PLAINTIFF'S
EXHIBIT
CHR-179

INTER COMPANY COR

TO: NAME	DEPT / DIVISION	FILE CODE	DATE
S. C. Enders	Manager, Friction Materials Development / Chemical		October 16, 19
FROM: NAME	DEPT / DIVISION		PLANT OFFICE
L. Redmond	Industrial Hygiene / Personnel		Highland Park

SUBJECT: Noise Levels, Airborne Asbestos Dust and Exhaust Ventilation - Department 4400

As requested by Mr. E. R. Lombard, a noise survey was performed at specific locations in the subject plant by the writer on September 24, 1969. Also, for the purpose of establishing data in the disc brake operations, air samples were collected to determine quantities of airborne asbestos dust and exhaust ventilation systems were tested on September 24 and October 8, 1969. The results obtained are listed on the attached data sheets.

Discussion

As indicated on the data sheet, the major noise source in the areas surveyed is the compressor. Readings of 90 to 91 decibels on the "A" scale (dBA) of a standard sound level meter were obtained on the first floor during the compressor air discharge. The noise level was 103 to 104 dBA at a distance of three feet from the compressor, which is located on the second floor. During the normal compressor operation, the readings obtained at the same two locations were 84 to 86 dBA and 93 to 94 dBA.

The hearing risk criteria adopted on May 20, 1969, under the authority of the Walsh-Healey Public Contracts Act, permits exposure to a noise level of 93 to 94 dBA for five hours per day. Since only maintenance operations are performed in the immediate vicinity of the compressor, where continuous noise exposures fall into this category, the actual exposure will be for short periods of time. Assuming a work station at a distance of three feet from the compressor, the maximum exposure time to the air discharge noise would be approximately one half hour per day. Exposure to a noise level of 103 to 104 dBA is permitted for a duration of 1½ hours daily. Based on calculation

as contained in the Walsh-Healey Act, the total permissible exposure time at a distance of three feet from the compressor is 4½ hours. This length of exposure appears to be unlikely.

Asbestos dust concentrations were found to be at satisfactory levels. The samples obtained at the Besly Grinder contained an average of 4.0 million particles per cubic foot of air (mppcf) which is below the established threshold limit value of 5.0 mppcf.

The readings obtained with an Alnor Velometer indicate good exhaust ventilation control of operations surveyed.

Louis Redmond

Louis Redmond
Industrial Hygienist

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Attachments

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Data Sheet
Trenton Chemical Plant
Friction Materials Operation

Noise Levels

Location	Sound Pressure Level in Decibels re: 0.0002 Microbars "A" Scale, Slow Response
U. S. Department of Labor - Permissible Noise Exposure Level:	
for 8 hours per day	90
for 6 hours per day	92
for 4 hours per day	95
for 3 hours per day	97
for 2 hours per day	100
for 1½ hours per day	102
for 1 hour per day	105
Department 4400	
First floor, loading Littleford mixer area, compressor noise	84-86
Same location, compressor discharge every 1½ minutes	90-91
Second floor, within three feet of compressor	93-94
Same location, compressor discharge every 1½ minutes	103-104
Second floor, Mr. J. Nordman's office	72-75
Same location, compressor discharge	81-82
Second floor, southeast office	71-73
Same location, compressor discharge	80-81

The above readings were obtained with a General Radio Company Sound Level Meter, Type 1565A.

Data Sheet
Trenton Chemical Plant
Friction Materials Operation

Asbestos Dust Concentrations

Location	Results in Millions of Particles per Cubic Foot of Air
Threshold limit value	5.0
Department 4400:	
September 24, 1969;	
Bay E-7, at Comins Saw #103066	less than 1
Bay F-4, at east Bipel Machine, weighing and loading material	2.0
Repeat of above	less than 1
Bay F-4, at west Bipel Machine, weighing and loading material	less than 1
Bay F-7, loading Besly Grinder	6.0
October 8, 1969;	
Bay F-4, at west Bipel Machine, weighing and loading material	1.2
Repeat of above	1.2
Bay F-7, loading Besly Grinder	4.1
Repeat of above	2.1
Bay F-7, inspection operation east of Besly Grinder	2.0

The above samples were obtained with Mine Safety Appliances Company Midget Impingers and a Monetaire Pump.

Data Sheet
Trenton Chemical Plant
Friction Materials Operation

Exhaust Ventilation

Location	Results in Feet per Minute
September 24, 1969;	
Bay E-7, Comins Saw #103066, circular saw with good enclosure	200
Bay F-7, Besly Grinder, good enclosure	600-800
Bay F-4, west Bipel Machine	175
Bay F-4, east Bipel Machine	175
October 8, 1969;	
Inspection table west of Besly Grinder, four openings, down draft exhaust	400-500

The above readings were obtained with an Alnor Velometer, Type 3002.