

Standard Interpretations / Compliance with 1926.1101 when drilling through asbestos-containing floor tile/mastic.

- **Standard Number:** 1926.1101 ; 1926.1101(g) ; 1926.1101(g)(5) ; 1926.1101(g)(9)

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>.

December 1, 2009

Mr. Dean Jordan
Bearsch Compeau Knudson, Architects & Engineers, PC
41 Chenango St.
Binghamton, NY 13901

Dear Mr. Jordan:

Thank you for your August 6, 2009, letter to the Occupational Safety and Health Administration (OSHA). Your letter has been referred to our Directorate of Enforcement Programs for your specific questions regarding disturbance of small amounts of asbestos-containing floor tile and mastic and the requirements of the OSHA asbestos standard, 29 CFR 1926.1101. This reply letter constitutes OSHA's interpretation only of the requirements discussed and may not be applicable to any question not detailed in your original correspondence. Your paraphrased question and our reply are below.

Question: You have asked if either OSHA or the U.S. Environmental Protection Agency (EPA) prohibit drilling through asbestos-containing floor tile and mastic to accommodate building mechanical, electrical, and plumbing penetrations.

Reply: Removal of or drilling through asbestos-containing floor tile and/or mastic is a Class III operation under the OSHA asbestos standard for construction, 29 CFR 1926.1101, as long as the amount of asbestos-containing debris from the work can be contained in one standard-sized waste bag not exceeding 60 inches in length and width; otherwise, this work would be a Class II asbestos operation. See §1926.1101(b) for the standard's definitions of the terms, Asbestos-Containing Material, Class II and Class III Asbestos Work, and Disturbance. For your scenario of core-drilling through asbestos-containing floor tile and/or mastic, the OSHA standard's required work practices and engineering controls for this Class III operation are listed in §1926.1101(g). In your specific scenario, the minimum controls include the following, and we have added commonly-used industry practices in brackets:

- Wet methods [e.g., amended water, shaving cream, or wallpaper paste], per §1926.1101(g)(1)(ii) and §1926.1101(g)(9)(i);

- Local exhaust ventilation to the extent feasible [e.g., a drill fitted with a HEPA-vacuum attachment], per §1926.1101(g)(9)(ii);
- Vacuum cleaners equipped with HEPA filters to collect all ACM debris [e.g., a HEPA-filtered shop vacuum], per §1926.1101(g)(1)(i); and,
- Prompt clean-up and disposal of wastes and debris contaminated with asbestos in leak-tight containers [e.g., a six (6) mil, labeled, waste bag], per §1926.1101(g)(1)(iii).

Note, the OSHA asbestos standard has additional requirements applicable to this specific Class III asbestos operation, but since you have not inquired about required training, establishing a regulated area, exposure monitoring, supervision by a competent person, etc., we have only listed the methods of controls required by §1926.1101(g). Now, besides the above minimum engineering and work practice controls, the further engineering control of isolating the work area may be needed, depending on the specific scenario, to minimize bystander asbestos exposures as follows:

- If the employer doesn't have a negative exposure assessment for the job, or where monitoring results show the permissible exposure limit (PEL) has been exceeded, the work area shall be contained using impermeable drop cloths and plastic barriers or their equivalent, or shall be isolated using the more protective control methods required by the standard for Class I asbestos work as listed in §1926.1101(g)(5) [e.g., a mini-enclosure], per §1926.1101(g)(9)(iv).

Industry experience with these types of drilling operations has shown that, when the minimum controls listed above are implemented, typically, the PEL is not exceeded and the employer may obtain a negative exposure assessment. Thus, in most cases, the additional engineering control of isolating this type of Class III work area within a mini-enclosure is not required by the OSHA asbestos standard. Note, however, that if either thermal system insulation (TSI) or asbestos-containing surfacing materials are subject to disturbance by any drilling, cutting, abrading, sanding, chipping, breaking, or sawing, then the additional engineering control of isolating the Class III work area is always required, per §1926.1101(g)(9)(iii).

Finally, you are correct that States that want to develop and operate their own occupational safety and health programs must set and enforce standards that are at least as effective as Federal OSHA standards. At minimum, State standards must be equivalent or as protective as the Federal standards. States with plans can promulgate standards covering hazards not addressed by Federal standards. The New York State Plan for Public Employees Safety and Health (PESH) covers State and local government employees in New York. The U.S. EPA has additional standards and requirements for asbestos work.

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,