



U.S. Environmental Protection Agency Applicability Determination Index

Control Number: A040001

Category: Asbestos
EPA Office:
Date: 12/12/2003
Title: Use of Solvent and Mechanical Buffer to Remove Floor Mastic
Recipient: Peter Connell
Author: Michael Alushin
Comments: See related determination filed as ADI Control No. A040002. See also ADI Control Nos. C93, C108, and See related determination filed as ADI Control No. A040002. See also ADI Control Nos. C93, C108, and A960019.

Subparts: Part 61, M, Asbestos

References: 61.141
61.145

Abstract:

Q: Is the use of solvent and a mechanical buffer to remove asbestos-containing floor mastic subject to the Asbestos National Emission Standards for Hazardous Air Pollutants, subpart M?

A: Yes, because the application of solvent followed by the buffer is considered abrading the floor mastic. This situation is distinguishable from the facts in previous determinations cited in the request for a determination.

Letter:

Mr. Peter F. Connell
MACTEC Engineering and Consulting, Inc.
10265 Rockingham Drive, Suite 150
Sacramento, CA 95827

Dear Mr. Connell:

This regulatory interpretation is in response to your August 20, 2003 letter, where you expressed concern that a mechanical buffer and solvent to remove asbestos-containing floor mastic should not be subject to the asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP). Specifically, you are questioning the letter dated May 5, 2003 from EPA Region IX to Ahmad Najjar, California Air Resources Board stating that the asbestos NESHAP applies when floor mastic is removed by a mechanical buffer and solvent.

Floor mastic is considered Category I asbestos which is not subject to the asbestos NESHAP unless it is subject to sanding, grinding, cutting or abrading. In your letter, you indicate that you apply a solvent before using a mechanical buffer with abrasive pads to remove floor mastic which does not reduce the mastic to a powder but to a loose sludge that does not dry out readily. The energy from the mechanical buffer with abrasive pads will cause the floor mastic to become friable through abrading. If the solvent was not applied beforehand, some other liquid or wetting-agent would have to be used prior to or during the removal action to keep the friable mastic adequately wet, preventing visible emissions. The floor mastic being removed by a mechanical buffer and solvent is subject to the asbestos NESHAP.

You identified previous determinations to support your position that your process does not cause floor mastic to be subject to the asbestos NESHAP. Determination C93 states that application of a solvent to mastic would not cause the mastic to be crumbled, or reduced to powder. That is correct. In that response, there was no mechanical force applied to the floor tile and mastic causing it to become crumbled or reduced to powder. In Determination C108, EPA responded that transite siding may or may not be subject to the asbestos NESHAP depending upon the removal process. EPA did not foresee the transite siding crumbling if the nails, screws and bolts were removed first and then the transite siding removed by hand. However, EPA went on to say, if the transite was removed by a wrecking ball, bulldozer or other heavy equipment, the transite would become subject to the asbestos NESHAP since it became crumbled through the use of mechanical force. In Determination A960019, there is a discussion of preamble language:

"... most nonfriable material can be broken without releasing significant quantities of airborne asbestos fibers. It is only when the material is extensively damaged, i.e., crumbled, pulverized or reduced to powder, that the potential for significant fiber release is greatly increased."

The use of a mechanical buffer with abrasive pads will cause extensive damage to mastic, reducing it to a powder creating the potential for significant fiber release. It is the application of your solvent that does not create visible emissions.

In regard to the use of rotary-blade equipment, Appendix A of subpart M, 40 CFR 61 applies specifically to asphalt shingles and removal methods applicable to that industry. If EPA applied the same criteria to floor mastic, the use of a mechanical buffer and abrasive pad does not slice the mastic but abrades it, causing the mastic to become friable and subject to the asbestos NESHAP.

I appreciate the opportunity to address your concern about the applicability of the asbestos NESHAP to mastic removal by mechanical and chemical means. This determination has been reviewed by the Office of Regulatory Enforcement, Office of Air Quality Planning and Standards and the Office of General Counsel.

Very truly yours,

Michael S. Alushin
Director
Compliance Assessment and Media Programs Division

Attachment

cc: Charlie Garlow, Office of Regulatory Enforcement Susan Fairchild, Office of Air Quality Planning Standards Michael Horowitz, Office of General Counsel Robert Trotter, Region IX