

SOUTHEASTERN STATES ASBESTOS CONFERENCE

QUESTIONS & ANSWERS

November 3-5, 2003

Savannah, Georgia

*** EPA has responded to the following questions to the best of the Agency's ability given EPA's understanding of the questions and given the very limited information provided. These responses do not represent official EPA applicability determinations about any specific situation. It is always better to present a specific case scenario and ask the EPA to respond to it than to ask general questions.***

1) Would a mobile home used (set up) as a temporary office on a construction site be subject to the NESHAP regulations? Would moving the mobile home be considered a demolition? What other activities could make it subject to the NESHAP regulations? Since the mobile home is not a permanent structure, would it ever be considered subject to the federal NESHAP regulations? What if the temporary office were a trailer designed as a mobile office (on wheels), would it be subject to the NESHAP regulations in the same manner as a mobile home used as a temporary office?

If a house or mobile home is an affected facility, moving of the house or mobile home from its foundation or from any load-supporting structural element is considered to be a demolition under Subpart M regardless of whether or not the mobile home is affixed to a foundation. The moving of a mobile home set up as a temporary office on a construction site would be considered a demolition under Subpart M since the mobile home is being used for commercial purposes. The applicability of Subpart M does not depend on whether the house is moved in tact or in sections. The reason a house is being moved is not a deciding factor on whether the asbestos NESHAP applies. For example, if the DOT were widening a road, the house(s) being moved would still need to be an affected facility in order for Subpart M to apply.

It also does not matter if the mobile home is on wheels or not for the purposes of Subpart M applicability. If the mobile home on wheels is used for commercial, industrial, or other purposes identifying it as a facility, the mobile home is subject to the NESHAP. Every time the mobile home is moved, it would not be subject since there is no structural member to consider if the home is being kept on wheels. However, if the mobile home on wheels is renovated or demolished, it would be subject to Subpart M.

2) Which of the following, if any, would be considered a facility under the NESHAP and thus require an asbestos inspection prior to activities associated with disturbance or demolition?

- * roadside billboards (associated with businesses)
- * bridges (sandblasted for paint removal)
- * utility transmission towers/lines
- * roadways and paved parking lots

- * fences / gates / similar structures
- * agricultural grain storage bins / tanks, etc.

Any of the above items could be subject to the NESHAP. Some of the items could be considered to be commercial or public structures. "Structure" is not defined in the NESHAP. However, "structural member" is defined as "any load-supporting member of a facility, such as beams and load-supporting walls; or any nonload-supporting member, such as ceilings and nonload-supporting walls." Many of the above items could be considered structures since they have load-bearing members. Other items above could be considered to be facility components. A "facility component" is defined as "any part of a facility including equipment." Although these items would not usually contain asbestos, a "facility component" includes any item that potentially contains or is covered with or coated with asbestos. A "facility component" should be located on contiguous, attached or adjacent facility property. Billboards and bridges could be considered to be structures. Utility towers and lines could be structures or facility components. Roadways, parking lots, and fences could be considered to be facility components.

For example, a roadway could be a facility component if the roadway happens to go through a military base. A case could be made to say the roadway is a component of the military base. The focus should be on how many of the items listed above actually contain asbestos on or in them and the quantity of asbestos concerned. Are there no larger structures that impact a large number of people or are located in an environmentally sensitive area that need to be inspected than a fence or a gate?

Agricultural buildings used for commercial purposes, such as a dairy barn or crop storage structure, are subject to the NESHAP. However, the rule does not apply to sheds used to store equipment for a homeowner's garden or to temporary farm stands that sell fresh produce.

These opinions are based upon the very limited information provided and do not represent an official EPA applicability determination about any specific situation. It is always better to present a specific case scenario and ask the EPA to respond to it than to ask general questions.

3) If friable asbestos material is identified in a structure to be demolished and the amount of the friable material is less than threshold amounts, must this material be abated prior to demolition?

No, this material need not be removed if threshold amounts are not met. Under § 61.145(a)(2), if threshold amounts are not met in a facility being demolished, only the notification requirements of paragraphs (b)(1), (2), (3)(i) and (iv), and (4)(i) through (vii) and 4(ix) and (xvi) of § 61.145 apply.

4) Has the EPA made a determination on whether or not waste debris from a NESHAP subject structure where the presence and quantity of RACM is unknown (including fire damaged structures) needs to be disposed of in an approved landfill?

EPA has not made a formal applicability determination on this issue. Applicability determinations are made only when requested by EPA Headquarters on a case-by-case basis. EPA is still of the opinion that since the quantity of RACM is unknown, the debris should be disposed of in an approved landfill. Disposal of such debris in an approved landfill will provide the maximum protection of public health and safety. While testing of the ash may be sufficient

to establish the presence of asbestos, the converse may not be true since testing of the ash may not be sufficient to determine the lack of the presence of asbestos. Factors such as wind directions and rising heat currents may disperse the asbestos fibers released during the burning.

5) What types of condominiums, cooperatives or lofts would be considered subject to the NESHAP?

If a residential building has four or fewer dwelling units, it is not a facility. If it has more than four units, it is a facility for NESHAP purposes. If you have a commercial building that has a residential loft, it is a facility. The whole building (loft and commercial part) is subject to the NESHAP.

6) What is going on with excavations, especially any involving W.R. Grace sites?

An emergency response removal is currently ongoing at Zonolite Company / W.R. Grace Wilder Plant located at 112 North Street in Wilder, Kentucky. Contaminated soil from this vermiculite exfoliating plant is being removed. The NESHAP does not apply when asbestos is a waste product of mining or excavation (example: Libby, Montana - asbestos was a tailing of the vermiculite mining where W.R. Grace was not mining commercial asbestos but vermiculite).

7) Could EPA offer any explicit and specific guidance on procedures for dealing with facilities that have been destroyed by fires, explosions, natural disasters, etc. ?

EPA currently uses the *Guidelines For Catastrophic Emergency Situations Involving Asbestos* (EPA 340/I-92-010, February 1992). The Agency is currently in the process of updating this guidance.

8) How is composite sampling of wall systems done, and can other materials such as flooring be considered the same way?

When joint compound and/or tape is applied to wallboard, it becomes an integral part of the wallboard. The joint compound and wallboard become one material forming a wall system. Where a demolition or renovation affects such a wall system, a composite analysis of the wall system layers (percent of asbestos in the joint compound, tape and wallboard) should be conducted. The lab examines each level of the sample and results are combined to determine the average percent of asbestos content for the total composite sample.

For all other multi-layered systems (other than the joint compound situation previously discussed), multiple layers of one core sample may be composited for analysis provided the procedures for sample analysis using gravimetric reduction and transmission electron microscopy (TEM) are followed. These procedures are contained in EPA's Method for the Determination of Asbestos in Bulk Building Materials, EPA/600/R-93/116. EPA finds that this

method is an acceptable alternative sampling method under Section 61.13(h)(1)(ii). When using the gravimetric procedures, the result may be recorded as percent asbestos by weight. If the result of the composite sample analysis indicates that the multi-layered system contains asbestos in the amount of one percent or less, but greater than none detected, then analysis by layers is required to ensure that no layer in the system contains greater than one percent asbestos. All layers in a multi-layered system will need to be treated as asbestos-containing if the layers can not be separated without disturbing the asbestos-containing layer. Requirements to perform point counting still apply for any layers being analyzed individually. Please refer to 60 FR 65243 dated December 19, 1995, and 59 FR 542 dated January 5, 1994, which discuss the analysis of multi-layered systems further. Please also refer to the letter from EPA Region 4 to Palm Beach County dated May 22, 2002, which discusses the same.

9) EPA has for some time recommended sampling using the "3-5-7" method when conducting a NESHAP inspection. As you know, the 3-5-7 sampling method applies to surfacing material only as it is not applicable to thermal system insulation (TSI) or miscellaneous material (see 40 CFR 763.86). Does EPA still recommend the "3-5-7 rule" for sampling TSI and miscellaneous material? If so, has EPA created a sampling protocol which is different from AHERA and OSHA?

Not speaking at all about what OSHA may require, sampling protocol may be found in the AHERA regulations at 40 C.F.R. § 763.86, *Sampling*. It provides the 3-5-7 rule on how many minimum samples you should take given the situation you encounter. 40 C.F.R. § 763.86(a) discusses sampling protocol for surfacing material. Sampling protocol for thermal system insulation (TSI) is discussed in 40 C.F.R. § 763.86(b). Miscellaneous material sampling is addressed in 40 C.F.R. § 763.86(c). Sampling of nonfriable suspected asbestos-containing building materials is discussed in 40 C.F.R. § 763.86(d). Please see 40 C.F.R. § 763.86 enclosed.

10) Is it a requirement under the NESHAP for a trained supervisor to be on-site for any demolition activity?

Under § 61.145(c)(8), it states, "... no RACM shall be stripped, removed, or otherwise

handled or disturbed at a facility regulated by this section unless at least one on-site representative... trained in the provisions of this regulation and the means of complying with them, is present.” Since the possibility exists of finding asbestos-containing material regulated by Subpart M at any point during a demolition, a trained on-site supervisor should be present throughout all of the demolition activities until the debris is hauled away to the landfill. This applies only to demolitions in which threshold amounts are met or exceeded.

11) Does the EPA require point counting of samples that are less than 1% by PLM estimation in order to determine whether or not the material is actually asbestos-containing? If so, does this apply to non-friable as well as friable material? Can laboratories represent analytical results as less than 1% based solely on PLM estimation without point counting the material?

Revisions to 40 C.F.R. Part 61, Subpart M, were promulgated on November 20, 1990, and included a requirement to perform point counting using PLM to quantify asbestos in samples where the asbestos content is below ten (10) percent. Such a requirement was included in the revisions in response to several reports of data from split samples analyzed by visual estimation (PLM) by two or more laboratories which showed conflicting results making it difficult to determine if a sample contained more than one (1) percent asbestos, thus classifying the material as asbestos-containing material. Prior to the requirement to perform point counting using PLM, a review of data from performance audits indicated a high number of false positives and false negatives reported by laboratories when analyzing the asbestos content of samples using PLM. These false negatives and false positives resulted in either projects not being covered by 40 C.F.R. Part 61, Subpart M, or unnecessary expenditure of funds for asbestos abatement and compliance with the requirements of Subpart M, respectively. The intent of the revision to Subpart M which requires point counting using PLM is to improve the quantitative analysis of samples for asbestos content. The revision applies to all regulated asbestos-containing material (RACM) as defined in 40 C.F.R. Section 61.141.

A sample in which **NO** (none detected) asbestos is discovered by PLM does not need to be point counted. The laboratory should examine a sufficient amount of any sample to be sure that the sample does not contain asbestos. A minimum of three slide mounts should be prepared and examined by PLM to determine if asbestos is present. If such examination shows the amount of asbestos to be less than ten (10) percent but greater than none detected, the owner or operator has two options. First, he may assume the amount of asbestos in the sample to be greater than one (1) percent and treat the material as asbestos-containing material for the purposes of 40 C.F.R. Part 61, Subpart M.. Alternatively, he may determine the amount of asbestos in the material by point counting using PLM. If an analysis of sample content determined by point counting using PLM is different from an analysis obtained by using PLM alone, the analysis determined by point counting using PLM **must** be used in determining applicability of and compliance with the requirements of 40 C.F.R. Part 61, Subpart M.

This discussion of point counting using PLM applies to all RACM. If non-friable material is not RACM for the purposes of the NESHAP, such point counting using PLM is not required.

Please see applicability determination C112 dated May 8, 1991, enclosed.