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- **Standard Number:** 1926.1101; 1926.1101(e); 1926.1101(f)(2); 1926.1101(f)(5); 1926.1101(f)(6); 1926.1101(g)(1); 1926.1101(g)(3); 1926.1101(g)(8)(ii) ; 1926.1101(k); 1926.1101(k)(7); 1926.1101(k)(8); 1926.1101(l)(1); 1926.1101(n)(2)

November 24, 2003

Kurt Varga, Ph.D.  
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Dear Dr. Varga:

Thank you for your April 18, 2002 letter to the Occupational Safety and Health Administration (OSHA). Your letter was forwarded to the Directorate of Enforcement Programs for a response. You are writing on behalf of the Ohio School Facilities Commission, which deals with the construction of schools in Ohio. As a preliminary matter, it should be noted that the Commission, as an agency of a state, and the public schools, as entities of political subdivisions of a state, are not subject to the Occupational Safety and Health Act of 1970. See 29 U.S.C. Sec. 652(b)(5). However, in light of your concerns about the costs imposed on school building contractors of complying with the asbestos standard, we are answering your questions. You have questions concerning the OSHA requirements covering the renovation of school buildings that have hard plaster containing some asbestos, but the amount is not more than 1%. This letter constitutes OSHA's interpretation only of the requirements discussed and may not be applicable to any question not delineated within your original correspondence. We apologize for the long delay of this response; our replies to your paraphrased questions are provided below.

**Question 1:** Are the OSHA letters dated April 17, 1997; August 7, 1998; and August 13, 1999 correct? They all say that items that do not contain >1% asbestos are covered to at least some extent by the Construction Asbestos Standard.

**Reply:** Yes, those letters are correct although some requirements of the Construction Asbestos Standard, 29 CFR 1926.1101 were not addressed. 29 CFR 1926.1101 would apply even if neither asbestos permissible exposure limit (PEL) is exceeded<sup>1</sup>. The standard contains numerous work practice requirements and prohibitions which apply, regardless of the exposure levels. However, only two of the requirements and three of the prohibitions must be observed in the case of work activities involving installed construction materials that do not contain >1% asbestos. Those work practice requirements and prohibitions that must be observed regardless of the exposure levels and of the percentage of asbestos in the installed construction materials are:

- 29 CFR 1926.1101(g)(1)(ii), which requires: **wet methods, or wetting agents, to control employee exposures during asbestos handling, mixing, removal, cutting, application, and cleanup, except where employers demonstrate that the use of wet methods is infeasible due to, for**

**example, the creation of electrical hazards, equipment malfunction, and, in roofing, except as provided in paragraph (g)(8)(ii)<sup>2</sup> of this section;**

- 29 CFR 1926.1101(g)(1)(iii), which requires: **prompt clean-up and disposal of wastes and debris contaminated with asbestos in leak-tight containers except in roofing operations, where the procedures specified in paragraph (g)(8)(ii)<sup>3</sup> of this section apply;**
- 29 CFR 1926.1101(g)(3)(i), which prohibits: **high-speed abrasive disc saws that are not equipped with point-of-cut ventilator or enclosures with HEPA filtered exhaust air;**
- 29 CFR 1926.1101(g)(3)(ii), which prohibits: **compressed air used to remove asbestos, or materials containing asbestos, unless the compressed air is used in conjunction with an enclosed ventilation system designed to capture the dust cloud created by the compressed air;** and
- 29 CFR 1926.1101(g)(3)(iv), which prohibits: **employee rotation as a means of reducing employee exposure to asbestos.**

There are also some other provisions that apply to work activities involving installed construction materials even where the material does not contain >1% asbestos. However, if neither asbestos PEL is exceeded, only the following few provisions apply:

- 29 CFR 1926.1101(f)(2)(i), the provision for establishing that neither asbestos PEL is exceeded: **Each employer who has a workplace or work operation covered by this standard shall ensure that a "competent person" conducts an exposure assessment immediately before or at the initiation of the operation to ascertain expected exposures during that operation or workplace. The assessment must be completed in time to comply with requirements which are triggered by exposure data or the lack of a "negative exposure assessment," and to provide information necessary to assure that all control systems planned are appropriate for that operation and will work properly;**
- 29 CFR 1926.1101(f)(6)(i), a provision covering the observation of monitoring: **The employer shall provide affected employees and their designated representatives an opportunity to observe any monitoring of employee exposure to asbestos conducted in accordance with this section;**
- 29 CFR 1926.1101(f)(5)(i), a provision covering employee notification of monitoring results: **The employer shall notify affected employees of the monitoring results that represent that employee's exposure as soon as possible following receipt of monitoring results;**
- 29 CFR 1926.1101(f)(5)(ii), another provision covering employee notification of monitoring results: **The employer shall notify affected employees of the results of monitoring representing the employee's exposure in writing either individually or by posting at a centrally located place that is accessible to affected employees;** and
- 29 CFR 1926.1101(n)(2)(i)-(iii), a set of provisions covering recordkeeping for measurements of exposures to airborne asbestos.

There are numerous additional provisions of the standard that apply to work activities involving installed construction materials even where the material does not contain >1% asbestos if at least one of the asbestos PELs is exceeded.

**Question 2:** Did OSHA intend to regulate material that is found to contain asbestos at <1% when it promulgated the Construction Asbestos Standard that it issued in 1994?

**Reply:** Yes. Instead of making all of the engineering controls and work practices applicable to all materials containing asbestos, OSHA made most of them applicable only to installed building materials that contain >1% asbestos and assigned the term "asbestos-containing material" (ACM) to those materials. However, to prevent needless worker exposures to asbestos, OSHA made a few common-sense work practices and prohibitions applicable if any asbestos is present in materials.

Thus, the current standard contains engineering controls and work practices that apply regardless of the exposure levels to certain work activities involving only installed building materials that meet the definition of ACM. It also contains a few work practices and prohibitions for work involving material that contains any amount of asbestos regardless of the exposure levels. And the standard has exposure-based requirements, consisting of a 0.1 fiber/cc 8-hour TWA PEL and a 1 fiber/cc 30-minute excursion limit, and other requirements that apply whenever worker exposures exceed either or both of the limits, regardless of the amount of asbestos contained in the materials involved.

**Question 3:** If OSHA had intended to regulate material with <1% asbestos, why aren't we required to communicate information about material with <1% asbestos?

**Reply:** Most of the requirements for communication of information occur under 29 CFR 1910.1101(k), *Communication of Hazards*. Any of the requirements which apply only to building or facility owners are inapplicable because the buildings are entities of political subdivisions of the State of Ohio and not subject to the OSHAct. On the other hand, any of the provisions that apply to employers are applicable to private contractors doing the asbestos work. The information that

sections (k)(7), (9), and (10) require to be communicated applies to materials not having >1% asbestos which are the source of employee asbestos exposures exceeding one or both of the asbestos PELs as well as to materials containing >1% asbestos. Also, 29 CFR 1926.1101(k)(8), which specifies labeling requirements, applies to materials that contain 1% or more asbestos. On the other hand, it is correct that the information which (k)(1)<sup>4</sup>-(k)(6) require to be communicated pertains only to materials containing >1% asbestos. However, it should be noted that under (k), surfacing material, thermal system insulation and asphalt and vinyl flooring material found in buildings constructed no later than 1980 or installed no later than 1980 must be considered to contain >1% asbestos, unless the employer demonstrates otherwise in accordance with (k)(5).

**Question 4:** Under 29 CFR 1926.1101(k)(8) are employers required only to communicate information about ACM?

**Reply:** 29 CFR 1926.1101(k)(8) requires employers to communicate information about ACM and also material that contains 1% asbestos. (ACM, again, is material that contains >1% asbestos.)

**Question 5:** Should the phrase "products containing asbestos" as used in paragraph (k)(8)(i) be read "ACM" and not as including materials with <1% asbestos, because otherwise there is a contradiction in (k)(8)?

**Reply:** No. There is no contradiction. Paragraph (k)(8)(i) deals broadly with products containing asbestos. Paragraph (k)(8)(vi)(B) provides for an exclusion from labeling for products with <1% concentrations of asbestos.

**Question 6:** Why, if material containing <1% asbestos is to be considered hazardous (employers are to wet it, put it in containers, and perform air monitoring), are employers not required to warn workers about its presence when they know it is present at a work site or in a building?

**Reply:** You **must** inform employees about the presence of material containing <1% asbestos when you know it is present. When employees perform work activities involving such material, you are required per 29 CFR 1926.1101(f)(2)(i) to assess their exposures to asbestos. In connection with this requirement you must, per 29 CFR 1926.1101(f)(6)(i), provide affected employees an opportunity to observe any monitoring of asbestos exposure. After the monitoring, you must, per 29 CFR 1926.1101(f)(5)(i) and (ii), inform employees of the monitoring results representing their asbestos exposures. In accordance with 29 CFR 1926.1101(e) and (k)(7), if asbestos exposures exceed or are likely to exceed one or both of the PELs, then you must provide warning by posting the area where these overexposures are occurring as a regulated area.

Although employers do not **have to** label containers of waste and debris containing <1% asbestos, promptly placing the waste and debris in leak-tight containers is a work practice that reduces the exposures of the employees producing the waste and debris. That is especially so because this work practice is to be used in conjunction with wet methods or wetting agents. By promptly cleaning up the waste and debris and placing it in containers, it is kept from drying out and possibly releasing airborne asbestos into the work environment. Leak-tight containers prevent the asbestos from seeping out and reintroducing an asbestos exposure hazard.

**Question 7:** If OSHA had intended to regulate material containing <1% asbestos, why do not employers have to use HEPA-filters when using vacuum cleaners to clean up material containing <1% asbestos?

**Reply:** An employer does not have to use vacuum cleaners to clean up material containing <1% asbestos. However, if an employer uses vacuum cleaners to clean up the material, then per 29 CFR 1926.1101(l)(1), it must use HEPA-filtered vacuuming equipment.

**Question 8:** If OSHA had intended to regulate material containing <1% asbestos, why does it not discuss the distinction between ACM and material containing <1% asbestos in the preamble to the regulation?

**Reply:** OSHA was already regulating materials that contained <1% asbestos. In promulgating the 1994 standard, OSHA was determining which materials to regulate further by additional work practice and engineering control requirements.

**Question 9:** If OSHA had intended to regulate material containing <1% asbestos, why did it not examine the compliance costs for working with this material?

**Reply:** As we stated above, OSHA was already regulating materials with <1% asbestos. In promulgating the 1994 standard, OSHA was determining the cost of complying with additional work practice and engineering control requirements.

**Question 10:** If OSHA had intended to regulate material containing <1% asbestos, why did it not mention this in its CPLs dealing with asbestos in construction?

**Reply:** That was simply an oversight by the preparers of the Asbestos Compliance Directive. It will be corrected when the directive is next updated.

Thank you for your interest in occupational safety and health. We hope you find this information helpful. OSHA requirements are set by statute, standards, and regulations. Our interpretation letters explain these requirements and how they apply to particular circumstances, but they cannot create additional employer obligations. This letter constitutes OSHA's interpretation of the requirements discussed. Note that our enforcement guidance may be affected by changes to OSHA rules. Also, from time to time we update our guidance in response to new information. To keep apprised of such developments, you can consult OSHA's website at <http://www.osha.gov>. If you have any further questions, please feel free to contact the Office of Health Enforcement at (202) 693-2190.

Sincerely,

Richard E. Fairfax, Director  
Directorate of Enforcement Programs

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<sup>1</sup> The asbestos PELs are an eight-(8-) hour time-weighted average (TWA) limit of 0.1 fiber per cubic centimeter of air (0.1 f/cc) and an excursion limit of 1.0 f/cc as averaged over a sampling period of thirty (30) minutes. [back to text]

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<sup>2</sup> Paragraph (g)(8)(ii) is directed toward the removal of roofing materials containing >1% asbestos. However, OSHA interprets the reference at (g)(8)(ii)(B) to the exception to the use of wet methods for reasons of infeasibility or the creation of safety hazards as also applying to removing any roofing materials that do not contain >1% asbestos. [back to text]

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<sup>3</sup> The reference to paragraph (g)(8)(ii) applies even for material that does not contain >1% asbestos. [back to text]

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<sup>4</sup> The phrase, *Installed Asbestos Containing Building Material*, is intended to be the heading and the start of 29 CFR 1926.1101(k)(1). The three sentences preceding that phrase are intended to be an introduction for 29 CFR 1926.1101(k) and precede (k)(1). [back to text]

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