



FACT SHEET

EPA Study Looks for Better Asbestos Removal Technology

EPA's National Risk Management Research Laboratory (NRMRL), headquartered in Cincinnati, Ohio, is jointly studying with EPA Region 6 and other EPA offices, an Alternative process of removing asbestos from homes and other buildings. In particular, NRMRL's Sustainable Technology Division (STD) is utilizing engineers and scientists from the Industrial Multimedia Branch to perform the study which will compare a standard method of asbestos removal with the Alternative method.

Background

The STD has been tasked with the responsibility of advancing the understanding, development, and application of technologies and methods of prevention, removal, and control of environmental risks to human health and ecology. This current project involves assessing a potentially cost-effective and environmentally safe way to demolish dilapidated buildings that contain asbestos.

Alternative Asbestos Control Method Process

EPA scientists are studying an Alternative process technology whereby friable asbestos (capable of becoming airborne) is safely removed from a building and disposed of appropriately. The remaining asbestos is then wetted with amended water (water with a surfactant) on the interior prior to demolition and on the exterior during demolition to control fiber release. The resulting debris is disposed of at a landfill approved to receive asbestos waste and several inches of soil are removed from the site and disposed as asbestos-containing waste. No water is allowed to leave the site.

NESHAP Process

The current National Emissions Standards for Hazardous Air Pollutants (NESHAP) process of demolishing a publicly-owned, asbestos-filled structure is done in four steps:

- Bring in a crew to remove specific, but not all, asbestos materials from the house,
- Dispose of the removed asbestos at a landfill approved to receive asbestos waste,
- Demolish the building, and
- Dispose of the building material in a landfill that accepts construction debris.

MORE

The Study

Two similar buildings containing similar types and quantities of asbestos were demolished. One demolition utilized the Alternative Method and one will utilize the standard NESHAP method. As they were demolished, environmental emissions were monitored to determine if the Alternative process protected the environment as well as the NESHAP method and if so, determine if the Alternative Method resulted in cost savings.

The buildings were located at the Fort Chaffee Redevelopment Authority in Fort Smith, Arkansas and were 1,000 feet from any possible receptor. The site was determined by remoteness, similarity, and asbestos type and content. The study should be concluded by the summer of 2007. The draft report is available for public and formal peer review.

More Information

More detailed information about the study can be found at this Web site maintained by EPA's Region 6 in Dallas.

<http://www.epa.gov/region6/6xa/asbestos.htm>

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