



U.S. Environmental Protection Agency Applicability Determination Index

Control Number: A960007

Category: Asbestos
EPA Office: SSCD
Date: 08/24/1993
Title: Sampling Methods
Recipient: Demars, Gary
Author: Rasnic, John

Subjects: Part 61, B-Asb, Asbestos Demolition/Renovation (Now Sub. M)

Abstract:

Q. If one or more samples analyzed from a homogenous area contained greater than 1% asbestos, is the entire homogenous area considered an asbestos containing material?

A. Yes. One sample is adequate to confirm that asbestos is present in a homogenous sampling area. If the material is of a "patchy" nature, multiple samples must be taken to ensure that if asbestos is present, it is detected.

Q. What source would provide guidance on a sampling scheme or method for determining whether plaster in a given functional space is greater than 1% asbestos?

A. "Asbestos in Buildings: Simplified Sampling Scheme for Friable Surfacing Materials (the "Pink Book", EPA 560/5-85-030a) would provide guidance on this topic.

Q. Does the EPA foresee any allowance for averaging of the asbestos concentration of multiple samples?

A. No. Averaging the asbestos concentration from multiple samples from a homogenous sampling area is not acceptable because it would defeat the validity of the sampling scheme. The EPA does not foresee allowing any averaging of the asbestos concentration for multiple samples at any time in the future.

Letter:

Mr. Gary DeMars
Director of Abatement Engineering
MacNeil Environmental, Inc.
755 East Cliff Road
Burnsville, MN 55337

Dear Mr. DeMars:

This is in response to your letter dated May 19, 1993 requesting a clarification of the National Emission Standards for Hazardous Air Pollutant (NESHAP) regulations regarding asbestos containing materials (ACM). Specifically, you requested guidance on a sampling scheme or method for determining whether plaster in a given functional space is greater than 1 percent asbestos. You also wanted to know if the Environmental Protection Agency (EPA) foresees any allowance for averaging of the asbestos concentration of multiple samples.

In your letter, you described the situation involving several school buildings in which bulk sampling of the same homogeneous building material has shown "mixed" results. The building material in question is hard cementitious plaster (circa 1890, non-acoustical) in which a small amount of asbestos (2-3 percent chrysotile-PLM) (1.75 percent point counting) has been detected in a minority of the homogenous samples.

You also indicated that your company has advised your client that since all samples collected are valid samples (and several of the samples analyzed contained greater than 1 percent asbestos) that the school buildings in question have to treat the entire homogeneous area as asbestos containing material.

We believe that the recommendation you've made to your client is consistent with our policy that if one or more samples analyzed shows greater than one percent asbestos, then the material in question is regulated as an asbestos containing material. One sample is adequate to confirm that asbestos is present in a homogeneous sampling area. Due to the "patchy" nature of the material you describe, multiple samples must be taken to ensure that if asbestos is present, it is detected. Averaging the asbestos concentration from multiple samples from a homogeneous sampling area is not acceptable because it would defeat the validity of the sampling scheme. For more information please review both "Asbestos in Buildings: Simplified Sampling Scheme for Friable Surfacing Materials" (the "Pink Book", EPA 560/5-85-030a) and "Statistical Support Document for "Asbestos in Buildings: Simplified Sampling Scheme for Friable Surfacing Materials" (the "White Book", EPA 560/5-85-030b). You can obtain a copy of these documents by contacting the Toxic Substances Control Act (TSCA) Hotline. The TSCA hotline number is 1-202-554-1404.

As to your request for guidance on sampling, we recommend that you and your client follow the guidance document referenced above (the "Pink Book") for assistance in developing a sampling scheme. We do not foresee allowing any averaging of the asbestos concentration for multiple samples at any time in the future.

This determination has been coordinated with EPA's Office of Enforcement, the Emission Standards Division of the Office of Air Quality Planning and Standards and the Office of Pollution Prevention and Toxics. If you have any questions, please contact Chris Oh of my staff at (703) 308-8732.

Sincerely,

John B. Rasnic, Director
Stationary Source Compliance Division Office of Air Quality Planning and Standards

cc: Sims Roy, ESD (MD-13)
Charlie Garlow, OE (LE-134A)
Tom Ripp, SSCD
Chris Oh, SSCD
Regional Asbestos NESHAP Coordinators