1246

ASBESTOS TEXTILE INSTITUTE
P. O. BOX 239
75 CENTER ST., POMPTON LAKES, N. J. 07442
U. S. A.
Phone: 839-2216
Area code 201

Founded 1944



6 November 1964

Mr. J. T. Griffis
H. K. Porter Co., Inc.
Thermoid Division
P. O. Box 10516
Charlotte, N. C.

Dear Mr. Griffis:

I am attaching three copies of news releases A, B and C which were supposed to have been released to the press during the conference on the Biological Effects of Asbestos at the Waldorf Astoria several weeks ago.

Fortunately, due to the alertness of Mr. Edward Schuman of J/M and Mr. Robert Cryor of North American Asbestos Company, these releases were discovered before their release, and the resultant objections that arose in the meeting, because of the sensationalism of the material held up their issuance.

It is my opinion that this whole situation should be discussed at the next Board of Governor's meeting but for my part I do not believe that any further steps should be taken at this time.

I also feel that this subject should not be brought to the attention of other than management of our several companies, as any general discussion on this situation by sales personnel with users of our products, could possibly aggravate the situation and result in individual opinions which could be damaging.

I feel that Mr. Reycraft's letter accomplished, for the time being, the fact that we, as an Industry, protest any irresponsible statements being made to the press.

I would welcome, and appreciate, an expression from the members of the Board of Governors regarding this very critical matter.

Very truly yours,

JOHN A. BROWN, JR. - PRESIDENT

sag

att.

The New York Academy of Sciences
2 East 63rd Street
New York, New York
TEmpleton 8-0230
Mr. Samuel Burger, Director of Public Relations

FOR RELEASE: October 20, 1964

HIGH INCIDENCE OF CANCER DEATHS FOUND IN ASBESTOS WORKERS; ASBESTOS IN ENVIRONMENT ALSO THREATENS CITY DWELLERS

New York City, October 19, 1964. A growing number of reports on the occurrence of asbestosis—a serious disease of the lungs due to the inhalation of asbestos dust—and asbestos cancer, reflect the harmful effects of exposure to asbestos dust, Dr. W. C. Hueper (National Cancer Institute, Bethesda, Md.) told a Conference on Biological Effects of Asbestos. The three-day Conference, sponsored by The New York Academy of Sciences, began today at The Waldorf Astoria.

"The enormous rise in production and industrial use of asbestos during the past 50 years has resulted in markedly widened exposure to asbestos dust for a greatly increased number and variety of workers," said Dr. Hueper.

Dr. I. J. Selikoff and co-workers (The Mount Sinai Hospital, New York City) told the Conference about a study of 1522 asbestos insulation workers in the New York-New Jersey Metropolitan area. Of the 307 who had died during the past 20 years, 20 per cent had cancer of the lung, probably a complication of asbestosis. Another 20 per cent died of cancer elsewhere in the body which may have resulted from exposure to asbestos. About five to six per cent died of asbestosis. Only a little more than half—55 per cent—died of all other causes.

X-ray examination of the lungs of 1,117 of the surviving asbestos insulation workers revealed that many of them had asbestosis. Of those who first began to work with asbestos 40 or more years ago, 94 per cent gave X-ray evidence of asbestosis. Of those whose first exposure to asbestos

began less than 10 years ago, 10 per cent gave definite X-ray evidence of asbestosis. Dr. Selikoff concluded that the health and lives of asbestos insulation workers are greatly endangered by their occupation.

From England comes a report by Dr. W. J. Smither (Asbestos Research Council) about 71 asbestos workers who have died since 1957. All were employed by a factory in London which has been manufacturing asbestos products for 50 years. The mean age at death of these 71 workers was 57 years. Although tuberculosis was present much less frequently than among those who died before 1957, there was a definite increase in the occurrence of lung cancer. And the relatively high number of cancers starting in the pleura and peritoneum—the membranes lining the chest and abdominal cavities and covering the organs within these cavities—surprised those engaged in the study.

Dr. R. Kiviluoto (Tampere Central Hospital, Finland) told the Conference about calcified plaques found in the pleura of several hundred persons, living in the vicinity of two Finnish asbestos mines, but not employed in the mining industry. Other X-ray evidence of asbestosis was not found in most of them. The plaques, once thought not to have serious clinical significance, are characteristic of early changes found in the pleura of asbestos workers. These people have what is now called endemic asbestosis, unrecognized before 1960. Dr. Kiviluoto pointed out that, because asbestos dust is indestructible and insoluble, even a brief exposure may result in severe lung damage many years later.

The urban dweller is now inhaling more asbestos dust, said Dr. J. G. Thomson (Medical School, Cape Town, Africa). This is due to increasing consumption and diversity of uses of asbestos in cities and to its virtual indestructibility, he said. Dr. Thomson told about the search that was made for "asbestos bodies" in the lungs of 500 deceased persons over 15 years of age in Cape Town, South Africa, and 500 in Miami, Florida. (Asbestos bodies

are asbestos fibers coated with an iron-containing substance.) The results were similar in the two groups. Asbestos bodies were present in no less than 30 per cent of the males and 20 per cent of the females, he said.

An increase in the occurrence of cancer of the pleura and peritoneum, in urban dwellers was forecast by Dr. Thomson as a result of this new form of air pollution. Such cancers can occur when there is only a small concentration of asbestos fibers in the lower part of the lung, he said.

Investigators engaged in experimental asbestosis research told the Conference of their findings. New ways to detect the "invisible" asbestos fibers in tissues were described by Dr. C. Berkley and co-workers (Mount Sinai Hospital, New York City). Localization of the fibers by electronic ashing has proven highly satisfactory, they said.

Dr. J. Mills (Reading University, England) said that in guinea pigs, finely divided particles of asbestos seem to be more active in the production of lung fibrosis than the larger particles which produce asbestos bodies. In spite of the fact that the experimental animals were exposed to asbestos dust in sealed chambers, small amounts of dust gained access to the animal room and many untreated guinea pigs developed interstitual pneumonia, he said.

The most important commercial varieties of asbestos are chrysotile, crocidolite and amosite. Chrysotile, or white asbestos—a silicate containing magnesium—comes from serpentine rock and occurs as tubular fibers and sheets. Crocidolite, or blue asbestos—a silicate of sodium and iron—comes from banded ironstone rock and occurs as solid fibers. Amosite, fawn-colored—a silicate of magnesium and iron—also occurs in banded ironstone as solid fibers. The greatest use of asbestos, both chrysotile and crocidolite, is in the manufacture of asbestos cement products. These products, manufactured in most countries of the world, consist of pipes, flat and corrugated sheets, shingles, and others. The second largest use of asbestos is in the manufacture of asphalt and vinyl asbestos floor tile.

###

The New York Academy of Sciences
2 East 63rd Street
New York, New York
TEmpleton 8-0230
Mr. Samuel Burger, Director of Public Relations

FOR RELEASE: October 21, 1964

ASBESTOS LINKED TO SEVERAL MALIGNANCIES; MAY PAVE WAY FOR CIGARETTE-INDUCED CANCER

New York City, October 20, 1964. In England, Wales and Scotland over 50 per cent of males recently deceased and known to have had asbestosis also had cancer within the chest cavity, Dr. W. B. Buchanan told the Conference on Biological Effects of Asbestos, sponsored by The New York Academy of Sciences. Today's meeting, the second of the three-day Conference was held at The Waldorf-Astoria.

Dr. Buchanan (Ministry of Labor, London, England) based his statement on an analysis of all the death certificates on which the presence of asbestosis is recorded from the three countries. Up to the end of 1963, 584 such death certificates have been received, he said, and the annual number of them is increasing. A relationship between asbestosis and cancer within the chest was suspected as long ago as 1947, and there now seems to be little doubt that such a connection is real and meaningful, he said.

Two German physicians, Drs. G. Jacob and M. Amspach, who studied such cases, noted that there were two kinds of cancers. Some of the cancers were bronchogenic—that is, they began in the lining of the branches of the wind-pipe which carry air into the lung. Other cancers were mesotheliomas, which start in the pleura—the membrane which lines the chest cavity and covers the lungs. They also found some mesotheliomas which began in the peritoneum—the membrane which lines the abdominal cavity and covers the organs within. Drs. Jacob and Amspach said that there was a relatively high incidence of pleural mesotheliomas among people who live in the vicinity of the Dresden asbestos works.

Dr. E. C. Hammond and co-workers (Mt. Sinai Hospital, New York City) were surprised to find a high incidence (20 per cent) of cancer of the stomach and intestinal tract in 307 deceased insulation workers in the New York-New Jersey Metropolitan area. They believe that in many of these cases, the cancer did not arise from the cells that line the inside of the gastrointestinal tract, but from the cells of the peritoneum. Such cancers were quite probably, therefore, mesotheliomas connected in some way with exposure to asbestos.

In Ireland, Drs. P. C. Elmes and O. L. Wade (Queen's University, Belfast, Ireland) studied 42 proved cases of pleural mesothelioma, and found that in 32 of these cases there was a positive history of exposure to asbestos. Asbestos bodies—asbestos fibers surrounded by an iron-containing substance—were found in the lungs of 88 per cent of these patients. These findings are further evidence that asbestos plays a role in pleural mesotheliomas.

In the laboratory, Drs. W. E. Smith and L. Miller (Fairleigh Dickinson University, Madison, N.J.) found large tumors in the chest cavities of hamsters—possibly mesotheliomas—after a single injection of asbestos into the cavities. They reported that the kinds of asbestos which stimulated tumor production were harsh chrysotile—white asbestos—and amosite—fawn-colored asbestos. Both are silicates of magnesium. Amosite also contains iron.

The same researchers said they had been unable to produce bronchogenic cancer in hamsters by introducing the same two kinds of asbestos into the lungs via the air passages. But, when either chrysotile or amosite were introduced into the air passages with a cancer-producing substance occurring in tobacco smoke, cancers occurred in twice as many animals as when the cancer-producing agent was introduced alone. Therefore, the

laboratory tests confirm the epidemiological evidence that asbestos can cause malignant mesotheliomas and may enhance the cancer-producing activity of chemicals known to produce bronchogenic cancer. Other laboratory researchers reported that they are now trying to find out if it is the asbestos itself or something associated with it which stimulates cancer formation.

Because those workmen who acquire asbestosis are entitled to compensation, definite standards already exist which measure the severity of incapacitation. Such standards are based on information obtained from chest X-rays, physical examination, and tests of lung function.

#####

C

The New York Academy of Sciences
2 East 63rd Street
New York, New York
TEmpleton 8-0230
Mr. Samuel Burger, Director of Public Relations

FOR RELEASE: October 22, 1964

SCIENTISTS CITE GROWING ASBESTOS HAZARDS; ASK FOR SAFETY MEASURES AND FURTHER STUDY

New York City, October 21, 1964. The increasing occurrence of cancer among asbestos workers is, ironically, a reflection of their improved working conditions and longer life span, scientists were told today at an international Conference on Biological Effects of Asbestos. The Conference is sponsored by The New York Academy of Sciences. Today's meeting at The Waldorf-Astoria brings the three-day meeting to a close.

In the early days of the industry, said Dr. J. C. Gilson (M.R.C. Pneumoconiosis Research Unit, Glamorgan, Wales), men working for only a few years in an asbestos-laden atmosphere developed asbestosis—excessive scarring of the lungs due to inhalation of the asbestos particles. Often these men died prematurely because of the complications of asbestosis—pneumonia or tuberculosis, he said.

When factory conditions were altered so that pneumonia and tuberculosis were no longer such a problem, Dr. Gilson continued, the late effects of asbestosis were commonly encountered, including severe bronchial conditions and enlargement of the heart.

More recently, said Dr. Gilson, these workers with only moderate degrees of asbestosis have survived long enough to develop cancers originating in the bronchial passages.

Now, quite unexpectedly, malignant tumors arising from the linings of the chest and abdominal cavities—mesotheliomas—are occurring in workers who have had only slight exposure to asbestos 40 or more years previously. Mesotheliomas due to asbestos are also being found among people who live near

asbestos mines and factories, and among city dwellers whose environment is contaminated by asbestos used in insulation and elsewhere.

Dr. Gilson pointed out that it is important to find out which kinds of asbestos fibers do the least harm within the body, so that the safer varieties of fibers may be more commonly used in the future.

The geographical location of the asbestos deposit is an important factor contributing to its capacity to cause disease, Dr. K. W. Smith (Johns-Manville Corporation, Manville, N.J.) asserted. Chrome, nickel or radioactivity are associated with some deposits, he said. These contaminants are known to be cancer-producing in their own right.

Dr. J. C. Wagner (Pneumoconiosis Research Unit, Glamorgan, Wales) told the Conference that it is not known exactly how asbestos causes disease. Nor is it known how the asbestos fibers migrate in the body. He said that pleural mesotheliomas—malignant tumors arising from the lining of the chest cavity—have occurred in animals following the injection of chrysotile, crocidolite, and amosite—the major varieties of asbestos. Pleural mesotheliomas have also been the result of injections of silica, which occurs naturally in sand and quartz. Asbestos also contains silica.

Other investigators from England, Ireland and South Africa described the nature of the mesothelioma in detail. They presented clear-cut evidence to prove that asbestos, or something associated with it, does indeed cause these malignant tumors in man and animal. In man, known exposure to asbestos and the presence of asbestos fibers in tumors and lungs are significant.

The New York Academy of Sciences, which is host to many thousands of scientists at the more than 20 major international scientific conferences it sponsors annually, recently announced plans to construct a $25 million World Science Center in the heart of New York City.

The Academy, whose 18,000 member-scientists represent all 50 states and 68 foreign countries, hopes to complete the World Science Center by 1967, in time to celebrate 150 years of service to the world scientific community. Support for the project is being sought from individuals, foundations, and government agencies here and abroad.

###