Illinois Department of
Public Health

John R. Lumpkin, M.D., M.P.H., Director

525-535 West Jefferson Street • Springfield, Illinois 62761-0001

July 23, 1996

RE: ILLINOIS SCHOOL ASBESTOS ABATEMENT PROGRAM

Dear School Administrator:

The purpose of this letter is to clarify the Department's position regarding removal of non-friable vinyl asbestos floor tile in school buildings as a non-response action. This clarification is based upon the interpretation of federal asbestos regulations (40 CFR Part 763, Subpart E, 40 CFR Part 61, Subpart M) and the Policy Clarification, Asbestos Hazard Emergency Response Act, issued April 29, 1993, by the U.S. Environmental Protection Agency (copy attached). In the past, removal of this material has been considered to be a response action, requiring a licensed asbestos abatement contractor, in accordance with the Asbestos Abatement Act and Code.

If handled carefully, floor tile may be removed with very little or no release of asbestos fibers. Accordingly, removal of non-friable asbestos-containing floor tile in a manner which is not likely to result in release of asbestos fibers will not be considered a response action. However, in accordance with Section 855.60 of the Asbestos Abatement Code in order for the Department to ensure that proper work procedures will be followed and that building occupants will not be subjected to asbestos hazards, the school or school district will be required to submit the following information to the Department:

1. A detailed description of the proposed project which specifies work procedures to be utilized and quantities and locations of asbestos-containing floor tile to be removed.

2. The attached Asbestos Abatement Notice with dates and times when the removal project will occur.

The required information and the Notice of Asbestos Abatement form must be submitted to the Department at least ten working days or 14 calendar days prior to the beginning of an asbestos abatement project in a school building. The work procedure will be reviewed and the school will be notified if the proposal is acceptable. No work involving asbestos-containing floor tile as a non-response action may be performed until a notice of acceptance of the proposed procedure is received by the school from the Department.

Any removal of non-friable floor tile which results in sanding, grinding, abrading, drilling, cutting, pulverizing, crushing, or excessive breakage of the material will be considered a response action, and all requirements of the Asbestos Abatement Act and the Asbestos Abatement Code will apply. Removal of asbestos-containing floor tile mastic by any means will continue to be considered a response action.

If you have any questions, please contact R. Kent Cook, Asbestos Program Manager at the Illinois Department of Public Health, Asbestos Program, 525 West Jefferson Street, Springfield, IL 62761 or telephone 217/782-3517 and for the hearing impaired only TTY# 800/547-0466.

Sincerely,

G. Michael Brandt, Chief
Asbestos and Lead Abatement Section

Attachments
EPA Policy
Asbestos Notice

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FLOOR TILE PROJECT NOTICE

DATE: _____

This form is to be completed in full and filed by the school district, private school or building owner with the Illinois Department of Public Health at least two weeks (ten working days) prior to the start of the floor tile project.

SCHOOL DISTRICT, PRIVATE SCHOOL OR BUILDING OWNER

BUILDING OWNER: _____
DISTRICT NAME AND NUMBER: _____
ADDRESS: _____
CITY: _____ STATE: _____ ZIP: _____

BUILDING INFORMATION

SCHOOL BUILDING NAME: _____ PHONE: _____
SCHOOL BUILDING ID#: _____ COUNTY: _____
ADDRESS OF BUILDING: _____
CITY: _____ STATE: _____ ZIP: _____
SIZE OF BUILDING: _____
USE OF BUILDING: _____

ABATEMENT INFORMATION

ESTIMATED COST OF ABATEMENT: _____
DESCRIPTION OF ASBESTOS CONTAINING MATERIAL: _____
_____
_____

APPROXIMATE AMOUNT OF ASBESTOS CONTAINING MATERIAL:
_____
_____

ABATEMENT TECHNIQUE: _____
_____

ABATEMENT DATES: START: _____ FINISH: _____
ABATEMENT TIMES: START: _____ FINISH: _____

_____
SIGNATURE OF SCHOOL DISTRICT, PRIVATE SCHOOL OR BUILDING OWNER

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

APR 29 1993

POLICY CLARIFICATION
ASBESTOS HAZARD EMERGENCY RESPONSE ACT (AHERA)

ISSUE

Under what circumstances is removal of vinyl asbestos tile ("VAT") or similar materials a response action under AHERA?

DETERMINATION

Removal of VAT (or other known or assumed asbestos-containing material ["ACM"] flooring or its adhesive) which involves sanding, grinding, mechanical chipping, drilling, cutting[1], or abrading the material has a high probability of rendering the ACM friable and capable of releasing asbestos fibers. Therefore, the United States Environmental Protection Agency ("U.S. EPA") has determined that removal projects which employ any of these techniques (other than small-scale/short-duration ["SS/SD"] projects) must be conducted as AHERA response actions requiring the development of project designs, use of accredited persons and aggressive air clearance sampling.

All removal projects employing techniques other than those discussed above must also receive careful planning prior to initiation to determine whether they must be conducted as AHERA response actions. While this paper clarifies which removal activities must be conducted as AHERA response actions, removal techniques for SS/SD projects should also be evaluated prior to initiation to ensure that they are conducted safely.

BACKGROUND

Section 202 of AHERA defines response action as a method that protects human health and the environment from ACM. Section 763.83 of the AHERA regulation defines response action as a method, including removal, encapsulation, enclosure, repair, and operations and maintenance, that protects human health and the environment from friable asbestos-containing building material ("ACBM").

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1. In this context, "cutting" does not include shearing, slicing or punching.

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Second, the AHERA regulation defines friable as meaning that the ACM, when dry, may be crumbled, pulverized, or reduced to powder by hand pressure. This definition includes previously nonfriable ACM after such previously nonfriable ACM becomes damaged to the extent that, when dry, it may be crumbled, pulverized, or reduced to powder by hand pressure.

Finally, the answer to Question 42 of the "100 Commonly Asked Questions About the AHERA Asbestos-in-Schools Rule," May 1988, also relates to this issue, and states:

> If the floor tile or its adhesive does not become friable during the removal process, it is not a response action, since the definition of response action refers to a method "that protects human health and the environment from friable ACBM." If the material becomes friable during removal, however, the job is then a response action . . . .

Implicit in this answer is the assumption that if the ACM is already friable, the activity must be conducted as a response action.

DISCUSSION

VAT (or sheet flooring) in good condition would generally be considered nonfriable. However, it is recognized that when nonfriable ACM is subjected to certain forces, such as 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. The U.S. EPA discussed this situation in the preamble of the Asbestos Revision to the National Emission Standard for Hazardous Air Pollutants ("NESHAP"), November 20, 1990, and acknowledged it in the NESHAP definition of Regulated Asbestos-Containing Material ("RACM"). Section 61.141 of the NESHAP Revision, Definitions, defines RACM as: (a) Friable asbestos material; (b) Category I nonfriable ACM that has become friable; (c) Category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting or abrading; or (d) Category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations."[2]

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2. Category I nonfriable ACM is any asbestos-containing packing, resilient floor covering (and mastic) or asphalt roofing product which contains more than 1 percent asbestos as determined using polarized light microscopy ("PLM"). Category II nonfriable ACM is any material, excluding Category I nonfriable ACM, containing more than 1 percent asbestos as determined using PLM, that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure. 40 C.F.R. Part 61, Subpart M, § 61.141.

The AHERA regulation also recognizes the potential for nonfriable ACM to become friable in both its definition of friability (discussed above) and in Section 763.91(a), which states, in part, that: "Any material identified as nonfriable ACBM or nonfriable assumed ACBM must be treated as friable ACBM for purposes of this section when the material is about to become friable as a result of activities performed in the school building."

The use of certain mechanical techniques on VAT or other ACM sheet flooring (and their adhesives), such as sanding, grinding, chipping, drilling, cutting (as defined above) and abrading, creates a high probability that ACM will be damaged or weakened to such an extent that it would be rendered friable. Based on the AHERA regulation's definition of response action as "a method that protects human health and the environment from friable ACBM," and the expectation that the material will be rendered friable by the activity, if any of these methods are employed to remove VAT from an AHERA-regulated school building, that activity would be considered to be a response action (unless it is a SS/SD project). In addition, the asbestos NESHAP requirements, including notification, may apply to the activity.

However, at this time, it appears that certain other removal techniques which <u>do not</u> use grinding, mechanical chipping, abrading, cutting (as defined above), sanding, or drilling the material would not be expected to render the material friable (examples of such techniques include the use of solvents, water, or heat such as infra-red, or other similar techniques which cause the tiles to become loosened or pliant to the point where they are easily removed). These activities would not be considered to be response actions as long as the material is not already friable or in such poor condition that it is likely to become friable during the activity or as a consequence of the activity.

Therefore, in deciding whether a removal activity (other than SS/SD) must be conducted as an AHERA response action, the following two factors must be considered prior to initiation of the activity in order to ensure that all necessary requirements and precautions are met.

1) <u>Condition of the material.</u> If the material is in such poor condition that it is already friable, or that it is likely to become friable during or as a consequence of the activity, the removal <u>must</u> be conducted as an AHERA response action because of the high probability of fiber release from the friable material.

2) <u>The methods which will be used to remove the material and/or the mastic</u>. If the removal methods involve sanding, grinding, drilling, mechanical chipping, cutting (as defined above), or abrading the material, or any other technique that is likely to result in rendering the material friable, the removal <u>must</u> be conducted as an AHERA response action.

In addition to fulfilling the AHERA requirements, consideration of these two factors is also consistent with the requirements of the asbestos NESHAP.

CONCLUSION

This paper clarifies when certain VAT removal activities must be conducted as response actions under AHERA. This determination must occur prior to initiation of the activity in order to ensure that all necessary requirements and precautions are met.

Regardless as to the removal technique or scope of the project, other concerns, such as: protection of the abatement workers and other building occupants (including OSHA and EPA Worker Protection requirements and state regulations); proper disposal of removed materials; and final cleaning of the work area must be resolved before the initiation of any project. The potential for release of volatile organic compounds from solvents; fire hazards; and possible hazardous waste considerations from the use of solvents (e.g., toluene and xylene) to remove mastic must also be considered. Please remember that the NESHAP requirements apply to any project, or group of projects at a facility, planned or anticipated within a calendar year which will reach the NESHAP thresholds of 160 square or 260 linear feet.

This Policy Clarification was developed in July 1992, by the U.S. EPA's Office of Prevention, Pesticides and Toxic Substances, AHERA Interpretive Guidance Workgroup, Office of Compliance Monitoring and clarifies when certain VAT removal activities must be conducted as response actions under AHERA. Please remember that your state may have other regulatory requirements regarding the removal of VAT. If you have any questions regarding this policy clarification, please do not hesitate to contact Region 5's Asbestos Control Section at 312/886-6003.