

AIR POLLUTION CONTROL DISTRICT
REGULATORY COMPLIANCE DIVISION

POLICIES AND PROCEDURES

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Topic: Asbestos Samples

Distribution: All Policy Holders

This policy and procedure document provides guidance on bulk sample collection of suspect Friable Asbestos Material (FAM) for asbestos NESHAP inspections. It is to be used in conjunction with Policy and Procedures II.Q, "Asbestos Demolition and Renovation" and III.B, "Chain of Custody Procedures". Ambient air sampling for asbestos is, however, not included here.

For the purposes of this document, there are three potential sources of suspect FAM: (1) surfacing materials (e.g., ceiling insulation and fireproofing on structural beams), (2) thermal system insulation and (3) miscellaneous materials (e.g., ceiling and floor tiles).

NUMBER OF SAMPLES

A minimum of three samples of suspect FAM are to be taken.

SAMPLING LOCATIONS

Although pre-abatement and pre-demolition situations may be encountered, inspections will primarily be conducted during active abatement activities where materials have been stripped, removed or are still in place. In environments which are disturbed and suspected to be contaminated, the representativeness of sample locations is based on the judgement of the inspector. Since the goal of collecting bulk samples is to determine and document whether suspect FAM contain greater than 1% asbestos, this subjective approach is warranted and appropriate.

SAMPLING EQUIPMENT

Inspectors may need the following tools to accomplish their sampling tasks:

1. Lightweight carrying case for storage and transport of sampling materials.
2. Airtight sampling containers (e.g., unused dry, clean and empty 35mm film canisters and Ziploc bags). Never reuse sample containers.

3. A plastic spray mister bottle to spray the area to be sampled.
4. Adhesive duct tape to temporarily repair a sampled area, such as pipe wrap.
5. Postal tape to seal sample containers.
6. A knife, linoleum cutter, cork borer or other tool appropriate for extracting samples.
7. Plastic bags with twist ties to store potentially contaminated waste generated during sampling.
8. Spray paint to identify sample sites on photographs.
9. Cloths (pre-moistened) for cleaning up debris and tools.
10. Documentation material - notebook or clipboard, inspection checklist, sample identification tags, chain-of-custody forms, waterproof pens.

PERSONAL PROTECTION EQUIPMENT

As a minimum level of protection, inspectors must wear a respirator, either a full or half-mask, with high efficiency disposable filter cartridges. Full face masks will also prevent eye irritation from dust, fibers and debris released during the sampling process. Disposable clothing should be worn if the sampling operation is likely to dislodge pieces of suspect material or if the environment is extremely dusty. Inspectors should have plastic bags, twist-ties and labels with them to handle the disposal of cartridges, protective clothing, wet cloths and debris.

SAMPLING PROCEDURES

The asbestos NESHAPS regulation does not provide specific recommendations for collecting bulk samples. However, some general rules will apply when collecting samples, including:

1. Identify homogeneous sampling areas¹ for each type of suspect asbestos containing material, i.e., surfacing materials, thermal system insulation and miscellaneous materials. Prepare and indicate on a diagram as necessary.
2. Before entering the containment area, put on protective equipment, including disposable overalls, overshoe boots, gloves and a properly selected respirator. A hard hat, safety shoes, protective glasses and ear protection may also be necessary. If the containment area is dusty, hair should also be covered.

¹ A homogeneous area contains friable material that is uniform in texture and appears identical in every other respect.

3. Moisten the area where the sample is to be extracted (spray the immediate area with water).
4. Extract the sample using a clean knife to cut out or scrape off a small piece of the material. Be sure to penetrate all layers of material. Be careful not to disturb adjacent material.
5. Place the sample in a container and tightly seal it.
6. Wipe the exterior of the container with a wet wipe to remove any material which may have adhered to it during sampling.
7. Place the sampling container in a Ziploc bag.
8. Complete and attach a Sample Identification Tag to the Ziploc bag (see Policy and Procedure III.B, "Chain of Custody Procedures" for instructions on filling out the Sample I.D. Tag).
9. Clean the tool(s) with wet wipes.
10. Photograph the sampling location. If necessary, take a second photograph with a reference point. The inspector can also use a brightly colored spray paint to indicate the sampling point.
11. Repeat steps #3 - 10 for each sample location.
12. If necessary, make a drawing of the inspection site, noting where the samples and photograph were taken, with a written description of the materials sampled.
13. Discard protective clothing, wet wipes, rags and cartridge filters in a labeled plastic bag. Seal and retain the bag until laboratory analysis results are received, at which time dispose of the bag as asbestos-contaminated waste if tests were positive for asbestos. Alternatively, if the Demolition and Removal contractor is State certified, dispose of the bag with the other waste which contains asbestos.
14. Follow the Chain of Custody specified in Policy and Procedure III.B after all samples have been taken.

