



U.S. ENVIRONMENTAL PROTECTION AGENCY

OFFICE OF INSPECTOR GENERAL

Early Warning Report: Use of Unapproved Asbestos Demolition Methods May Threaten Public Health

Report No. 12-P-0125

December 14, 2011



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Abbreviations

AACM	Alternative Asbestos Control Method
EPA	U.S. Environmental Protection Agency
NESHAP	National Emission Standards for Hazardous Air Pollutants
OSHA	Occupational Safety and Health Administration
RACM	Regulated asbestos-containing material

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

THE INSPECTOR GENERAL

December 14, 2011

MEMORANDUM

SUBJECT: Early Warning Report:
Use of Unapproved Asbestos Demolition Methods
May Threaten Public Health
Report No. 12-P-0125

FROM: Arthur A. Elkins, Jr.
Inspector General

A handwritten signature in black ink, appearing to read "Arthur A. Elkins, Jr.", is written over the printed name.

TO: Lisa P. Jackson
Administrator

The Office of Inspector General received allegations that the U.S. Environmental Protection Agency (EPA) has authorized the use of unapproved methods to demolish buildings containing asbestos. EPA may also have violated Occupational Safety and Health Administration (OSHA) regulations designed to protect workers during previous experimental asbestos demolitions. Our initial research indicates that these allegations have merit. We will continue to review these allegations; however, the current and proposed use of unapproved methods requires your immediate attention.

Background

Asbestos is a human carcinogen with no safe level of exposure. Asbestos exposure can lead to serious diseases such as asbestosis, lung cancer, and mesothelioma. In 1973, EPA issued the Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP) to protect human health by reducing exposure to asbestos during building demolitions and other activities. According to the Asbestos NESHAP, regulated asbestos-containing material (RACM) must be removed by specially trained technicians prior to demolition. RACM does not need to be removed when the building is structurally unsound and in danger of imminent collapse. This method reduces the release of friable asbestos by removing asbestos intact.

Beginning in 1999, EPA considered alternative methods to augment the Asbestos NESHAP. These demolition methods, such as the Fort Worth Method and the Alternative Asbestos Control Method (AACM), leave some or all RACM in place. Demolition equipment applies mechanical

forces that shred the RACM, potentially releasing asbestos fibers into the environment and endangering public health. Buildings are wetted during demolition in an attempt to limit the release of asbestos fibers. However, EPA has not approved or shown that these “wet” methods are protective of human health. In July 2011, EPA’s Office of Research and Development ended its research on the AACM due to technical deficiencies.

Use of Unapproved Methods Threatens Health and Safety

Our preliminary research indicates that unapproved methods are currently being used or considered at multiple sites. The Hanford Superfund Site, near Richland, Washington, is one location where the use of AACM-like methods has been allowed by EPA under conditions that are less restrictive than required by the Asbestos NESHAP. EPA is also considering other unapproved methods for demolition at a gaseous diffusion plant in Paducah, Kentucky. The use of unapproved methods is counter to EPA regulations. The current and proposed use of unapproved methods may jeopardize the health and safety of the public.

For example, settled dust results obtained from testing during AACM demolition experiments at Fort Chaffee, Arkansas, and Fort Worth, Texas, demonstrated asbestos fiber releases. Video footage and photos show government employees and contractors at the demolition sites without personal protective equipment, a possible violation of OSHA asbestos worker protection requirements. Because settled dust results indicate that asbestos escaped the restricted areas, unprotected workers adjacent to the restricted areas and any members of the public in the vicinity of the sites may have been exposed. EPA should identify the workers that were present, and notify them according to OSHA regulations. Further, EPA should notify the surrounding public of potential asbestos exposure during these AACM experiments.

EPA should immediately and clearly communicate NESHAP and OSHA requirements for the demolition of asbestos-containing structures to regional, program, and field offices to prevent potentially hazardous asbestos exposures. EPA should notify these offices that unapproved methods are not to be used without obtaining appropriate waivers. Further, EPA should identify all sites, such as Hanford, with work plans that contain EPA authorization to use unapproved methods for asbestos demolitions, and retract any such approvals that deviate from the Asbestos NESHAP regulation. In addition, EPA should assess whether any authorizations resulted in potential asbestos exposure of workers or the public, and notify them accordingly.

Thank you for your prompt attention to this important matter. If you have any questions, please contact me at (202) 566-0847 or elkins.arthur@epa.gov, or Wade Najjum at (202) 566-0827 or najjum.wade@epa.gov.