

November 12, 1968

Mr. J. W. Rife
Director of Workmen's Compensation
Frigidaire Division
General Motors Corporation
300 Taylor Street
Dayton, Ohio 45404

Dear Mr. Rife:

Enclosed is a copy of a letter to the Legal Section of The Industrial Commission of Ohio regarding O.D. 8770-22, Harold Cawthorne. This copy is for your information and file.

Please contact the Division any time it may be of service to the company on matters concerning accident prevention or industrial hygiene.

Very truly yours,

Albert E. Scheible
Safety Engineer

AES:ew
Enc:

November 12, 1968

Legal Section
The Industrial Commission of Ohio
Ohio Departments Building
Columbus, Ohio

Attn: Paul J. Dragan, Referee
Room 419-B

Re: O.D. 8770-22
Harold Cawthorne

Gentlemen:

On October 17 and 18, 1968 visits were made to Frigidaire Division of General Motors Corporation, Plant No. 1 in Dayton, Ohio and Plant No. 2 in Moraine City (suburb of Dayton) Ohio. The visit to Plant No. 2 was made to evaluate environmental atmospheric conditions relevant to the subject claimant's employment by this company. The company manufactures electric ranges and refrigerators.

The claimant's employment experience with this company is as follows:

5-12-48	to	11-8-48	Plant 2, Dept. 262.	Material handler.
11-8-48	to	10-24-49	" " " 227.	Insulation assembly.
10-24-49	to	10-31-49	" " " "	Assembler.
10-31-49	to	11-7-49	" " " 228.	Conveyor assembler.
11-7-49	to	3-6-50	" " " "	Material handler (incl. hand trucker).
3-6-50	to	3-13-50	Plant 2, Dept. 228.	Conveyor assembler.
3-13-50	to	5-12-52	" " " 217.	Material handler (incl. hand trucker).
5-12-52	to	7-14-52	Laid off.	Lack of work.
7-14-52	to	12-8-52	Plant 1, Dept. 16.	Hand trucker.
12-8-52	to	8-24-53	" " " "	Assembly.
8-24-53	to	5-29-57	Plant 2, Dept. 227.	Conveyor assembly.
5-29-57	to	10-24-57	Laid off.	Lack of work.
10-24-57	to	3-31-58	Plant 3, Dept. 327.	Conveyor assembly.
3-31-58	to	4-11-58	Plant 2, Dept. 218.	Tube expanding machine.
4-11-58	to	9-25-58	Laid off.	Lack of work.
9-25-58	to	4-20-59	Plant 3, Dept. 328.	Conveyor assembly.
4-20-59	to	8-3-59	Plant 2, " 228.	Asphalt hydrolene spray or pour.
8-3-59			Plant 2, Dept. 228.	Assembly.
8-3-59	to	8-1-60	" " " 216.	Punch press.

Legal Section
Industrial Commission of Ohio
Re: O.D. 8770-22 - Harold Cawthorne

November 12, 1968
Page 2

8-1-60	to	3-16-64	Plant 2, Dept. 227.	Conveyor attendant. Load and unload de- lux porcelain.
3-16-64	to	8-16-65	Plant 2, Dept. 227.	Conveyor assembly.
8-16-65	to	12-20-65	" " "	Check, handle and dispatch.
12-20-65	to	2-21-66	Plant 2, Dept. 227.	Urethane foaming operation, load and unload and prepare for pouring.
2-21-66	to	1-15-68	Plant 2, Dept. 217.	Check, handle and dispatch.
1-15-68	to	2-12-68	Off work	
2-12-68	to	3-6-68	Probably Plant 2, Dept. 217.	Check, handle and dispatch.

Last day worked.

The claimant received a pre-employment physical examination. Previous employment was recorded as follows:

January, 1942 to January, 1945	Fairfield Air Depot. Property and supply.
May, 1945 to May, 1948	Self employed. Wall cleaner.
May, 1952 to July, 1952	Self employed. Cawthorne Confectionery.

From the employment experience above it will be noted that the claimant had many different classifications. Classifications change over the years. Most of those in which the claimant worked may be described as material handling. This could be handling of parts, sub-assemblies, or near finished product. It could be done by hand, by hand truck, or by placing parts on a conveyor line. A great deal of product movement is done by conveyor.

The claimant worked in Plants 1, 2 and 3. However, only one year was spent in Plant 1 (1952-1953). On two occasions (1957-1958 and 1958-1959) he worked in Plant 3 totaling about one year. The far greater share of his employment, about 17 years, was in Plant 2. This plant was visited.

Locations where the claimant could have been exposed to some dust would have been:

Insulating assembly	1948-1949	10 months	Plant 2
Punch press	1959-1960	1 year	" "

The dust exposure for these operations would have been fibrous glass or metal dust, neither of which are considered to be pneumoconiosis producing. Tube expanding is not a current operation. The other two operations, as observed, showed no visible evidence of dust either in the atmosphere or by reason of settled dust.

Legal Section
Industrial Commission of Ohio
Re: O.D. 8770-22 - Harold Cawthorne

November 12, 1968
Page 3

Locations for possible air contamination to which the claimant could have been exposed, other than normal plant atmospheric exposure, would have been:

Asphalt hydrolase spray or pour	1959	4 months	Plant 2
Urethane foaming, load and unload	1965-1966	2 months	"

The asphalt spray or pour is used in refrigerators or freezers where fibrous glass insulation is used. The claimant probably did this on horizontal type freezers which are no longer produced. The operation observed used a spray gun for the application. The material is piped under pressure to the spray gun. As the box shells pass on a conveyor, only enough spray is applied at predetermined locations to insure proper forming adhesion of the insulation. It was necessary to place the head inside a shell to detect an asphalt odor, which was not irritating to this observer. This odor was not noticeable at the general work location.

Urethane foam is a homogeneous plastic used in the refrigerators instead of fibrous glass insulation. It has excellent insulating qualities. A mold space of the desired thickness of insulation is formed by placing a smaller metal shape of the same configuration inside of the refrigerator shell. The metal mold shape is placed inside the shell as the shell passes on a conveyor. The shell is then conveyed into a totally enclosed and exhausted machine where the urethane foam is applied and cured. On removal from the machine the metal mold shape is removed leaving a smooth, even thickness of urethane foam insulation in the refrigerator shell.

One of the raw materials used to make urethane foam is a class of materials called diisocyanates. Toluene diisocyanate is commonly used. It is a highly toxic material known to cause asthmatic type reaction in some individuals. The threshold limit value is .02 ppm. The odor threshold is about twenty times higher than the threshold limit value. The claimant probably helped at one or more of the operations to place refrigerator shells on the conveyor line, insert the metal mold shape, remove same after foam application, and remove the insulated shell from the conveyor line. There are a considerable number of people working in this area. It is very well ventilated, as are other plant areas, by duct outlets which deliver outside air into the plant.

The departments where the claimant worked are not separated from each other by permanent partitions. The areas are quite extensive. There are gas operated ovens, pickling vats (dilute acid wash), and metal cleaning vats which he may have passed by or worked in the general vicinity of while handling material. These facilities are all locally exhausted.

Handling bottoms from bottom banks probably means taking refrigerator bottom panels from storage and placing them on conveyors for delivery to assembly or processing areas.

Legal Section
Industrial Commission of Ohio
Re: C.D. 8770-22 - Harold Gawthorne

November 12, 1968
Page 4

Painting is done on an upper floor in large exhausted paint booths. The claimant was never classified as a painter so it is not known in what manner he may have been exposed to paint materials. There was no indication of paint vapors or fumes while walking outside the booths.

It is very difficult to assess the claimant's exposure to possible air contamination because one area of the plant was much the same as another in this respect. The plant is excellently ventilated by mechanical ventilation and local exhaust. There were no significant odors in any of the areas visited. Other than as mentioned earlier under possible dust exposure and air contamination, there appeared to be no different atmosphere to which the claimant was exposed than that in which practically all other employees worked. A highly sensitive individual might find the asphalt spray or pour operation somewhat irritating.

Very truly yours,

Albert E. Scheible
Safety Engineer

AES:zw