PLAINTIFF'S
EXHIBIT
CHR-181

MICHIGAN DEPARTMENT OF HEALTH

LANSING, MICHIGAN 48914

July 2, 1965 Reply to: Wayne County Department of Health
Eloise, Michigan

Chrysler Corporation
Chrysler Chemical Division
5437 W. Jefferson
Trenton, Michigan

COPY

Attention: S. B. Twiss, Ph.D., President

Gentlemen:

On May 19, 1965, we conducted a study of the various operations handling asbestos and toluene to determine whether your employees were being exposed to concentrations above our limits.

Air samples were collected in the breathing zone of the workers loading raw asbestos into the mixers and after various machining operations. In general the dust found in the samples was below the established limit. One of the samples collected at No. 3 Saw was slightly above the limit indicating that the ventilation and hooding should be checked to see if it is operating at maximum efficiency.

Solvent samples were collected in the breathing zone of the workers during the emptying of the mixer and the loading of the portable boxes, the shoveling of the mix into the extrusion press and stacking the extruded linings on the drying racks. The air samples collected indicated high concentrations during the emptying of the mixer and the shoveling of the mixed material from the portable box into the extruder. The concentration in the mix room was of short duration and did not appear significant compared to the time of exposure and the background concentration of 10 to 20 parts per million. However the shoveling of material occurs over a longer period of time and is a problem. The average concentration during the shoveling operation is 250 parts per million with the peak concentration exceeding this figure. The ventilation on the box was checked and found to be approximately 700 cubic feet of air per minute, very low according to our standards for good ventilation.

Some type of corrective measures should be initiated at the shovelling of brake lining material into the extruder hopper--one, either change the method of loading the extruder to reduce the employee exposure or two, increase the exhaust ventilation to 1750 cubic feet of air per minute per box.

We are enclosing the data collected during our study and if there are any questions before our next visit please feel free to contact us.

Very truly yours,

DIVISION OF OCCUPATIONAL HEALTH

Marvin M. Schuman
District Engineer

MMS/ja

Enclosure

cc: Donald Eschelbach, Industrial Hygienists

Chrysler Corporation
Chrysler Chemical Division
5437 W. Jefferson
Trenton, Michigan

Date of Investigation: May 19, 1965

ASBESTOS DUST

Sample No.	Location and Remarks	Million of Particles per Cubic Foot of Air
	Maximum Allowable Concentration	5
5C1	Breathing zone collected on the balcony level above the mixing units during the dumping of dry ingredients into the large funnel servicing the blenders on the first floor.	3.7
5C2	Breathing zone on the balcony opening and dumping ingredients into the small dry blender on this level.	3.3
5C3	General air taken on the balcony level during the mixing operation.	1.0
5C4	Breathing zone on the first floor--#1 inspection station after the double end grinder.	2.9
5C5	Breathing zone--#3 saw--operator removing linings from forming machine and stacking into curing trays prior to final cure.	6.7
5C6	Breathing zone--#1 saw--operator removing linings from forming machine and stacking into curing trays prior to final cure.	4.6
7	Breathing zone of operator of the double-end grinder at #1 inspection station.	.5
5C8	Breathing zone #1 inspector after double-end grinder.	.9
5C11	Breathing zone grinding low quality brake lining southeast corner of building.	.8
5C12	Breathing zone unloading linings from curing rack.	.6

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SOLVENT STUDY

Sample No.	Location and Remarks	Parts of Toluene per Million parts of Air
	Maximum Allowable Concentration	200
1	Breathing zone mix room operator dumping mixed product into portable box.	200-250
2	Mix room average concentration during mixing operation - mixer closed.	20
3	Breathing zone shovelling brake lining material from the portable box to extruder average concentration.	250
4	Extruder operation taking extruded material from extruder and placing it on drying rack, average.	15

Remarks: Only one extruder operating during our study.