C # 5396011

MICHIGAN DEPARTMENT OF PUBLIC HEALTH

LANSING, MICHIGAN 48914

PLAINTIFF'S EXHIBIT

FD-1768

Reply to: 1547 Middlebelt Road
Inkster, Michigan 48141

May 28, 1976

Ford Motor Company
Dearborn Glass Plant
3001 Miller Road
Dearborn, Michigan 48121

FILE

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Attention: Mr. Michael R. O'Rear,
Industrial Relations Manager

Gentlemen:

On February 11, March 9 and 10, and April 8, 15 and 27, 1976, this Division conducted an investigation of your plant to determine what operations or materials may affect the health of the employees. Your operations consist of the manufacture of glass. We were accompanied by Mr. Allen W. Carpenter, Supervisor of Safety, and Mr. Artist Wilson, Employee Health and Safety Representative.

In addition to discussing the handling characteristics of certain chemical compounds; restrooms and lunchrooms were evaluated and the following studies or material analyses were carried out:

1. evaluation of glass dust-in-air in reference to an employee working in the proximity of the waste cullet railroad car.

2. evaluation of dust in the breathing zone of the "seamer and marker" at location B-12.

3. dust study in the breathing zones of two employees working in or near the furnace control batch room.

4. a breathing zone study of an employee in the glass conveyor area where methyl chloroform (1-1-1-trichloroethane) is used.

5. analyses of material samples taken of paper board, talc, insulating cement, Lucor-A, and Carbo-Cite.

6. breathing zone samples of employees working at the location where talc is applied at the bending lehr operation.

7. oil mist samples taken in the breathing zone of two employees working in the autoclave area.

A number of chemical compounds were discussed with both Mr. Carpenter and Mr. Wilson in regard to their handling characteristics, and Mr. Carpenter obtained caution labels where necessary. According to "Documentation of the Threshold Limit Values," American Conference of Governmental Industrial Hygienists, methyl chloroform is the "least hepatotoxic of the common chlorinated hydrocarbon solvents," and for example, "1900 ppm for 5 minutes caused a disturbed equilibrium in exposed men." That value normally should be above any expected exposure under the present use. Monoethanolamine should be handled as an alkaline material.

The objective in analyzing other material samples was to determine the presence or absence of asbestos or free silica. This information is summarized on one of the attached data sheets.

The total weight dust samples obtained in the breathing zone of the cutter-breaker who works adjacent to the cullet railroad car is below the Maximum Allowable Concentration (MAC), as is a similar sample obtained for the seamer and marker at position B-12 where the edge of the glass is polished. Each of the seamers has an individual dust collector.

A sample was collected in the breathing zone of an employee working in the area of the bridge walkway over the glass conveyor. Methyl chloroform samples taken in the morning and afternoon were below the MAC. These samples were obtained using charcoal tubes and a personal sampling pump.

In the batch house, samples were obtained using filters and personal sampling pumps in the breathing zone of two employees, as shown on the data sheet. These values were also below the MAC. Although one of the compounds, added at the fifth floor microscales, contained 15% free silica, the exposure is for only 2 or 3 minutes per shift.

No asbestos or quartz was detected in the talc material analysis. Total weight dust samples as well as respirable samples were taken in the breathing zones of several employees at this location, and all were found to be within the MAC. As a matter of information, as fibers were reported, asbestos "peak" evaluation samples were also taken on 3 employees at this location; and as indicated on the data sheet, the values are below the "peak" limit. Although the fibers met the criteria of an aspect ratio greater than 3 to 1, they did not appear to be characteristic "asbestos type."

Samples were also obtained in the breathing zones of 2 employees located in the autoclave area to determine whether oil mist was a significant factor. As shown on the data sheet, both values were below the MAC.

In conclusion, we observed no violations of existing State occupational health standards as a result of our investigation. However, it must be remembered that changes in operating techniques or materials may alter the present conditions and it is necessary to be alert to the occupational health significance of any such changes.

Very truly yours,

BUREAU OF ENVIRONMENTAL
AND OCCUPATIONAL HEALTH

Roy S. Ericson, Jr., Engineer
Division of Occupational Health

RSE/sb

Enclosures

cc: D. L. Block, M.D., Medical Director
Mr. Paul Toth, Ind. Safety Section

8007 0100

C # 5396011

Air Contaminant Data Sheet

Ford Motor Company
Dearborn Glass Plant

3001 Miller Road

Dearborn, Michigan 48121

Study of March 9, 1976 Engineer: R. Ericson

Results Expressed In milligrams total weight inert dust per cubic meter of air.

Sample Identification and Description	Results	MAC*	Above MAC
Adjacent to cullet railroad car:			
5-FNG-1 William Kent, Cutter Breaker	0.78 mg/M^3 total wt.	15mg/M^3	-
5-FNG-2 Robert Pool, Seamer and Marker B-12	0.35 mg/M^3 total wt.	15 mg/M^3	-

Instrumentation: Personal sampling pump and vinyl metricel filter

*Maximum Allowable Concentration

0007 0101

C # 5396011

Material Sample Data Sheet

Ford Motor Company
Dearborn Glass Plant

3001 Miller Road

Dearborn, Michigan 48121

Study of March 9 and 10, 1976 Engineer: R. Ericson

Sample Identification and Description		Results
5-FMG-11	Homosote - paper board Box Job - Dept. 6413	No asbestos detected
5-FMG-12	Talc - at lehr	No astestos or free silica detected
5-FMG-13	Insulating cement	No asbestos or free silica detected
5-FMG-14	Lucor-A	No talc, asbestos or free silica detected
5-FMG-15	Carbo-cite 5th floor microscales 2-3 minutes/shift	15% free silica

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Air Contaminant Data Sheet

Ford Motor Company
Dearborn Glass Plant
3001 Miller Road
Dearborn, Michigan 48121

Study of March 10, 1976 Engineer: R. Ericson

Results Expressed In parts methyl chloroform (1-1-1-trichloroethane) per million parts of air by volume.

Sample Identification and Description		Results	MAC*	Above MAC
Glass conveyor				
Keith Horvath #0909 - cutter	A.M.	37 ppm	350 ppm	-
	P.M.	53 ppm	350 ppm	

Instrumentation: Charcoal tube and low flow pump

*Maximum Allowable Concentration

3007 0103

C # 5396011

Air Contaminant Data Sheet

Ford Motor Company
Dearborn Glass Plant

3001 Miller Road

Dearborn, Michigan 48121

Study of March 10, 1976 Engineer: R. Ericson

Results Expressed In milligrams total weight dust per cubic meter of air.

Sample Identification and Description		Results	MAC*	Above MAC
Batch House				
5-FHG-7	Thomas Long #0042, Runner Furnace Control Batch Room	2.06 mg/M^3	15 mg/M^3	-
5-FHG-8	Jack Dawson #8881 Furnace Control	0.59 mg/M^3	15 mg/M^3	-

Instrumentation: Personal sampling pump and vinyl metricel filter

*Maximum Allowable Concentration

8007 0104

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Air Contaminant Data Sheet

Ford Motor Company
Dearborn Glass Plant

3001 Miller Road

Dearborn, Michigan 48121

Study of April 8, 1970 Engineer: R. Ericson

Results Expressed In Number of fibers greater than 5 microns in length per cubic centimeter

Sample Identification and Description		Results	MAC*	Above MAC
Bending Lehr				
5-FMG-M1	Talc material analysis	No asbestos (chrysotile or amosite) detected. No quartz detected		
5-FMG-A1	Greg Shory #3733 Line 1	3.1 fibers >5 microns/cc. peak determination		
5-FMG-A2	Clemis Meadows #1316 Line 2	4.1 fibers > 5 microns/cc. peak determination		
5-FMG-A3	Dale Neelands #3001 Line 2	3.4 fibers >5 microns/cc. peak determination		

Instrumentation: Personal sampling pump and filter

*Maximum Allowable Concentration

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Air Contaminant Data Sheet

Ford Motor Company
Dearborn Glass Plant

3001 Miller Road

Dearborn, Michigan 48121

Study of April 8, 1976 Engineer: R. Ericson

Results Expressed In milligrams total weight dust per cubic meter air.

Sample Identification and Description			Results	MAC*	Above MAC
Bending Lehr					
5-21	James Curl #4083 loader	with cyclone, respirable	0.19 mg/M^3	5 mg/M^3	-
5-173	Dennis Wenckovsky #7015 loader	without cyclone, total	1.90 mg/M^3	15 mg/M^3	-
5-236	David Cohen #1071 loader	without cyclone, total	1.25 mg/M^3	15 mg/M^3	-
5-233	Verlin Williams #6174 loader	with cyclone, respirable	0.41 mg/M^3	5 mg/M^3	-

Instrumentation: Personal sampling pump and vinyl metricel filter

*Maximum Allowable Concentration

8007 0106

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Air Contaminant Data Sheet

Ford Motor Company
Dearborn Glass Plant

3001 Miller Road

Dearborn, Michigan 48121

Study of April 15, 1976 Engineer: R. Ericson

Results Expressed In milligram total weight dust per cubic meter of air

Lucor-A

Sample Identification and Description	Results	MAC*	Above MAC
5-FMG-243			
AA-74 Floor inspector position	0.39 mg/M^3	15 mg/M^3	-
5-FMG-217			
B-68 William Ketelhut 3491 Bracket breaker	0.75 mg/M^3	15 mg/M^3	-

Instrumentation: Personal sampling pump and vinyl metricel filter

*Maximum Allowable Concentration

8007 0107

Air Contaminant Data Sheet

Ford Motor Company
Dearborn Glass Plant

3001 Miller Road

Dearborn, Michigan 48121

Study of April 27, 1976 Engineer: R. Ericson

Results Expressed In milligrams oil mist per cubic meter of air

Sample Identification and Description		Results	MAC*	Above MAC
Autoclave area				
5-FMG-371	Meadows #6495 crane operator - radio controlled	0.27 mg/M^3	5 mg/M^3	-
5-FMG-147	Charles Karman #7241 Power service operator	0.05 mg/M^3	5 mg/M^3	-

Instrumentation: Personal sampling pump and vinyl metricel filter

*Maximum Allowable Concentration

S007 0108

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