

FEBRUARY 24, 1986

TO: D. T. DALEY
H. G. BAXTER
B. L. BRANNAN
W. M. CUNNINGHAM

For your information.

V. J. Grizzle/mkc
V. J. Grizzle

VJG/mkc

Attachments

V. J. GRIZZLE

LAM 019583

ABS-000393

CM 211

JOHN A. JURGIEL & ASSOCIATES, INC.

Occupational Health and Safety Consultants

2092 CONCOURSE DRIVE
ST. LOUIS, MISSOURI 63146
(314) 557-7488
February 18, 1986

Gene Streb
Safety Representative
Nooter Corporation
1400 South Third
St. Louis, Missouri 63104

Dear Mr. Streb:

John A. Jurgiel and Associates, Inc., conducted airborne monitoring for asbestos fibers during removal operations at the Shell Oil Company, Wood River, Illinois on February 7, 11, and 12, 1986. Areas monitored for asbestos fibers were the Vacuum Flasher, Vacuum Flasher Control Room, and Kero stripper. Asbestos removal projects were conducted by Nooter Corporation St. Louis, Missouri.

Air monitoring results for airborne fiber concentrations are summarized in Table 1. Personnel monitoring results ranged from 0.020 - 0.85 fibers per cubic centimeter (f/cc). Five out of eight personnel measurements exceeded the Occupational Safety and Health Administration (OSHA) medical surveillance level of 0.1 f/cc. Personal protective equipment consisted of a MSHA/NIOSH approved half mask respirator equipped with high efficiency particulate filters and disposable coveralls.

Area monitoring was performed at the perimeter of controlled abatement areas. The results of this monitoring ranged from less than 0.000 (i.e. quantification limit) to 0.096 f/cc. Two down wind samples exceeded the Environmental Protection Agencies action level for buildings of 0.01 f/cc. Adverse weather conditions (i.e. cold weather) limits the use of water as a wetting agent for asbestos material. Removal operations were conducted in a semi dry state. As weather conditions continue to improve additional wetting will be necessary to control fiber release. Removal in weather below freezing requires additional efforts to control fiber release. The upwind barrier should be extended to compensate for potential increased fiber concentrations.

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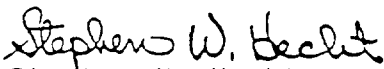
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An area sample was collected in the Vacuum Flasher Control Room on February 11, 1986. A fiber concentration of 0.042 f/cc was measured. This level exceeded an air fiber concentration of 0.01 f/cc measured during actual removal on January 31, 1986. This number was of concern since it also exceeds the EPA's action level. Additional monitoring conducted on February 12, 1986 indicated a air concentrations of less than the quantification limit of 0.000 f/cc. This indicates that the sample collected on the 11th was inadvertently contaminated.

Total dust sampling for silica was conducted at Distillation Unit #1 on February 12, 1986. The samples collected have been submitted for free silica analysis. An additional report will be prepared upon completion of this analysis.

If we can be of additional assistance, please feel free to call upon us.

Sincerely,


Stephen W. Hecht
Industrial Hygienist

cc: V. J. Grizzle, CSP, Shell Oil Co.

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Table 1

AIRBORNE FIBER CONCENTRATIONS

SHELL OIL COMPANY
Wood River, Illinois

February 7, 11, and 12, 1986

Name/Location	Sample Number	Sample Volume (Liters)	Airborne Fiber Concentrations
<u>February 7, 1986</u>			
Abatement Area Vacuum Flasher #1 (Area #7)	0207-1	262	0.0153
Abatement Area Vacuum Flasher #1 (Area #7)	0207-2	256	0.144
East Area Sample Entrance to Pump Room Vacuum Flasher #1 (Area #7)	0207-3	366	<0.018
West Area Sample 9th Street Vacuum Flasher #1 (Area #7)	0207-4	360	<0.018
North Area Sample East of Pump Room Vacuum Flasher #1 (Area #20)	0207-5	342	<0.019

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Table 1 (cont.)

Name/Location	Sample Number	Sample Volume (Liters)	Airborne Fiber Concentrations
Abatement Area Vacuum Flasher #1 (Area #2B)	0207-6	222	0.038
Abatement Area Vacuum Flasher #1 (Area #2C)	0207-7	218	0.222
South Area Sample East of Pump Room Vacuum Flasher #1 (Area #2B)	0207-8	218	<0.029
<u>February 11, 1986</u> #1 Flasher Control Room (John Hamm's Desk)	0211-1	1108	0.042
South Area Sample Kero Stripper (Corner of 5th & Kay)	0211-2	050	0.096
North Area Sample Kero Stripper (Corner of 5th & Kay)	0211-3	055	<0.000
Abatement Area (Kero Stripper)	0211-4	210	0.477
Abatement Area (Kero Stripper)	0211-5	206	0.850

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Table 1 (cont.)

Name/Location	Sample Number	Sample Volume (Liters)	Airborne Fiber Concentrations
<u>February 12, 1986</u>			
Area Sample Vacuum Flasher Control Room (Electrical Control Box)	0212-1	780	<0.008
Area Sample Vacuum Flasher Control Room (Behind Control Panel)	0212-2	780	<0.008
Area Sample Vacuum Flasher #1 Southwest of Abatement Area	0212-3	717	- 0.07
Area Sample Vacuum Flasher #1 Southeast of Abatement Area	0212-4	711	<0.009
Abatement Area Vacuum Flasher #1	0212-5	466	0.084
Abatement Area Vacuum Flasher #1	0212-6	468	0.655

*Air monitoring results reported in fibers per cubic centimeter of air (f/cc). Data values reported as less than (<) are below the quantification limit of analysis (i.e. detection limit).

Method of Collection: Samples for airborne fibers were collected with S Model 224 and MSA Model G air sampling pumps. Sampling was conducted at flow rate of 2 and 3 liters per minute. A 25 millimeter 0.8 micron, mix cellulose ester filter was used as the collection media

Method of Analysis: Samples were analyzed for airborne fibers by lig microscopy techniques in accordance with NIOSH asbestos fibers in air, met P S CAH 239.

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