



ASBESTOS REGULATORY CLARIFICATIONS

Toxic Substances Control Division

ARC – 014

November 2001

Subject: Analysis of Joint Compound for Asbestos Content

BACKGROUND

The Texas Asbestos Health Protection Rules (TAHPR), National Emission Standards for Hazardous Air Pollutants (NESHAP), Occupational Health Safety and Health Administration (OSHA) rules, and Asbestos Hazard Emergency Response Act (AHERA) rules define *asbestos-containing material (ACM)* as material that contains greater than one percent asbestos. The EPA specified analytical methods for determining *ACM* for NESHAP and AHERA compliance in 1994, and thereby allowed composite analysis to be performed on multi-layered wall systems. Of these multi-layered wall systems, the EPA allowed joint compound, when used to fill cracks and voids in wall systems, to be considered non-ACM if the composite analytical result is equal to or less than one percent. By contrast, the TAHPR and OSHA rules do not recognize composite sample analysis for the purposes of defining *ACM*. Since the NESHAP and AHERA often apply to projects that are also applicable to TAHPR and OSHA, there has been confusion as to the requirements for sampling and analyzing joint compound. This document clarifies how the Texas Department of Health (TDH) regulates demolition/renovation (D/R) projects involving asbestos-containing joint compound

RESPONSE

If more than one asbestos regulation applies to a project, the more stringent regulation prevails. The TAHPR does not allow composite sample analysis as part of an asbestos inspection performed inside a *public building* for a D/R project. Composite analysis is allowed when such inspections are performed in NESHAP facilities that are not *public buildings*.

The OSHA rules do not allow material to be classified as non-ACM based on composite sample results. Therefore, when a private employer hires a crew to perform D/R work, composite analytical results may not be used to rebut the designation of presumed ACM. This regulation is focused to worker protection.



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DISCUSSION

TAHPR

In 25 TAC 295.32, the TAHPR define **ACM** as follows:

Asbestos-containing material (ACM)- Materials or products that contain more than 1.0 % of any kind or combination of asbestos, as defined by the Environmental Protection Agency (EPA) recommended methods as listed in EPA/600/R-93/116, July 1993 “Method for the Determination of Asbestos in Bulk Building Materials.” This means any one material component of a structure or any layer of a material sample. Composite sample analysis is not allowed.

In 25 TAC 295.32, the TAHPR define **Asbestos-containing building material (ACBM)** as follows:

Asbestos-containing building material (ACBM) – Surfacing ACM, or miscellaneous ACM that is found in or on interior structural members or other parts of a public or commercial building.

In 25 TAC 295.32, the TAHPR define **inspection** as follows:

Inspection – An activity undertaken in a school building, public building, or commercial building to determine the presence or location, or to assess the condition of, friable or non-friable asbestos-containing building material (ACBM) or suspected ACBM, whether by visual or physical examination, or by collecting samples of such material. This term includes reinspections of friable and non-friable known or assumed ACBM which has been previously identified. The term does not include the following:

- (A) periodic surveillance of the type described in 40 CFR 763.92(b) solely for the purpose of recording or reporting a change in the condition of known or assumed ACM.*
- (B) inspections performed by employees or agents of federal, state, or local government solely for the purpose of determining compliance with applicable statutes or regulations; or*



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(C) visual inspections of the type described in 40 CFR 763.92(i) solely for the purpose of determining completion of response actions.

In the above definitions, the terms *inspection*, *ACBM*, and *ACM* are interrelated. The term *inspection* is focused to *ACBM*, which in turn, is defined as types of *ACM*. Since TAHPR does not allow composite analysis for determining *ACM*, composite analysis may not be used when performing inspections of the interior space of *public buildings* for D/R projects.

NESHAP and AHERA

On September 30, 1994, the EPA published the *Asbestos Sampling Bulletin, Supplementary Guidance on Bulk Sample Collection and Analysis, U.S. EPA, OPPT/CMD (7404)*. This document provides guidance for sampling and analysis of multi-layered wall systems, including wall systems that contain joint compound. With regard to joint compound, the guidance specifies that discrete layers be combined to produce a composite analytical result. If the composite result is less than or equal to one percent, the joint compound is not classified as *ACM*, and no further analysis is required. If the composite result is greater than one percent, the joint compound is *ACM*.

The EPA clarified in *Treatment of Layers of Wall*, January 13, 1994 (A960014) that joint compound is material used to fill nail holes, cracks and small spaces between sections of wallboard. Add-on material (e.g. troweled-on texture), not used as described above, is not considered joint compound, even if the substance is chemically similar to joint compound.

The EPA further clarified sampling requirements for multi-layered wall systems, not including joint compound, in the Federal Register, December 19, 1995 (*FRL-5399-3*). In this document, the EPA stated that, as an alternative to the standard PLM method, samples from multi-layered wall systems could be first analyzed gravimetrically as composite samples. If the results show the asbestos content to be greater than one percent, the material would be classified as *ACM*. If no asbestos were detected in the composite sample, the material would be classified as non-*ACM*. However, if the results indicate trace levels of asbestos up to one percent, the individual layers of the sample would then need to be reanalyzed. If the reanalysis showed that any layer within the sample contained greater than one percent, the layer would be classified as asbestos containing. According to this document multiple samples cannot be combined for composite analysis. The EPA stated that this alternative method is allowed to potentially reduce the time and cost of sampling analysis.



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OSHA

OSHA issued a letter on July 10, 1996 (*TS/WEAVER/ws/July 3, 1996*), where the issue of composite analysis of ACM was addressed. The letter contains the following question and answer regarding wallboard systems (i.e. joint compound):

In order to be in compliance with OSHA's "Communication of hazards" requirement as outlined in 29 CFR 1926.1101(k), does a completed inspection conducted pursuant to the requirements of AHERA 40 CFR Part 763, Subpart E fulfill OSHA requirements when wallboard systems are sampled as a composite material as allowed under AHERA and how can this conflict within the regulation be reconciled?

No, OSHA will not accept composite sampling even though the requirements of AHERA 40 CFR Part 763.86 were followed. If one is rebutting the designation of a material as PACM under 1926.1101(k)(5), each material must be analyzed separately to determine if it contains more than 1 % asbestos.

FREQUENTLY ASKED QUESTIONS

1. When an asbestos inspection is performed inside a **public building**, does TDH allow joint compound to be analyzed as a composite sample?

Answer: No. Composite sampling is not allowed under TAHPR for determining if a material is ACM.

2. When an asbestos inspection is performed on a facility that is not a **public building**, does TDH allow joint compound to be analyzed as a composite sample?

Answer: Yes. The under the NESHAP, composite analysis of joint compound is allowed.

3. If an asbestos inspection is being done in a public building as part of a demolition does TDH allow joint compound to be analyzed as a composite sample?

Answer: No. Composite sampling is not allowed under TAHPR for determining if a material

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is ACM.

Agree to form and substance

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