Q: Why would a State and not the EPA have jurisdiction over asbestos in the case of a single-family home?

A: Single-family homes are not considered "facilities" under the asbestos NESHAP, thus no Federal laws or regulations are implicated. In addition, the State in this case has an equivalent asbestos NESHAP program, to which EPA generally defers. Thus, the State takes the lead in implementing the asbestos NESHAP program in the State. The determination letter provides further guidance on technical issues.

Letter:

Ms. Eileen York
14809 Old Columbia Pike
Burtonsville, Maryland 20866

Dear Ms. York:

Everett Bishop of my staff prepared the response based upon publicly available documents and on consultations with other staff at the Environmental Protection Agency (EPA). This letter is in response to your facsimile of March 20, 2001 in which you ask several questions regarding the applicability of the asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP) to renovation in a residential home. We have responded in a question and answer format, first showing your question then providing our answer.
Question #1.

If vinyl asbestos floor tile containing 10-20% asbestos fibers and mastic containing 5-15% asbestos fibers were jackhammered without following the NESHAP or COMAR (Code of Maryland Administrative Regulations) regulations, what probability would exist for the asbestos fibers being released?

Response #1.

We will assume that the floor was jackhammered without using proper work practices, i.e., wetting the floor tile during the jackhammering operation. In this situation, we would expect that most probably asbestos fibers would be released.

Question #2.

Would this be toxic to breathe in?

Response #2.

The following information was taken from the booklet Asbestos in Your Home - How Can Asbestos Affect My Health? found at the EPA website: http://www.epa.gov/opptintr/asbestos/ashome.htm.

From studies of people who were exposed to asbestos in factories and shipyards, we know that breathing high levels of asbestos fibers can lead to an increased risk of lung cancer, most likely:

Mesothelioma, a cancer of the lining of the chest and the abdominal cavity; and Asbestosis, in which the lungs become scarred with fibrous tissue.

The risk of lung cancer and mesothelioma increases with the number of fibers inhaled. The risk of lung cancer from inhaling asbestos fibers is also greater if you smoke. People who get asbestosis have usually been exposed to high levels of asbestos for a long time. The symptoms of these diseases do not usually appear until about 20 to 30 years after the first exposure to asbestos.

Most people exposed to small amounts of asbestos, as we all are in our daily lives, do not develop these health problems. However, if disturbed, asbestos material may release asbestos fibers, which can be inhaled into the lungs. The fibers can remain there for a long time, increasing the risk of disease. Asbestos material that would crumble easily if handled, or that has been sawed, scraped, or sanded into a powder, is more likely to create a health hazard.

Question #3.

Would jackhammering the asbestos tile and asbestos mastic make regulated asbestos-containing material RACM?

Response #3.

Based on your indications that the floor tile and mastic contain greater than one percent asbestos, they would be asbestos-containing material (ACM). Floor tile and mastic subjected to jackhammering would become RACM. However, in your case, your single family home does not meet the definition of "facility." A "facility" applies to any institutional, commercial, public, industrial or residential structure. The definition goes on to exclude residential units having four or fewer dwelling units. (See the Code of Federal Regulations (CFR) at Title 40 CFR Section 61.141-Definitions for the entire definition.)

Question #4.

Is there any type of vinyl asbestos floor tile or asbestos mastic that if subject to jackhammering could not be "crumbled, pulverized or reduced to powder by hand pressure?"
Response #4.

To the best of our knowledge, we are not aware of any asbestos floor tile or asbestos containing mastic that can withstand the force of a jackhammer and remain undamaged. In this case, since the vinyl asbestos tile and mastic are Category I nonfriable ACM, the issue is not whether or not jackhammering puts the material in a condition that it may be damaged by hand, but whether or not it is sanded, ground, cut or abraded. Jackhammering grinds and abrades the material, therefore the vinyl asbestos tile and mastic become RACM.

Question #5.

Can "hand pressure" be defined to include tools, i.e., a jackhammer or is "hand pressure" defined solely to mean "hand?"

Response #5.

It is recognized that when nonfriable ACM is subject to certain forces, i.e., mechanical forces, weather or aging, it can be weakened to the point where it can become friable, i.e., crumbled, pulverized or reduced to powder by hand pressure and can thereby release asbestos fibers. As we understand your situation, your vinyl floor was considered nonfriable ACM which was subject to a mechanical force (jackhammer) which would have weakened the vinyl tile and mastic to the point where it could become friable and thereby release asbestos fibers.

Question #6.

Would EPA investigate this matter if it occurred in a facility?

Response #6.

If EPA acts on a complaint, it would investigate for federally enforceable issues. If there are no federally enforceable issues or the State is delegated the program, then EPA generally refers the complaint to the State for action. Due to resource constraints, EPA is not able to respond to every compliant received. Complaints are directed to the EPA's Regional offices which handle them based upon priorities, circumstances and annual resources.

Question #7.

Has EPA ever assisted States in matters that are outside their jurisdiction?

Response #7.

To the best of our knowledge, we are unaware of such a situation. If there would be a clear national benefit, EPA might assist the State, if invited.

Question #8.

How does a State become delegated by EPA?

Response #8.

The State of Maryland submitted a written request to EPA seeking delegation of authority from EPA to implement and enforce the asbestos NESHAP program. EPA evaluated the State regulations as to whether they were at least equivalent to the federal asbestos NESHAP and reviewed whether there were sufficient resources available to implement an effective program.

Question #9.
What laws/regulations must it (the State) enforce?

Response #9.

We can speak only to those regulations which have been delegated to the State of Maryland, in this instance, the asbestos NESHAP program. Any State delegated the asbestos NESHAP program should implement those regulations as effectively and evenhandedly as possible. There may be other regulations applicable to asbestos in the State of Maryland that are beyond the scope of the federal NESHAP regulations. The EPA has no jurisdiction in enforcing or overseeing implementation of those State specific regulations.

Question #10.

Does EPA oversee or fund any of these State programs?

Response #10.

The EPA provides grants to States to assist them with their compliance monitoring and enforcement activities for several environmental programs. In addition, EPA does conduct State oversight inspections for those programs which have been delegated to the State.

Question #11.

Why should the Maryland Department of the Environment (MDE) have jurisdiction in your home?

Response #11.

Since Maryland has an equivalent asbestos NESHAP program, the MDE has the lead for implementing the asbestos NESHAP program in the State. As I noted in my March 9, 2001 letter, there are citations under the Maryland administrative regulations, outside of the federal asbestos NESHAP program, that could apply to your situation. However, only MDE staff can determine whether those citations apply to your situation. I encourage you to speak to the asbestos staff at the Maryland Department of the Environment, Air and Radiation Division. You can reach them at (410) 631-3200.

I appreciate your concern about asbestos contamination and the proper method for removal and disposal. Since demolition was performed in a single unit dwelling, the asbestos NESHAP regulations would not apply in your situation. There may be State-specific regulations concerning asbestos removal, but you need to confer with Maryland officials for the proper determination.

Very truly yours,

Michael S. Alushin
Compliance Assessment and Media Programs Division Office of Compliance

c: Everett Bishop