



**DATE:** December 22, 2009

**TO:** Asbestos Abatement Contractors

**FROM:** Industrial Hygienist  
Technical Assistance Branch, DOHS, ORS, OD, NIH

**SUBJECT:** NIH Asbestos Abatement Policy Changes

The Division of Occupational Health and Safety has changed the National Institutes of Health's (NIH) asbestos abatement oversight program. The changes are effective 1 January 2010. Affected parties should contact Mr. John Veitch ([veitchj@mail.nih.gov](mailto:veitchj@mail.nih.gov)) with questions.

The following policy changes are made:

### **1. Industrial Hygiene and Sampling Requirements**

**Current protocol requires the abatement contractor's industrial hygienist (IH) to conduct area air sampling before and during abatement, as well as clearance sampling after abatement.**

Under the new policy, the NIH IH or its representative will visually inspect and perform both pre and post abatement air monitoring. Abatement contractors are not required to engage the services of a third party industrial hygiene firm; however, the abatement contractor remains responsible for compliance with OSHA's personal exposure limits for asbestos fibers. NIH will **NOT** provide personal air sampling for asbestos contractor personnel.

### **2. Background Sampling**

**Current protocol requires ambient air sampling for abatement activities to determine background concentrations of asbestos fibers. This sampling is performed prior to the abatement activity.**

Under the new policy, background air sampling will be conducted for Class I or Class II asbestos abatement projects. Background monitoring will include at least one air sample per 5,000 sq.ft. of containment area. A minimum of 2 air samples will be collected. Background samples will be archived and available for analysis to address post abatement discrepancies. These samples will be collected and archived by the NIH IH or its representative.

In addition to the abovementioned duties, the NIH IH or its representative will perform and document the following:

- Verify containment integrity is maintained. The NIH IH shall inspect the containment at the beginning, end, and periodically throughout the shift. This includes periodically checking the manometer onsite to ensure that a -0.02 column inches of water pressure differential is maintained. The shift supervisor is responsible for correcting any containment breaches or pressure deficiencies. Abatement shall not proceed until the containment issues have been addressed.
- Verify that all abatement workers and supervisors have current certifications and are licensed by the State of Maryland Department of the Environment. The NIH IH shall ensure that any person entering the containment has donned the proper PPE. All personnel entering the containment should be documented in the NIH IH's shift log.
- Periodic inspection of the containment. The NIH IH shall enter the containment at least once every two hours to ensure that proper work practices are being followed (e.g. wet methods, HEPA vacuums, and prompt clean-up).
- Ambient air monitoring. The NIH IH shall conduct ambient air monitoring during abatement. This includes, but is not limited to, air sampling at the HEPA exhaust, air sampling near the decontamination facility entrance, and air sampling near free-hanging critical barriers (i.e., barriers that are not immediately adjacent to and adhered to a structural component). Analysis shall be performed according to NIOSH Method 7400.
- Visual inspection of the containment. The NIH IH will visually inspect the containment at the end of the abatement to verify that all asbestos has been removed and surfaces are thoroughly cleaned. The abatement contractor shall not proceed with encapsulation until the NIH IH has confirmed that all surfaces are clean and free of dust and debris.

### **3. Post Abatement Sampling**

**The current protocol requires the abatement contractor's IH to collect phase contract microscopy clearance air samples.**

Under the new policy, the NIH IH will perform clearance air sampling on all Class I and Class II asbestos abatement projects. Sampling and analysis methodology of these samples will be conducted as described below. The enclosures or critical barriers will not be disassembled until approved to do so by NIH IH.

- **NESHAP Projects:** Transmission Electron Microscopy (TEM) analysis will be used for all NESHAP abatement projects. This method includes agitating containment surfaces with a leaf blower for at least 30-minutes prior to collecting the air samples. The abatement contractor will provide both the fan and leaf blower. The TEM samples will be analyzed by a National Voluntary Laboratory Accreditation Program certified laboratory using the protocol outlined in the U.S.

EPA Asbestos Hazard and Emergency Response Act rules in 40 CFR Part 763, including the application of the "Z" test. The worksite shall be re-cleaned and air sampling repeated if the measured asbestos fiber concentration exceeds 70 s/mm<sup>2</sup>.

**NOTE: TEM samples require a 24-Hour turn-around time. Abatement contractors should incorporate this into their schedules.**

- **Non-NESHAP Projects:** Projects involving less than 160 linear feet or 260 square feet of regulated asbestos-containing materials may be cleared using the Phase Contrast Microscopy method approved by Code of Maryland Regulations 26.11.21.06. One air sample will be collected per room and at least one sample will be collected for every 50,000 cubic feet or 5,000 square feet of floor area, whichever requires more samples. The worksite shall be re-cleaned and re-tested if the measured asbestos concentration exceeds 0.1 f/cc. A minimum of 2 samples will be collected in any containment.

**NOTE:** The abatement contractor shall be responsible for all re-cleaning costs. The NIH shall be reimbursed for laboratory fees incurred for additional clearance sampling and analysis.