



The Industrial Commission
Of Ohio
Division Of Safety & Hygiene
246 N. High St., Col. O. 43215

PLAINTIFF'S EXHIBIT

K-2027

December 13, 1984

Legal Section
Industrial Commission of Ohio
246 North High Street
Columbus, Ohio 43215

Attention: Ms. Judy Spencer

RE: OD 20964-22
Edsail Spence, Decedent
Joyce Spence, Widow-
Claimant
Owens-Illinois
Columbus, Ohio 43207

Dear Ms. Spencer:

On July 12, 1984, an unannounced visit was made by Cindy Ellwood and Beth Wetzel, industrial hygienists with the Division of Safety and Hygiene, to Owens-Illinois, 711 Southwood Avenue, Columbus, Ohio 43207. Due to the unavailability of the company's supervisory personnel on that date, the company postponed the visit. A scheduled return visit was made on September 17, 1984. The purpose of the visits was to collect industrial hygiene data relative to the death claim of Edsail Spence. A copy of the death certificate is contained in the claim file, with the cause of death cited as cardiopulmonary arrest due to or as a consequence of bilateral pulmonary thromboemboli.

Mr. Spence submitted a claim on 6-6-83 for alleged silicosis, glass poisoning, and "asbestos." Upon his death on 6-23-83 the claim was dismissed until it was re-opened as a death claim by his widow, Joyce Spence.

Contacted at the company were:

1. Mrs. Kathy Pinnie, Industrial Relations Director
2. Mr. Neil Miller, Forming Supervisor

The company manufactures television picture tubes. It currently employs approximately 1200 hourly and salaried employees.

A complete service record for the decedent's work at Owens-Illinois was provided. (See Enclosure 1.) According to

2

0000 0544

the widow-claimant's affidavit contained in the claim file, she stated that prior to employment with Owens-Illinois, Mr. Spence did odd jobs, worked as a farmer, laborer, and logging mill sawyer. The company records state that the date of hire was ~~6-1-66~~ for Mr. Spence. His last day worked was 8-25-75. He retired due to ill health on 12-31-77. Mrs. Pinnie stated that he used quite a few days of sick leave in 1973 and 1975.

During the 23 years in which he actually worked at Owens-Illinois, Mr. Spence primarily worked in the Forming Department, mainly classified as an automatic machine worker and also as a button machine operator. (Written job descriptions are included in Enclosure 1.)

According to Mrs. Pinnie, Mr. Spence was not required to wear a respirator for any of the jobs he held at Owens-Illinois.

Discussion of Possible Exposures

1. According to Mrs. Pinnie and Mr. Miller, no fiber glass was used as a raw material in any of the operations in which the claimant worked. (In 1974, a fiber glass material, Kevlar, replaced the asbestos matting used on the conveyor belts. This should not have resulted in exposure of fiber glass to the employees, however.)
2. Silica is stored in the batch yard. Mrs. Pinnie stated that with the classifications held by the decedent, he would never have been required to work in or near, enter, nor even walk by the batch yard. All of the glass to which the decedent would have been exposed was what Mrs. Pinnie described as "solid glass," but not to the raw materials used to manufacture glass.

In a Division of Safety and Hygiene report dated April 11, 1960, to Owens-Illinois (formerly called the Kimble Glass Company), it stated that molds are removed from the molding machines and cleaned with a very fine wet-sand-blasting operation in the Mechanical Repair Department (MRD). The report did not mention whether the Forming department employees worked near the MRD or not. Results of silica tests conducted in the MRD are included in two 4-11-60 Division reports. (See Enclosure 2.)

3. In the 1960's, 25% ammonium formate was used to spray on hot molds. In 1960, the Owens-Illinois Safety Director stated in a letter (Enclosure 2) that a number of employees were complaining of a burning sensation to the eyes, headaches, nosebleeds, and dermatitis. The irritant in question, formic acid, is a severe irritant to the eyes, mucous membranes, and

skin. However the Division's industrial hygienist that investigated the complaints said that "concentrations of vapors at this operation do not appear to be high enough to constitute a health hazard." He further stated that the spraying area was usually a non-working area. "An employee would usually be there only to observe or adjust equipment." (See Enclosure 2.)

4. The widow-claimant stated in an affidavit contained in the claim file, "He (Mr. Spence) told me that a chemical was sprayed on machines and he would breath the smoke. I recall when he came home from work, his face would be covered with a black grit and he smelled like oil. He also would have a white powder on his clothes that he said was asbestos and glass particles..." The chemical "sprayed on machines" referred to was likely Renite. (See page 6 of Enclosure 1.) In Mr. Miller's letter it states, that Mr. Spence would not have worked in the immediate area where Renite was used. During an interview Mr. Miller stated that there was some condensation of Renite in the general plant. A material safety data sheet is included. (Enclosure 1.)
5. Monochlorobenzene was used in the general plant area and in the late 1950's it was used only in the quality control area. (Results of tests for monochlorobenzene determinations are included in Enclosure 2.) Chlorinated benzene compounds are irritating to the skin, conjunctiva, and mucous membranes of the upper respiratory tract. Of course, it is not possible to determine what the decedent's exposure to monochlorobenzene might have been from the date of hire to the late 1950's.
6. The claimant could have been exposed to asbestos in the Forming Department. The relationships between asbestos exposure and subsequent asbestosis, cancers of the lungs and digestive tract, and mesothelioma are well documented. In a previous unrelated O-I occupational disease claim investigation report dated 1-20-84, Mr. Neil Marquard, Industrial Hygienist, stated,

"The glass being molded by the forming machines is hot. Molten glass within the melt furnaces is normally within a temperature range of 1600° - 2200°F. Therefore, thermal insulation (frequently asbestos) is often utilized in the form of curtains, pads, and gloves. Asbestos gloves are still considered by many as the best personal protective device available for protection against excessive heat. Owens-Illinois officials are in the process of researching the feasibility of switching to non-asbestos materials wherever possible. However, an adequate substitute material

for gloves has not been found by company personnel as of this date.

The attached article from the American Industrial Hygiene Association Journal (Volume 42, Number 12, December 1981, pages 870 - 875) indicated that both airborne and ingestive fiber exposures are likely to occur as a result of wearing asbestos gloves. Most of the workplace exposures recorded (in the article) were below the OSHA standard airborne limits, but were in excess of NIOSH recommendations. No agency or scientific organization has yet established an absolutely "safe" level of exposure for human carcinogens."

Mr. Neal Miller stated that asbestos was used for several different applications in the Forming Department: (a) asbestos matting on conveyors, (b) asbestos pads on button-chucks, and (c) asbestos gloves. The conveyor belts and take-out pads were coated to keep the asbestos in a non-friable state. Kevlar is the substitute material used since 1974 on the conveyor belts.

Mr. Spence was a sweeper at various times in the Forming Department. Part of the sweeper's job was to distribute new asbestos gloves to workers. Any settled asbestos fibers on the floor could have been re-introduced into the ambient air by sweeping, and thus could cause exposure to the workers in the Forming Department.

Results of asbestos surveys conducted by the Occupational Safety and Health Administration (requested through the Freedom of Information Act)³ and results of surveys conducted by the O-I corporate hygienist¹ are enclosed. [Especially note in Enclosure 1, page 65, 2.35 asbestos fibers per cubic centimeter of air released from asbestos gloves. This exceeds the 8 hour time weighted average (TWA) permissible exposure limit set by OSHA. However on the result sheet it was not noted if the result represented a TWA nor if it represented an actual exposure to an employee. It was likely an area sample.]

Conclusions

No definite statements can be made concerning the exposure incurred during 23 years of employment. According to Mrs. Pinnie and Mr. Miller the decedent would not have been exposed to silica dust nor to fiber glass, but could have been exposed to minimal amounts of asbestos. (Note: "minimal" exposures to asbestos are still significant.)

5

OD 20964-22, Edsall Spence - Decedent
Joyce Spence - Widow-claimant
Page 5

Of course whether asbestos-caused cancer was present and if it was a contributing factor of death was not specifically mentioned in the medical reports.

Examples where tumors or malignancies are mentioned: (From claim file, Mercy Hospital, 1-83) "It was believed that the patient may have bronchiectasis and/or malignancy. This needed to be ruled out." In this report, the final diagnosis did not mention malignancy.

(From claim file, coroner's report, page 4) "There is a tumorous mass in the anterior psoas muscle on the right... Centrally, the tumor mass is calcified and multi-cystic with hemorrhage. The illeac veins are dissected; the vein adjacent to the tumor mass on the right has thrombi and may have been broken off proximally. These are consistent with the origin of the thromboemboli which are found in the lung as the cause of death."

Respectfully submitted,

Beth Wetzel

Beth Wetzel
Industrial Hygienist

BW/klp

Enclosures:

1. Information from the Owens-Illinois company files.
2. Copies of O-I reports from the Division of Safety and Hygiene's files.
3. Survey results obtained from OSHA through the Freedom of Information Act.