



U.S. Environmental Protection Agency Applicability Determination Index

Control Number: C76

Category: Asbestos
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Title: Shot Blasting
Recipient: Spratlin, William A.
Author: Rasnic, John B.

Subparts: Part 61, M, Asbestos

References: 61.141
61.145(c)
61.150

Abstract:

Nonfriable material (including floor tile mastic) which is removed using abrasive forces such as grinding, sanding or other abrasive methods, is subject to the asbestos NESHAP regulation. The shot-blasting operation would cause nonfriable asbestos material (mastic) to be crumbled, pulverized, or reduced to powder, and therefore, asbestos NESHAP work practices must be followed. This means adequately wetting the nonfriable material (mastic) before and during the shot-blasting operation, keeping the shot-blasted material adequately wet before collection, and disposing of the waste according to the requirements of the asbestos NESHAP. In addition, because this process does cause asbestos-containing material to be crumbled, pulverized or reduced to powder, shot blasting must be performed under wet conditions.

Letter:

UNITED STATES Environmental PROTECTION AGENCY
WASHINGTON, D.C. 20046

Sep 21, 1990

MEMORANDUM

SUBJECT: Applicability Determination on the Use of Shot Blasting Machines

FROM: John B. Rasnic, Acting Director
Stationary Source Compliance Division (EN-341)
Office of Air Quality Planning and Standards

TO: William A. Spratlin, Director
Air and Toxics Division
Region VII

This is in response to a Region VII request for an applicability determination on the use of shot blasting equipment to remove mastic containing asbestos. Members of your staff and the Missouri Department of Natural Resources (Missouri DNR) recently observed a demonstration of this equipment and have provided us with their comments. We have also discussed this asbestos removal technique with Region IV where similar requests have been made to use this process. A recent determination made by Region IV on shot blasting is attached.

The process of shot blasting involves a system which propels small steel shot towards the floor to remove mastic or other adhesive materials. As stated in the Region IV determination, nonfriable material (including floor tile mastic) which is removed using abrasive forces such as grinding, sanding or other abrasive methods, is subject to the asbestos NESHAP regulation. The shot blasting operation would cause nonfriable asbestos material (mastic) to be crumbled, pulverized, or reduced to powder, and therefore, asbestos NESHAP work practices must be followed. This means adequately wetting the nonfriable material (mastic) before and during the shot blasting operation, keeping the shot blasted material adequately wet before collection, and disposing of the waste according to the requirements of the asbestos NESHAP. The regulation does not allow for an alternative to wet methods except under very limited circumstances, which are not met in this situation.

In their comments, the Missouri DNR noted that the shot blasting equipment used in the Region VII demonstration is not approved by the manufacturer for operation on wet surfaces. However, during the demonstration, the equipment was operated on both wet and dry surfaces. During the wet process removal, both the Missouri DNR and Region VII staff commented that despite wetting the floor, the waste material was dry, and visible emissions resulted from removing the waste material from the equipment. Because this process does cause asbestos-containing material to be crumbled, pulverized or reduced to powder it must be operated under wet conditions. As stated above, the nonfriable material must be adequately wetted before and during the removal process and remain wetted until collected for disposal. Visible emissions which occur during the waste collection procedure are evidence that the material was not adequately wetted and may result in an enforcement action by EPA against the owners or operators involved in the project. This determination has been coordinated with EPA's Office of Enforcement, Emission Standards Division, and Region VII.

If you have any further questions, please contact Scott Throwe of my staff at (202) 475-7002.

Attachment

cc: Alice Law, Region VII
JoAnn Heiman, Region VII
Asbestos NESHAP Coordinators, Regions I-X
Air Compliance Branch Chiefs, Regions I-X