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Industrial Hygiene Consultants

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January 12, 1987

Mr. Bill Cunningham
Industrial Hygiene Manager
Shell Oil Co.
PO Box 262
Wood River, IL 62095

PLAINTIFF'S EXHIBIT

SH-2877

Dear Bill:

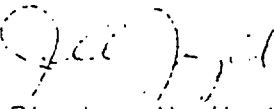
An airborne asbestos survey was conducted on January 3, 1987. Asbestos containing materials were removed from a process line on the west vacuum flasher furnace. A 7-man crew comprised of Shell Insulators performed this removal project.

A total of 8 airborne samples were collected during the removal project. Personnel samples ranged from 0.01 - 0.26 fibers per cubic centimeter (f/cc). One sample did exceed the Occupational Safety and Health Administration (OSHA) Asbestos Standard 1926.55(c) of 0.2 f/cc. Personnel were equipped with half mask ~~Suzy~~air, and Mine Safety Appliance (MSA) full and half mask respirators. A high efficiency particulate filter was the selected cartridge. Additional protective equipment consisted of disposable coveralls and gloves. Three area samples collected at the perimeter of the controlled area indicated airborne fibers below detectable limits of analysis (i.e. less than 0.01 f/cc).

The following conditions attributed to elevated airborne fiber concentrations during removal: 1) the colder temperatures (29 degrees F) minimized wetting techniques, 2) the 7-man crew removed asbestos at a higher than normal rate, and 3) the lack of a negative air pressure machine while working in an enclosure. However, a negative pressure is limited in its ability to reduce personnel exposure in an ~~enclosure~~ enclosure. Work practices and proper wetting of asbestos material are by far more effective control measures.

Please call if you have any questions regarding this report.

Very truly yours,


for Stephen W. Hecht
Industrial Hygienist

Enc.

SWH/bsm

LAM 019506

ABS-000317

TABLE 1

RESULTS OF PERSONAL AND PERIMETER MONITORING
FOR AIRBORNE ASBESTOS

Shell Oil Company
(DU-2 West Vacuum Flasher Furnace)
Wood River, Illinois

January 3, 1987

Sample #/Time	Employee/Description	Airborne Fiber Con- centration (f/cc)	8-hour TWA (f/cc)
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WRMC 870103-1 0045-0225 0343-0515		0.24	0.10
WRMC 870103-2 0049-0226 WRMC 870103-7 0343-0515		1.0 0.31	0.26
WRMC 870103-3 0050-0225 0343-0515		0.034	0.01
WRMC 870103-4 0100-0520	Perimeter North of Abatement Area. Approx- imately 4 feet east of P-39046	<0.01	
WRMC 870103-5 0106-0521	Perimeter Northwest Corner of Abatement Area, Pump Alley	<0.01	
WRMC 870103-6 0112-	Perimeter South of Abatement Area. 9 Feet from East Furnace	Void	
WRMC 070103-8	Blank *	3 Fibers/ 100 Fields	

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f/cc - fibers per cubic centimeter
TWA = Time Weighted Average

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Table 1 (continued)

*Sample obtained were blank corrected.

Method of Collection: Airborne samples were collected with MSA Model G, SKC 224-43, and Gilian HFS, 113A sampling pumps. This instrumentation was calibrated before and after survey. Sampling media consisted of an open-faced 25 millimeter 0.8 micron mixed cellulose ester filter.

Method of Analysis: Samples were analyzed in accordance with NIOSH asbestos fibers in air procedures, NIOSH 7400 Method.

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