cc: GLW
TBS
W. Williams
J.R. Dean

UNION CARBIDE

INTERNAL CORRESPONDENCE

SILICONES & URETHANE INTERMEDIATES

Bldg. 3005 - 2
South Charleston, WV 25303

TO: Mr. John Buzzard

DATE: May 31, 1984

FROM: Mr. D. A. Gosselin

ORIG. DEPT: S&UI Safety and Health

CC: Mr. C. E. Fry
Mr. R. L. Foster
Dr. D. Liebeskind
Mr. C. A. McNeill

SUBJECT: Laundering Asbestos Contaminated Clothing

Dear John:

I have reviewed your letter (Attachment "A") concerning the laundering of asbestos contaminated clothing vis-a-vis the OSHA Standard 1910.1001 and have determined that while your approach is sound and appropriate, there appears to be one additional thing that must be done.

Paragraph (d)(4)(iii)(b) of Section 1910.1001 (see boxed-in area on Attachment "B") states that "Any employer who gives asbestos-contaminated clothing to another person for laundering shall inform such person of the requirement in paragraph (d)(4)(iii)(a) of this section to effectively prevent the release of airborne asbestos fibers in excess of the exposure."

I suggest that a letter be written to Mr. Fauss, the owner of Vogue-Swift Cleaners, calling his attention to this paragraph in Section 1910.1001 of the code of Federal Regulations.

For your general information, a temporary emergency standard (issued 11/4/83) of 0.5 fibers (longer than 5 micrometers) per cubic centimeter as on eight-hour time weighted standard is currently in effect. It could soon get tighter. In a proposed rule and notice of hearing published in the Federal Register on 4/10/84, OSHA announced its intent to permanently lower the eight-hour time-weighted average down to one of two alternative levels: 0.5 fibers/cc or 0.2 fibers/cc. OSHA seems to be leaning towards the 0.2 fibers/cc limit, but had invited comments on the poroposed revisions to be submitted on or before 5/12/84. The informal rulemaking hearing is scheduled for 6/19/84 in Washington, D.C.

Thank you for your inquiry. I think you asked a worthwhile question.

D. A. Gosselin
Safety and Health Affairs Manager

DAG/ero

Attachments

0386A

Attachment "A"

UNION CARBIDE

INTERNAL
CORRESPONDENCE

RECEIVED
MAY 22 1984
D. A. GOSSELIN

UNION CARBIDE CORPORATION SILICONES PLANT
SILICONES AND ORGANOFUNCTIONAL INTERMEDIATES P.O. BOX 8361, SOUTH CHARLESTON, WV 25303

To (Name) Mr. D. A. Gosselin
Division Union Carbide Corporation
Location Post Office Box 8361
Area Building 3005
South Charleston, West Virginia 25303

Date May 21, 1984

Department, Dept. Purchasing

Area

Copy to

Subject Cleaning of Insulators Clothing

Dear Don:

Confirming our recent phone conversation regarding the cleaning of insulators clothing at Vogue-Swift Cleaners in Marietta, Ohio, the following is a brief outline of the procedure used:

(1) Purchase order issued describing clothing as contaminated. Copy attached.

(2) Clothing is put into special heavy black polyethylene bags imprinted with statement as follows:

- CAUTION -	(2-3/8" Letters)
CONTAINS ASBESTOS FIBERS	(1-5/8" Letters)
AVOID CREATING DUST	(1-5/8" Letters)
BREATHING ASBESTOS DUST MAY	(1-5/8" Letters)
CAUSE SERIOUS BODILY HARM	(1-5/8" Letters)

(3) We have talked to Mr. Mahlon Fauss, the Owner of Vogue-Swift Cleaners, by phone, and advised him how we are labeling the bags. Mr. Fauss agreed to inform his employees. Nothing has been sent to Vogue-Swift in writing regarding how to handle clothing.

(4) Each time we send a bag of clothing a Special Shipping Order is prepared. Our truck delivers bag to cleaner and our truck picks up cleaned clothing. Estimate clothing is sent out for cleaning 2 to 3 days weekly.

Please advise if we are meeting all OSHA requirements and any further obligations we might have to the vendor rendering this service.

Thanks for your help.

Very truly yours,

Purchasing Agent

J. R. Buzzard:lk

Attachments

(b) See § 1910.6 concerning the availability of ANSI Z9.2-1971, and the maintenance of a historic file in connection therewith. The address of the American National Standards Institute is given in § 1910.100.

(iii) *Particular tools.* All hand-operated and power-operated tools which may produce or release asbestos fibers in excess of the exposure limits prescribed in paragraph (b) of this section, such as, but not limited to, saws, scorers, abrasive wheels, and drills, shall be provided with local exhaust ventilation systems in accordance with subdivision (ii) of this subparagraph.

(2) *Work practices*—(i) *Wet methods.* Insofar as practicable, asbestos shall be handled, mixed, applied, removed, cut, scored, or otherwise worked in a wet state sufficient to prevent the emission of airborne fibers in excess of the exposure limits prescribed in paragraph (b) of this section, unless the usefulness of the product would be diminished thereby.

(ii) *Particular products and operations.* No asbestos cement, mortar, coating, grout, plaster, or similar material containing asbestos shall be removed from bags, cartons, or other containers in which they are shipped, without being either wetted, or enclosed, or ventilated so as to prevent effectively the release of airborne asbestos fibers in excess of the limits prescribed in paragraph (b) of this section.

(iii) *Spraying, demolition, or removal.* Employees engaged in the spraying of asbestos, the removal, or demolition of pipes, structures, or equipment covered or insulated with asbestos, and in the removal or demolition of asbestos insulation or coverings shall be provided with respiratory equipment in accordance with paragraph (d)(2)(iii) of this section and with special clothing in accordance with paragraph (d)(3) of this section.

(d) *Personal protective equipment*—(1) Compliance with the exposure limits prescribed by paragraph (b) of this section may not be achieved by the use of respirators or shift rotation of employees, except:

(i) During the time period necessary to install the engineering controls and to institute the work practices required by paragraph (c) of this section;

(ii) In work situations in which the methods prescribed in paragraph (c) of this section are either technically not feasible or feasible to an extent not sufficient to reduce the airborne concentrations of asbestos fibers below the limits prescribed by paragraph (b) of this section; or

(iii) In emergencies.

(iv) Where both respirators and personnel rotation are allowed by paragraphs (d)(1) (i), (ii), or (iii) of this section, and both are practicable, personnel rotation shall be preferred and used.

(2) Where a respirator is permitted by paragraph (d)(1) of this section, it shall be selected from among those approved by the Bureau of Mines, Department of the Interior, or the National Institute for Occupational Safety and Health, Department of Health, Education, and Welfare, under the provisions of 30 CFR Part 11 (37 F.R. 6244, Mar. 25, 1972), and shall be used in accordance with subdivisions (i), (ii), (iii), and (iv) of this subparagraph.

(i) *Air purifying respirators.* A reusable or single use air purifying respirator, or a respirator described in paragraphs (d)(2) (ii) or (iii) of this section, shall be used to reduce the concentrations of airborne asbestos fibers in the respirator below the exposure limits prescribed in paragraph (b) of this section, when the ceiling or the 8-hour time-weighted average airborne concentrations of asbestos fibers are reasonably expected to exceed no more than 10 times those limits.

(ii) *Powered air purifying respirators.* A full facepiece powered air purifying respirator, or a powered air purifying respirator, or a respirator described in paragraph (d)(2)(iii) of this section, shall be used to reduce the concentrations of airborne asbestos fibers in the respirator below the exposure limits prescribed in paragraph (b) of this section, when the ceiling or the 8-hour time-weighted average concentrations of asbestos fibers are reasonably expected to exceed 10 times but not 100 times, those limits.

(iii) *Type "C" supplied-air respirators, continuous flow or pressure-demand class.* A type "C" continuous flow or pressure-demand, supplied-air respirator shall be used to reduce the concentrations of airborne asbestos fibers in the respirator below the exposure limits prescribed in paragraph (b) of this section, when the ceiling or the 8-hour time-weighted average airborne concentrations of asbestos fibers are reasonably expected to exceed 100 times those limits.

(iv) *Establishment of a respirator program.* (a) The employer shall establish a respirator program in accordance with the requirements of the American National Standards Practices for Respiratory Protection, ANSI Z88.2-1969, which is incorporated by reference herein.

(b) See § 1910.6 concerning the availability of ANSI Z88.2-1969 and the maintenance of a historic file in connection therewith. The address of the American National Standards Institute is given in § 1910.100.

(c) No employee shall be assigned to tasks requiring the use of respirators if, based upon his most recent examination, an examining physician determines that the employee will be unable to function normally wearing a respirator, or that the safety or health of the employee or other employees will be impaired by his use of a respirator. Such employee shall be rotated to another job or given the opportunity to transfer to a different position whose duties he is able to perform with the same employer, in the same geographical area and with the same seniority, status, and rate of pay he had just prior to such transfer, if such a different position is available.

(3) Special clothing: The employer shall provide, and require the use of, special clothing, such as coveralls or similar whole body clothing, head coverings, gloves, and foot coverings for any employee exposed to airborne concentrations of asbestos fibers, which exceed the ceiling level prescribed in paragraph (b) of this section.

(4) Change rooms: (i) At any fixed place of employment exposed to airborne concentrations of asbestos fibers in excess of the exposure limits prescribed in paragraph (b) of this section, the employer shall provide change rooms for employees working regularly at the place.

(ii) Clothes lockers: The employer shall provide two separate lockers or containers for each employee, so separated or isolated as to prevent contamination of the employee's street clothes from his work clothes.

(iii) Laundering: (a) Laundering of asbestos contaminated clothing shall be done so as to prevent the release of air-borne asbestos fibers in excess of the exposure limits prescribed in paragraph (b) of this section.

(b) Any employer who gives asbestos-contaminated clothing to another person for laundering shall inform such person of the requirement in paragraph (d)(4)(iii)(a) of this section to effectively prevent the release of airborne asbestos fibers in excess of the exposure limits prescribed in paragraph (b) of this section.

(c) Contaminated clothing shall be transported in sealed impermeable bags, or other closed, impermeable containers, and labeled in accordance with paragraph (g) of this section.

(e) *Method of measurement.* All determinations of airborne concentrations of asbestos fibers shall be made by the membrane filter method at 400-450 × (magnification) (4 millimeter objective) with phase contrast illumination.

(f) *Monitoring*—(1) *Initial determinations.* Within 6 months of the publication of this section, every employer shall cause every place of employment where asbestos fibers are released to be monitored in such a way as to determine whether every employee's exposure to asbestos fibers is below the limits prescribed in paragraph (b) of this section. If the limits are exceeded, the employer shall immediately undertake a compliance program in accordance with paragraph (c) of this section.

(2) *Personal monitoring*—(i) Samples shall be collected from within the breathing zone of the employees, on membrane filters of 0.8 micrometer porosity mounted in an open-face filter holder. Samples shall be taken for the determination of the 8-hour time-weighted average airborne concentrations and of the ceiling concentrations of asbestos fibers.

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