation is presently contributing to the "Insulation Industry Hygiene Research Program (IIHRP): Mount Sinai School of Medicine, City University of New York", which program is undertaking a health research program for industrial workers. Its purpose is to:

1. develop improved methods for minimizing exposure of insulation workers to dusts and fumes encountered in their work;
2. disseminate knowledge of these improved methods of dust control wherever they may be applied advantageously; and
3. offer cooperation, advice and assistance toward their universal adoption.

Johns-Manville Corporation is contributing \$262,500 to this program. There are presently no final reports but progress reports are presumably available to Plaintiff's attorney through the Director of the Program, Dr. Irving J. Selikoff, at Mt. Sinai Hospital.

Defendant has contributed the time of its personnel and data to a seven to ten year environmental clinical and epidemiological study of workers exposed to asbestos which is now being conducted by the Division of Occupational Health of the United States Public Health

Service and is entitled "Asbestos Industry Study: U. S. Public Health Service." The following reports are based on such study:

"Techniques for the Detection, Identification and Analysis of Fibers" by Robert G. Keenan and Jeremiah R. Lynch;

"The Role of Trace Metals in Chemical Carcinogenesis - Asbestos Cancers" by J. R. Dixon, et al.;

"Identification and Control of Asbestos Exposures" by Lewis J. Cralley.

Each of these studies is presumably available to Plaintiff's counsel through the Consumer Protection and Environmental Health Service of the Public Health Service of the U. S. Department of Health, Education and Welfare.

Another such study entitled "Fibrous and Mineral Content of Cosmetic Talcum Products", by L. J. Cralley, et al., was printed at Page 350 of the July-August, 1968, issue of the American Industrial Hygiene Association Journal. A copy of such study is presumably available to Plaintiff's attorney through the Occupational Health Program, National Center for Urban and Industrial Health.

Epidemiological studies of the Canadian general population designed to examine the relationship, if any, between asbestos exposure and disease among various population groups in Canada, including the Quebec asbestos miners, is presently being conducted. Again, this study is being funded by QAMA and a sister corporation of Defendant is furnishing a significant portion (over half) of such funding. The total amount of such funding is \$704,700 for 1966 - 1974.

Johns-Manville Corporation is funding a study being conducted by the Mt. Sinai School of Medicine, City University of New York, entitled "Biological Effects of Modified Inorganic Fibrous Micro-particles." The amount of such funding is \$142,000. There are no reports available as yet. The purpose of the study is to explore the development of new biological test systems for fibrous materials and to determine the effect on biological activity of asbestos fiber which has been coated with a variety of physical and/or chemical substances.

Johns-Manville Corporation has contributed \$70,000 to the Industrial Hygiene Foundation of America's "Fibrous Dust Study." The purpose of this program is to investigate factors involved in the pathogenicity of major varieties of asbestos fiber to determine the true nature of ferruginous bodies. Although some reports have been written based on this research no reports of the research per se have yet been published. Among such reports are the following:

"Pulmonary Ferruginous Bodies" by Dr. Paul Gross, et al., printed at Vol. 85, Page 539 of Arch Path. in May, 1968.

"Pulmonary Ferruginous Bodies in City Dwellers" by Dr. Paul Gross, et al., printed at Vol 19, Page 186 of Arch Environ Health, in August, 1969.

"Ferruginous Bodies in Human Lungs" by Dr. Michael D. Utidjian, et al., printed at Vol. 17, Page 327 of Arch Environ Health, in September, 1968.

Each of these reports is presumably available to Plaintiff's attorney through the Industrial Hygiene Program of America, Inc.

QAMA is sponsoring a study of the health effects of asbestos, if any, on workers in the asbestos cement manufacturing industry in the New Orleans area. The total funding of this study is \$200,000 and Defendant's sister corporation is furnishing approximately \$142,000 of this sum through QAMA. In addition, Johns-Manville Corporation is contributing time of its personnel at a total cost to it of \$14,500. This study began in 1969 and is concentrating on the health status of present and past employees in the plants of Defendant and National Gypsum Company in and around New Orleans. No reports have been published yet.

QAMA is sponsoring a study of the biological effects of asbestos. This study was commenced in 1968 and is being conducted by Prof. Enrico C. Vigliana, Clinica Del Lavoro 'Luigi Devoto', Milan, Italy, and by Prof. Benvenuto Pernis, Istituto Di Medicina Del Lavoro, Della Universita Di Genoa, Genoa, Italy. The total funding of this study is \$130,000 and Defendant's sister corporation is furnishing a significant portion (over half) of such funding through its membership in QAMA. It is a three year study and no reports have yet been published.

QAMA is sponsoring a research program on the effects of induced asbestos granulomas in hamsters under the direction of Dr. Andre Dumond of the University of Montreal, Montreal, Canada. The total funding of this study is \$11,266 and Defendant's sister corporation is furnishing a significant amount (over half) of such funding through its membership in QAMA. This is a two year study commenced in 1968 but no reports have yet been published.

QAMA is funding a study on the occupational and environmental exposure to anthophyllite asbestos by the Institute of Occupational Health, Helsinki, Finland, under the direction of Dr. Leo Noro. The total funding of this study is \$42,000 and Defendant's sister corporation is furnishing a significant amount of such funding (over half) through its membership in QAMA. This is a four year study commenced in 1968, and no reports have yet been published.

INTERROGATORY NO. 24.

Defendant has no such labor inspectors but Defendant does provide the services of an industrial hygienist to Dr. Selikoff and the Mt. Sinai Hospital, New York, New York, for the purpose of making environmental evaluations including dust counts at the construction sites where thermal insulation products are being installed. This service is being provided in conjunction with the joint scientific research program being conducted by the Mt. Sinai Environmental Sciences Laboratory, Johns-Manville Corporation and the Heat and Frost Insulators and Asbestos Workers Union.

INTERROGATORY NO. 25.

Defendant is aware that the hearing described was conducted.

INTERROGATORY NO. 26.

No.

INTERROGATORY NO. 27.

Defendant is aware of the statement of the surgeon-general.

INTERROGATORY NO. 29.

Defendant understands this question to relate to industrial insulation products containing asbestos. Defendant states that all commercial insulating products look alike. Trained Technicians

could possibly identify by their appearance alone the different asbestos papers, cements and molded insulation made by different manufacturers. The Defendant doubts that a worker or layman could do so. The visual variations are those of color and the degree of color variations is usually very slight. Each manufacturer has his own carton or container marking which is distinctive, but the product, once outside of the container, is not in Defendant's opinion distinguishable by the worker or layman as aforesaid.

The sole exception to the foregoing rule is that some THERMO-BESTOS block produced by Defendant during the period 1940 - 1967 had the initials "JM" or some Johns-Manville Trade-mark imprinted thereon.

INTERROGATORY NO. 30.

No.

INTERROGATORY NO. 43.

<u>YEAR</u>	<u>NET SALES</u>
1960	\$ 77,720,000
1961	169,189,000
1962	178,148,000
1963	190,046,000
1964	217,707,000
1965	224,308,000
1966	232,993,000
1967	227,199,000
1968	246,207,000
1969	262,900,000

Defendant does not have available the total amounts of sales of its products containing asbestos.

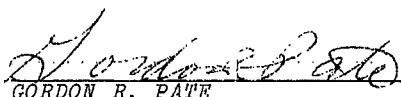
INTERROGATORIES NO. 47 - 84.

Answers to Interrogatories No. 47 - 84 inclusive.

Defendant agrees that the states mentioned had Workmen's Compensation Laws covering occupational diseases, beginning in the years mentioned, but disagrees that all of these Workmen's Compensation Laws specifically covered asbestosis by name.

Respectfully submitted,

JOHN G. TUCKER
Orgain, Bell & Tucker
Beaumont Savings Building
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GORDON R. PATE
1119 Beaumont Savings Building
Beaumont, Texas 77701
Attorney for Johns-Manville Products Corporation

THE STATE OF TEXAS I
COUNTY OF JEFFERSON I

GORDON R. PATE, being duly sworn, upon oath states that he is the attorney of record for the Defendant, Johns-Manville Products Corporation, and authorized in the course of his employment to make and present the foregoing Additional Answers to Plaintiff's Interrogatories, which he does under said authority, and being cognizant of the matters therein set forth and based upon the information furnished him and the investigation conducted as to the subject matter of the Interrogatories, says that the said Answers are true and correct.

Gordon R. Pate
GORDON R. PATE

SWORN TO AND SUBSCRIBED before me, the undersigned authority, on this the 30th day of July, 1970.

James K. Brown
NOTARY PUBLIC In and For
Jefferson County, Texas

CERTIFICATE OF SERVICE

A true and correct copy of the foregoing Additional Answers to Interrogatories was on the 30th day of July, 1970, forwarded to all counsel of record.

Gordon R. Pate
GORDON R. PATE