



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

SEP 21 1990

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TOXIC SUBSTANCES AND RADIATION
OFFICE OF
US EPA, REGION VII

MEMORANDUM

SUBJECT: Applicability Determination on the Use of Shot Blasting Machines

FROM: John B. Rasnic, Acting Director *Richard Bond Jr.*
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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

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ATLANTA, GEORGIA 30365

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C. H. Fancy, P.E., Chief
Bureau of Air Regulation
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

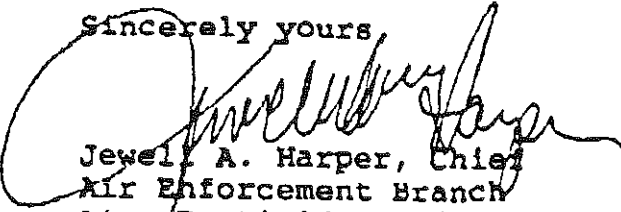
Dear Mr. Fancy:

We are in receipt of your letter dated June 8, 1990, requesting clarification of the National EPA policy regarding removal of non-friable asbestos containing material. Specifically, you requested guidance concerning the use of the Hot Shot steel shot surface preparation system. We have consulted with EPA Headquarters concerning this matter and offer the following comments.

Non-friable material (including floor tile mastic) which is removed using abrasive forces such as grinding, sanding, sawing, shot blasting or other abrasive methods is subject to the asbestos NESHAP regulation. The shot blasting operation which you described causes non-friable 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 non-friable 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 regulation.

In brief, the shot blasting technique which you described is subject to the wetting requirements of the asbestos NESHAP regulation, and failure to wet during the blasting operation is considered a violation. If you have any questions concerning this matter please contact Alan Powell at 404/347-5014.

Sincerely yours,


Jewel A. Harper, Chief
Air Enforcement Branch
Air, Pesticides and Toxics
Management Division