Q & A for the Alternative Asbestos Control Method

Q1: What is the Alternative Asbestos Control Method (AACM)?

The AACM was developed by the EPA Office of Research and Development (ORD) in Cincinnati, OH, and EPA Region 6, Dallas, TX, as an alternative work practice to the asbestos NESHAP to safely and effectively speed up efforts to demolish abandoned, dilapidated buildings containing asbestos.

Q2: Why do we need to control asbestos during building demolition?

Asbestos is made up of microscopic bundles of fibers that may become airborne when asbestos-containing materials are damaged or disturbed. If breathed in sufficient quantities and over a long-enough time, these fibers can become lodged deep in a person's lungs and cause health problems such as asbestosis, mesothelioma or cancer.

Q3: What is the current asbestos removal method?

Pursuant to the Clean Air Act of 1970, EPA established the asbestos National Emission Standard for Hazardous Air Pollutants (NESHAP). It is intended to minimize the release of asbestos fibers during activities involving the handling of asbestos. It specifies work practices to be followed during renovation, demolition or other abatement activities when friable asbestos is involved.

Q4: Why do we need the AACM?

Communities, law enforcement and local government officials spend much time, energy and revenues addressing problems posed by abandoned structures containing asbestos. Often these properties remain vacant for years and then collapse. EPA experts believe that reevaluating and updating our asbestos cleanup procedures can help better safeguard citizens' health and can help communities reclaim abandoned properties.

Q5: How does the AACM differ from the current asbestos NESHAP?

The AACM allows certain regulated asbestos-containing materials, such as wallboard or joint compound, to remain inside a structure during demolition, the removal of soil from the area. All construction debris is to be shipped to a certified asbestos landfill. It also requires treatment of used 'amended water.' Amended water contains a product that is

similar to dishwashing detergent, which reduces the surface tension of the water. This increases the water's ability to penetrate the asbestos-containing materials and minimizes the potential release of asbestos fibers into the air.

Q6: Is the AACM as safe as the asbestos NESHAP?

Preliminary findings indicate the AACM provides at least equivalent protection to the environment as the current NESHAP requirements for the types of buildings we have tested.

Q7: Do you still have to meet all the asbestos NESHAP requirements?

Most of the requirements of the NESHAP still have to be met. In some cases, the AACM requires removal of asbestos-containing materials that are not required to be removed under the NESHAP, and vice versa. The AACM also requires of all water used and the removal of some soil, which are not required by the current Asbestos NESHAP.

Q8: Are there any restrictions to using the AACM?

Structures must be three stories or less to use the AACM. This allows adequate wetting of both the interior and exterior of the structure and is within the working reach of both the wetting and demolition equipment.

Q9: Has the AACM been used before?

Yes. Region 6 and ORD initiated a pilot-scale demonstration, AACM Project #1, in a secure location at Fort Chaffee Redevelopment Authority, near Fort Smith, Arkansas in April of 2006. A second demonstration, AACM Project #2, was also conducted at Fort Chaffee in July of 2007.

Q10: What is the difference between AACM Project #1 and Project #2?

Project #1 was selected to facilitate a side-by-side comparison of the AACM vs. the current NESHAP method. The asbestos-containing materials for the first test were positive wallboard systems and vinyl asbestos tile. Project #2 was a second, single building test of the AACM. The selected building consisted of residential-grade transite shingles containing 30-percent chrysotile asbestos. In addition, commercial-grade transite panels were added to the exterior of the building, also containing 30-percent chrysotile asbestos.

Q11: How will communities be protected?

Current data show that there was virtually no airborne release of asbestos from the two demolitions to date; however, precautions are in place with the choice of the site, the distance from the site to the nearest occupied structures, the fact that the nearby occupied buildings are predominantly upwind from the demolition, the street adjacent to the

building will be closed during the demolition, the sidewalks will be closed, and site access to pedestrians will be prohibited. The demonstration will include extensive environmental monitoring. Enforcement and health officials from the State and EPA will be on site and can stop work if needed.

Q12: Will additional tests be conducted using the AACM?

We are currently working to conduct the third in a series of field tests of this potential alternative method to collect scientific information for review. The objective of our third test is to evaluate the method on additional forms of asbestos-containing materials, specifically 'popcorn' ceiling materials commonly used during earlier building construction in the United States.

Q13: How can I learn more?

Visit the EPA Region 6 website at http://www.epa.gov/region06/6xa/asbestos.htm.