

To: Safety and Environmental Health
Representatives



Interorganization Correspondence

PLAINTIFF'S
EXHIBIT
USX-138

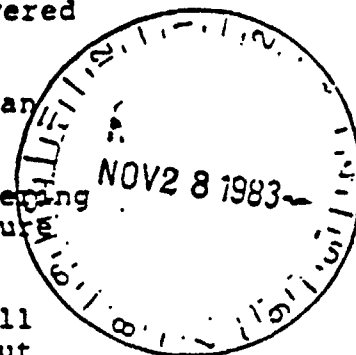
Date: November 21, 1983

From: William D. Miller
Director - Safety and
Environmental Health

Subject: Asbestos - Emergency Temporary Standard

The Occupational Safety and Health Administration (OSHA), on November 4, 1983, issued an Emergency Temporary Standard (ETS) for asbestos. This Standard is effective immediately and applies to all workplaces where employees may be exposed to asbestos in all industries covered by the Act including General Industry, Construction and Maritime. The major changes to the Standard made by the ETS are:

1. The permissible exposure level has been lowered from 2 fibers/cc to 0.5 fibers/cc.
2. The ETS permits the use of methods other than engineering controls to immediately reduce employee exposure to the 0.5 fibers/cc permissible exposure level; however, engineering controls are still mandated to reduce exposure to 2 fibers/cc.
3. Training programs must be established for all employees exposed above 0.5 fibers/cc without regard to the use of respirators.



Attached is a Summary of Requirements of the Standard.

In order to assure compliance with this Standard, the following steps should be implemented immediately:

- Identify all jobs, processes, areas, etc. which may expose employees to asbestos above the 0.5 fibers/cc ETS limit.
- Conduct Industrial Hygiene monitoring in all areas where asbestos exposures occur to adequately determine if employee exposures exceed the 0.5 fibers/cc ETS limit.
- Establish and implement a training program that addresses all of the items mandated by the ETS for all employees exposed to asbestos above the 0.5 fibers/cc limit.

USX0002893

- Document all of the above steps through accurate records. Provide the Corporate Industrial Hygiene Services organization with an initial report that indicates your timetable for accomplishing the above objectives and a final report showing compliance.

If you require technical Industrial Hygiene assistance in accomplishing compliance with this Standard, contact:

F. M. Toca, Ph.D.
Manager-Industrial Hygiene Services
600 Grant Street - Room 720
Pittsburgh, PA 15230

Steelcom - 8-723-6836



WDM/js
attachment

USX0002894



Interorganization Correspondence



Date: February 1, 1974

To: Mr. F. R. Smith, Jr.
General Superintendent
Homestead Works

From: W. C. Janes, Manager
Environmental Health

Subject: Asbestos Dust Survey

At the request of Al Patterson, Safety, an environmental health survey was conducted in the No. 3 Machine Shop and No. 2 Forge Heat Treating Shop at Homestead Works on Oct. 24 and 31, 1973. Its purpose was to determine whether workers are exposed to asbestos dust concentrations in excess of the air standard established under the OSHA of 1970.

The present OSHA standard for exposure to asbestos dust is 5.0 fibers, longer than 5 micrometers, per cubic centimeter of air, based on an 8-hour, time-weighted average exposure. On July 1, 1976, the limit is reduced to 2.0 fibers per cubic centimeter.

While the standard is based on an 8-hour, time-weighted average, no single exposure may exceed a ceiling limit of 10 fibers per cubic centimeter.

Fifteen short-term (15-47 minutes) breathing zone samples were collected during this survey. A sample was worn by each worker, thus giving his integrated exposure for the period of sampling. Results of the samples are listed in the attached tables.

Two samples were collected on the Conset tester at the heat lathe in No. 3 Machine Shop. During the first test (15 minutes), the employee hand sawed semi-circles from two 42" x 48" pieces of fiberboard and installed one of the pieces at the end of the induction hood. His exposure over this sampling period was 0.58 fibers/cc. During the second sampling period (30 minutes), he installed the other piece of fiberboard and applied cement to cracks and crevices for better insulation. During this period, his exposure was 0.23 fibers/cc giving a time-weighted average exposure of 0.35 fibers/cc for the total period of sampling. Since this represents his only exposure to airborne asbestos for the work shift, his 8-hour, time-weighted average exposure calculates to be 0.05 fibers/cc.

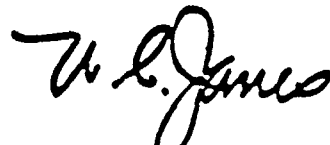
According to the manufacturer, the insulating cement used in this operation (Johns-Manville No. 460 Insulating Cement), contains no asbestos fibers.

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Results from 7 samples, collected in the breathing zone of the quencher helper in the Sealas furnaces area of No. 2 Forge Heat Treating Dept., ranged from 0.10 to 0.48 fibers/cc with a time-weighted average exposure of 0.21 fibers/cc. The two highest exposures (0.48 and 0.35 fibers/cc), were found while cutting asbestos fiberboard with a hand saw. Cutting 1/16" asbestos sheets showed an asbestos exposure of 0.12 fibers/cc.

Findings from 6 samples collected on the furnace operator in the Sealas furnaces area ranged from 0.03 to 0.61 fibers/cc with a time-weighted average value of 0.15 fibers/cc. The operator worked with the quencher helper in preparing protective discs for sleeve ends. However, he did none of the cutting of asbestos products. The higher exposure (0.61 fibers/cc), resulted when the operator positioned the protective disc into the sleeve end while the quencher helper hammered it into place. This hammering caused asbestos dust to be released from the edge of the disc into the breathing zone of the furnace operator. It would be good practice to wet the edges of the discs before hammering to minimize the generation of asbestos dust.

Asbestos dust exposures of all employees sampled during this survey were found to be well below the present OSHA air standard of 5.0 fibers/cc and also well within the projected permanent standard of 2.0 fibers/cc which goes into effect on July 1, 1976. The employees are not exposed to hazardous levels of airborne asbestos dust.


W. C. Jones

JFQ/mdd

Attachments

TABLE 1

ASBESTOS EXPOSURES

No. 3 Machine Shop

Homestead Works

October 24, 1973

<u>Occupation</u>	<u>No. of Samples</u>	<u>Total Sampling Time</u>	<u>High</u>	<u>Low</u>	<u>Time-Weighted Average Concentration (fibers/cc) for Period of Sampling</u>
Conset Tester at Heat Lathe - (J. Pifer)	2	45	0.58	0.23	0.35

Federal Standard - Asbestos Dust

As of July 7, 1972: 5.0 fibers/cc

As of July 1, 1976: 2.0 fibers/cc.

TABLE 2

ASBESTOS EXPOSURES

No. 2 Forge Heat Treating - Sealas Furnaces Area

Homestead Works

<u>Occupation</u>	<u>No. of Samples</u>	<u>October 31, 1973</u>		<u>Time-Weighted Average Concentration (fibers/cc for Period of Sampling</u>
		<u>Total Sampling Time (Min.)</u>	<u>High Low</u>	
Quencher Helper - (E. Turozey)	7	178	0.48 0.10	0.21
Furnace Operator - (D. Lloyd)	6	188	0.61 0.04	0.15

Federal Standard - Asbestos Dust

As of July 7, 1972: 5.0 fibers/cc

As of July 1, 1976: 2.0 fibers/cc



Interorganization Correspondence

Date: February 5, 1976

To: W. C. Janes, Manager
Environmental Health

From: J. F. Quealy

Subject: OSHA Inspection
Homestead Works

On February 4, 1976, I went to Homestead Works to collect simultaneous samples during an OSHA inspection. The inspection was conducted by OSHA Industrial Hygienists Paul Hitcho, Matt Perry and Dave Berestecky. The OSHA personnel arrived at approximately 9:10 a.m. Messrs. Hitcho and Perry went to the Harvey Shop while Mr. Berestecky proceeded to the No. 2 Forge Shop. I arrived at the plant at approximately 10:20 a.m.

At the Harvey Shop, Mr. Hitcho conducted the inspection. Mr. Perry acted primarily as an observer. They collected sulfur dioxide samples on three employees (craneman, heater and expeditor) and asbestos samples on two heaters. Ron Andes, Homestead Fuel Engineer, had one personal sampler and began collecting a simultaneous sample on the craneman. We began collecting samples on the other 4 individuals when I arrived.

OSHA collected their SO₂ samples in midget impingers containing 10 ml of 0.3 N H₂O₂. A prefilter was used to remove particulates. They collected their samples at 1.7 lpm. The NIOSH Manual of Analytical Methods states that a sample size of not more than 100 liters should be collected using this method. However, OSHA exceeded this limit with each sample. They changed solutions only once for each sample during the day. Their sample times ranged from approximately 2-3 hours. The method also calls for 15 ml of absorbing solution to be used. OSHA used only 10 ml.

Our SO₂ samples were collected using the same method. However, we used 15 ml of absorbing solution and tried to restrict our sample size to 100 liters. We collected a total of 14 samples, ranging from 12-60 minutes, on the same three individuals.

Mr. Hitcho collected asbestos samples on the two heaters in the Harvey Shop because he saw rolls of asbestos sheet on the floor. This sheet is used very infrequently in the Harvey Shop. Mr. Hitcho left the same sample filter on the heaters for the entire sampling period (approximately 5 hours). I changed our filters after about 3.5 hours because it appeared that the total collected particulates could make counting difficult.

USX0000173

Mr. Berestecky conducted the survey in the No. 2 Forge Dept. He arrived at the Sealas furnaces area at about 9:30 a.m. and collected samples for asbestos on two employees, the quencher and his helper. He was accompanied by Chuck Van Horne, Homestead Safety Engineer. Mr. Berestecky collected four samples on each individual, ranging from 39 to 136 minutes. Total sampling time was 314 minutes on the quencher and 274 minutes on his helper. I arrived at this area and collected two samples on each individual. My total sampling time was 3 hours on each individual. After my arrival, these employees had little or no contact with asbestos. Prior to my arrival, Mr. Berestecky said he observed the quencher helper dry sweeping debris containing asbestos products. Housekeeping in the area was awful, with numerous pieces of asbestos products strewn all over the floor.

At 3:05 p.m., the OSHA personnel held a closing conference with Mr. Dean Wilson, General Superintendent. Mr. Hitcho stated that he felt that air samples collected in the Harvey Shop would show low concentrations of SO₂ and asbestos but that a citation would probably be issued because no monitoring had been done to initially determine employees' asbestos exposures. Mr. Berestecky commented on the poor housekeeping in the area of the Sealas furnaces in No. 2 Forge Shop and recommended that wet sweeping be substituted for dry sweeping. He also indicated that a citation would probably be issued for failure to comply with the medical examination requirements of the asbestos standard.

J. F. Quealy

JFQ/mdd

- inform employees of the purpose, proper use, fitting instructions and limitations of respirators;
- review the provisions of the Asbestos Standard 1910.1001.

- Warning Signs

Legible signs warning of the health hazards of asbestos shall be provided and displayed at each location where airborne concentrations of asbestos fibers may exceed 0.5 fibers/cc.

- Application

Applies to all workplaces where employees may be exposed to asbestos in all industries covered by the current Asbestos Standard; i.e., General Industry, Construction and Maritime.

Details of compliance with this Standard are covered in Industrial Hygiene Services Guideline Number 12 (Revised December, 1983) entitled, "Guidelines for the Protection of Employees Against the Hazards of Asbestos Dust Exposure."

js
November 21, 1983

USX0002896

**OSHA EMERGENCY TEMPORARY STANDARD
FOR ASBESTOS**

Summary of Requirements

Effective Date: November 4, 1983

Requirements:

● **Permissible Exposure Level**

Employees may not be exposed to concentrations of asbestos exceeding 0.5 fibers/cc on an 8-hour time-weighted average basis.

● **Methods of Control**

Employers may choose among engineering controls, work practices and respirators to reduce exposures to the new PEL. However, the requirements in 1910.1001(c) to utilize feasible engineering controls and work practices to reduce exposure levels to 2.0 fibers/cc remain in effect.

● **Training**

A training program must be initiated no later than December 4, 1983 for those employees potentially exposed to asbestos above the PEL, without regard to the use of respirators. This program must:

- inform the employee of health effects of asbestos exposure;
- inform the employee of the relationship between asbestos and smoking in producing lung cancer;
- identify those operations which may expose employees to asbestos and the steps being taken by the company to minimize exposure (engineering controls, work practices, respirators, housekeeping and protective clothing);
- inform employees of the necessary protective steps that they should take to minimize exposure;

USX0002895

Hamstead - 800-3

USS ENVIRONMENTAL HEALTH SAMPLES FOR ANALYSIS

Date Submitted 1-17-83

Facility Comptrol. Lab. 4 By SPH/SL/SL Ent. 3100

Location 1/16/83 Date Reported Lab. 76-3

Dept. OSHA Insp. Complaint 2-10-4 By SPH/SL/SL

SAMPLE DATA

DATE	TIME	DATE	TIME	INITIAL WEIGHT (g)	ANALYSIS USED (g)	SO ₂ (mg)	mg/l	ppm
1-17-83	4:2	1	91		SO ₂ conc.	0.10	0.0011	0.42
	4:7	2	94		SO ₂ conc.	0.20	1.0021	0.80
	4:1	2	82		SO ₂ conc.	0.10	0.0012	0.46
	5:1	2	106		SO ₂ conc.	0.10	1.0009	0.35
	2:4	2	60		SO ₂ conc.	0.16	0.0033	1.26
	3:1	2	70		SO ₂ conc.	0.10	0.0013	0.50
	4:5	2	90		SO ₂ conc.	0.10	0.0011	0.42
	4:5	2	96		SO ₂ conc.	0.10	0.0014	0.40
<i>Time elated</i>				Initial weight by Personal Air Sampling	7-12-83			
				Final weight	7-12-83			

Note: mg/l x 1000 = ppm

TWA = 0.53 ppm

DISTRICT NO. 1. P.F.

Figure 14-4

RESIGNER

1. COMPLETELY UNRELIABLE
2. 2. 2. 2.

CERTIFICATE OF SERVICE

I hereby certify that the original of the foregoing Documents Produced By USX Corporation Made Exhibits To Depositions Given By USX Corporation (Also Some Documents Identified At USX Depositions Not Produced By USX Corporation*) was filed with the Prothonotary on May 15, 1997, and copies were served, by first class mail, postage prepaid, on May 15, 1997, as follows:

David A. Luptak, Esquire
USX Corporation
Rm 1515, 600 Grant Street
Pittsburgh, PA 15219-4778
(Counsel for USX Corporation)

Nicholas P. Vari, Esquire
Kirkpatrick & Lockhart
1500 Oliver Building
Pittsburgh, PA 15222-2312
(Counsel for Harbison Walker
Refractories Division of Dresser Industries, Inc.
and Indresco, Inc. and as lead counsel for all supplier
defendants)

I further certify that a copy of this Certificate Of Service was served upon the counsel for the remaining defendants by first class mail on May 15, 1997, with advice that counsel may obtain a copy of the attached booklet by requesting it from plaintiff's counsel.

STEPHEN I. RICHMAN

