



PLAINTIFF'S EXHIBIT

FD-1907

Inter Office

Personnel and Organization Staff

May 6, 1981

Mr. A. Clark, Safety Engineer
Lansdale Electronics Plant

cc L. F. Bieler
R. M. Ruth
D. Vaughn

Subject: Asbestos and Silica Analyses, Lansdale Plant

At your request, four bulk samples and four filter samples were analyzed for asbestos and silica (i.e., quartz) respectively. The results of the analyses are listed in the attached tables and discussed below:

Asbestos

All bulk samples were found to contain some asbestiform material (refer to Table 1) (i.e., chrysotile). The actual amounts ranged from 1-2 percent in the floor sweepings (Sample "C") to 21-22 percent in sample cut from rectangular bar stock (Sample "A").

The samples were initially analyzed in the Ford Industrial Hygiene Laboratory using an asbestos "spot test" and the results confirmed by Clayton Environmental Associates Laboratory using x-ray diffraction techniques.

Crystalline Silica

Four air samples for total airborne dust were analyzed for silica content (refer to attached Table 2), and appropriate permissible exposure limits were calculated. The air sampling results indicate that the first operator position east of the silo is not exposed to excessive silica concentrations. However, the area under the sand silo does contain excessive airborne crystalline silica concentrations and, therefore, access to this area should be restricted.

If there are any questions, contact the writer at 313-337-8955.

M. J. O'Brien, Industrial Hygienist Senior
Industrial Hygiene & Toxicology Department
Employee Health Services

jb
Attachments

SCF-FORD-3108

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INDUSTRIAL HYGIENE SERVICES SECTION
INDUSTRIAL HYGIENE & TOXICOLOGY DEPARTMENT
EMPLOYEE HEALTH SERVICES

Lansdale Plant
Asbestos Bulk Samples

<u>Sample Description</u>	<u>Percent Asbestos (Chrysotile)</u>
Sample A - Cut from rectangular bar stock	21-22
Sample B - Cut from rod-type bar stock	11-12
Sample C - Floor sweepings	1-2
Sample D - Insulation in cellar	9

Samples analyzed by x-ray diffraction technique by Clayton Environmental Consultants. Also analyzed by asbestos "spot check" test by Ford Industrial Hygiene Laboratories.

DATA RETRIEVAL NUMBERS: AC 20-23

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Lansdale Plant

Duraspark Area

<u>Location</u>	Percent Crystalline Silica	Airborne Crystalline Silica Concentration (mg/M ³)	
		<u>PEL**</u>	<u>Actual</u>
<u>GENERAL AREA SAMPLES</u>			
First operator station east of silo	21.3	1.23	0.39
First operator station east of silo	10.7	2.19	0.20
Sand shaker near operator	6.0	3.33	0.69
Under sand silo	67.7	0.42	2.70*

* Exceeds 8-hour time-weighted average permissible exposure limit

** Permissible exposure limit calculated from following equation:

$$PEL (mg/M^3) = \frac{30}{\% \text{ Silica} + 3}$$

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