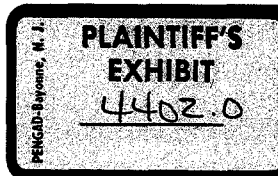


December 12, 1973



Mr. Edward J. Slack
Vice President
Employee Relations

Subject: Response to Requests for Information Concerning the
New Yorker Articles

Both Dr. Morton Corn and I have received numerous requests from our professional colleagues regarding the New Yorker articles. In addition, I have received such requests from within PPG, both directly and indirectly. Dr. Corn and I feel that it is in the best interest of ourselves, the occupational health professionals, Pittsburgh Corning, and PPG, if we can answer such inquiries appropriately.

The articles provide the reader with views about both Pittsburgh Corning and their Occupational Health Consultants that are wholly or in part untrue and also tell only a part of the story, thereby attempting to lead the reader to believe that the Occupational Health Consultants were either incompetent or involved in a conspiracy with Pittsburgh Corning Management which results in inadequate health protection of the employees and resulting in serious health effects on these employees.

Dr. Corn and I have prepared in draft form a review of the health considerations that were involved in Unibestos (See Attachment #1). We recommend that we be permitted to use this information in answering inquiries that come to our attention. I further recommend that this information be available for use in providing interested PPG Management Personnel with an assessment of articles as they pertain to Pittsburgh Corning and their Occupational Health Consultants.

This matter has been discussed by Dr. Corn and myself with Mr. Cyrus Anderson, as well as the Law Representative of Pittsburgh Corning. At the next meeting on December 18, 1973, with these people, we will discuss the attached draft, particularly in regard to whether or not, in its present or further revised form, it can be used as Dr. Corn and I have recommended.

Following this meeting, Mr. Anderson says that we will meet with Mr. Joseph Neubauer and discuss the New Yorker Magazine articles and any recommendations for action that are considered appropriate.

Mr. Anderson and the Law Representative from Pittsburgh Corning have drafted information which they believe should be used for release (See Attachment #2). Dr. Corn and I feel that while this information is probably satisfactory to establish the Pittsburgh Corning position, it is not sufficient for he or I in answering questions from professional colleagues or in my responding to questions from PPG Management Personnel.

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I would appreciate your review and comments on the attached draft. I would also recommend, if possible, you attend both the December 18th meeting and the as yet unscheduled meeting with Mr. Neubauer.

Lee B. Grant, M.D.
Medical Director

LBG:lc
Attachments

cc: C. V. Anderson
Dr. M. Corn

TO WHOM IT MAY CONCERN:

Beginning in the October 29, 1973, issue of the New Yorker Magazine, a series of five weekly articles appeared. The series is entitled, "Annals of Industry - Casualties of the Work Place." The author is Paul Brodeur. The articles attempt to support the position stated by Anthony Mazzocchi, the Director of the Legislative Department of the Oil, Chemical, and Atomic Workers International Union, that industrial workers are the victims of a conspiracy by the "medical industrial complex" designed to suppress knowledge of occupational health hazards and to delay the passage and enforcement of laws to cope with them. The "medical industrial complex" is described as being composed of the occupational health personnel and consultants in industry and in government, both at the State and Federal levels, and the managers of industry. The articles depict the Tyler Plant of Pittsburgh Corning Corporation, in the words of a union official, as the "epitome of what is wrong with the way our country was dealing with the problem of industrial disease." In my opinion, this position is supported only by stretching the truth and in some cases altering or omitting the record.

As a professional in Occupational Medicine and as the Occupational Medicine Consultant to Pittsburgh Corning, I have a responsibility to both to

make available a portion of the story that has not been told in the articles.

The articles allege that the Tyler Plant from its beginning has grossly exceeded the asbestos dust standards in most all of its operations. On the basis of results of surveys of airborne dust in the Tyler Plant prior to 1969, this was not true. There was evidence that excessive dust exposures occurred only at selected plant sites and that these excursions in airborne concentrations of dust were not consistent. The same surveys suggested permissible exposures (as calculated by then existing standards) at most sampling sites. It was only in 1969 when the Walsh-Healey Standards changed the entire concept of the standard from 5 MPPCF in a sample collected by impinger to 12 fibers per cubic centimeter collected by filter that concentrations were deemed excessive throughout the plant. Late in 1971 the asbestos dust standard was further lowered by the OSHA Temporary Emergency Standard for Asbestos to 5 MPPCF.

The articles lead the reader to believe that the scientific world has known the biological response to all forms of asbestos since at least 1964. On the contrary, the effects of Amosite with respect to lung cancer and mesothelioma were not reported until September, 1972. Amosite is the type of asbestos used in "Unibestos", Pittsburgh Corning Corporation's asbestos-containing thermal pipe insulation. The facts are that in 1965 a study reported on miners exposed to amosite in the Transvaal Region of South Africa, where the amosite

mesothelioma being caused by exposure to amosite dust. This study suggested

that amosite might be a safe type of asbestos that could be used in place of

other asbestos that had been shown to be associated with malignancies. These

facts may have had an influence in the greater demand for amosite that was

experienced. Further facts are that it was in September, 1972, several months

after Pittsburgh Corning Corporation had closed its Unibestos manufacturing

operations that Selikoff published the first paper which suggested a relationship

between amosite asbestos and malignancies. Selikoff states in this article that

"there has been no evidence concerning whether the amosite variety is carcinogenic."

A chronological description of recommendations and actions concerned with

occupational health aspects of the Pittsburgh Corning Unibestos operation as

well as the thinking that was involved will contribute to better understanding

of the side of the story not told in the articles.

Pittsburgh Corning bought the Unibestos process from UNARCO in 1962

and took over the UNARCO plant in Tyler, Texas, employing about 60 employees.

This plant had been operated by UNARCO since 1954, therefore, the employees

had been working with asbestos for eight years. Pittsburgh Corning built a new

Unibestos plant in Port Allegany in 1963, which employed about 50 employees.

The Port Allegany Unibestos Plant was part of a larger operation where several

other non-related non-asbestos-containing products were manufactured.

The Pittsburgh Corning Management was aware that asbestos dust exposure might result in asbestosis. Because of this, in 1963 they asked the Industrial Hygiene Foundation of Pittsburgh, Pennsylvania, to perform an industrial hygiene survey of the Tyler Plant. Professors Jack Cholak and Lawrence Shaffer of the Kettering Laboratory, University of Cincinnati, participated in this survey which indicated, with one or two exceptions, that the dust exposure was being adequately controlled according to existing standards. They made recommendations to control dust exposure in the one or two operations where such control was necessary.

In 1964, shortly after Dr. Grant became the Medical Director of PPG Industries, Pittsburgh Corning Management, alarmed by an article in the lay press concerning mesothelioma being associated with asbestos dust exposure in the building trades, asked him what he knew about it and what significance it had for Pittsburgh Corning who used amosite asbestos. After becoming familiar with the small amount of information that was available on the subject, Dr. Grant advised Pittsburgh Corning that it did not appear to be known whether amosite asbestos would or would not produce malignancies in either animals or man.

During his first visit to both Pittsburgh Corning plants in 1965, Dr. Grant recommended that the chest x-rays that were done on the Unibestos

employees should be read by a physician who was Board Certified in Radiology.

Also, he recommended that periodic industrial hygiene surveys should be accomplished.

In 1966, as part of his recognition of a potential hazard, Dr. Grant suggested two approaches to attempt to further clarify the health effects of amosite. In one approach, Dr. Grant advised Pittsburgh Corning that the USPHS was conducting a study to investigate the relationship between the types and degree of asbestos dust exposures in the asbestos industry in the United States and because and associated health effects / Pittsburgh Corning plants offered an opportunity to study the effects of amosite asbestos alone and not a mixed exposure to other types of asbestos, USPHS might be interested in including the Pittsburgh Corning plants in their study. Pittsburgh Corning asked Dr. Grant to inquire about including the Pittsburgh Corning plants in this USPHS study. The USPHS did include the Pittsburgh Corning plants in the study in March, 1967. Unfortunately, the USPHS performed only the industrial hygiene investigation but never implemented the medical investigation associated with the study.

In the other approach, Dr. Grant advised Pittsburgh Corning about a fibrous dust study in animals that was being contemplated by Dr. Paul Gross of the Industrial Hygiene Foundation at the request of the National Insulation Manufacturers Association and suggested that it might be possible to have amosite

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Asbestos included in this study. Some animals would be intravenously with amosite

st and other animals would be exposed to inhalation of high concentrations of amosite dust. This was to be a three-year study. Pittsburgh Corning accepted this approach and included exposure to amosite dust in the study. The animals exposed to amosite dust did not develop malignancies.

Also in 1966, Dr. Grant investigated the possibility of the Texas State Chest Hospital, located near the Tyler Plant, performing medical examinations on Tyler employees who had worked five years or more in the plant, to include a detailed respiratory history, medical examination, chest x-ray examination, and pulmonary function tests, including FVC, FEV_{1.0}, and carbon monoxide diffusion. Dr. Grant advised Pittsburgh Corning that the Hospital would do these examinations. Because the USPHS study would include basically these same tests which the Texas State Hospital would perform, Pittsburgh Corning suggested that duplication of effort be avoided by letting the USPHS perform the study and accepting their results. Unfortunately, despite numerous requests by Dr. Grant, the USPHS never performed the medical studies. Pittsburgh Corning sponsored these studies at Texas State Chest Hospital in 1971.

After receiving the results of the USPHS Dust Survey in 1968, Dr. Grant advised Pittsburgh Corning Management of the significance of these asbestos dust concentrations in terms of possible effects on the health of employees. He advised

Pittsburgh Corning to ask Dr. Morton Corn of the University of Pittsburgh to assist them with the design of an adequate ventilation system to control airborne dust. In 1968, Dr. Corn assisted in the design of a ventilation system at Port Allegany and in 1969 a similar system was designed for the Tyler Plant. The system, with some modifications, was installed in Port Allegany in 1970. A new ventilation system was not installed at Tyler prior to closure of the plant.

In 1969, with the lowering of the asbestos dust standard under Walsh-Healey to 12 fibers per cubic centimeter, Dr. Grant advised that procedures for surveillance and protection of Pittsburgh Corning employees exposed to amosite dust should be reviewed.

As a result of his visit to Tyler in March, 1970, Dr. Grant recommended that further time should not be spent waiting for USPHS to do the medical portion of their asbestos study, particularly in view of the fact that the 1969 chest x-rays of a few of the employees showed findings for which follow-up medical (continued on next page)

examinations were indicated. He recommended that the Texas State Hospital be asked to do the examinations in accordance with the agreed protocol in 1967.

Dr. Hurst of the Texas State Chest Hospital completed the examination of all of the Tyler employees in August of 1971.

It became apparent to Dr. Grant in early 1969 that the asbestos dust standard would be further lowered, which raised the question in his mind as to whether Unibestos could be installed or removed by the insulation worker without exceeding the asbestos dust standard. In January, 1969, he held a briefing with Pittsburgh Corning Management alerting them to this potential problem. Dr. Grant recommended to Pittsburgh Corning that a study be done at UC Berkeley by a thoroughly competent group of investigators, including Doctors Irving Tabershaw, Clark Cooper, Bernard Tebbens, and Leroy Balzer, to determine whether Unibestos or three other competitors' products could be used without exceeding the asbestos standard. The study was initiated in 1969 and showed that none of asbestos-containing thermal pipe insulation products could be used without exceeding the asbestos dust standard. Pittsburgh Corning intensified their efforts to develop an asbestos-free product. Unibest was a result of this effort in which mineral wool replaced the asbestos. Unibest was also tested by UC Berkeley in 1970 and it was found that while it didn't contain asbestos, it produced dust levels above the nuisance dust standard of 10 mg. per cubic meter.

of air. The findings of both of these studies were reported at an International Health and Safety Meeting in Helsinki in 1971, and later published in the scientific literature.

Other efforts directed at protecting the health of users of Unibestos included the use of a warning label on product containers advising, "This product contains asbestos fiber. If dust is created when this product is handled, avoid breathing the dust. If adequate ventilation control is not possible, wear respirator approved by U.S. Bureau of Mines"; providing the customer with a pamphlet prepared by Dr. Grant and others on the National Insulation Manufacturers Health and Safety Committee entitled "Recommended Health Safety Practices for Handling and Applying Thermal Insulation Products Containing Asbestos", and providing health and safety programs at the Regional Meetings of the Insulation Contractors by members of the NIMA Health and Safety Committee.

Unibest development was not successful, so in September, 1971, Pittsburgh Corning Management decided to stop Unibestos manufacturing operations in early 1972 at both locations. This was accomplished at Tyler in February, 1972, ten years after buying the process from UNARCO.

The Texas State Chest Hospital Medical Study of the Tyler employees reported in January, 1972, diagnosed seven (7) employees as having probable early asbestosis. Four of these employees had worked at the Tyler plant for

ten years and one each employed for 11, 15, and 17 years. These employees will continue to be followed by Dr. Hurst at the Texas State Chest Hospital.

NIOSH performed a medical study of the Port Allegany employees and found no asbestos-related disease. It should be remembered that this plant had been in operation about nine years.

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