

Asbestos Program Update

Volume 4, Issue 1

Ohio Department of Health

Spring 2003

Featured Topic Discussion:

Visual Inspections Prior To Final Air Clearance

By: Joshua Koch, R.S.

(Major contributions in research by David Holston, R.S.)

The Ohio Department of Health (ODH) has found numerous asbestos projects where inadequate or nonexistent visual inspections prior to final air clearance have resulted in public health emergencies. Ohio Administrative Code (OAC) 3701-34-03(I) defines a public health emergency (PHE) as any visible emission of asbestos-containing materials during the course of an abatement activity. A PHE includes, but is not limited to, unauthorized dry removal of asbestos, asbestos abatement activities without engineering controls or contained work area, breaching of contained work area, or **visible asbestos-containing dusts or debris outside the contained work area** (most frequently cited PHE by ODH).

A common perception by certified individuals is they are being hired to only conduct final air clearance, not to conduct a visual inspection of the work area. However, as discussed in this article, the activity of conducting a visual inspection prior to final air clearance is required and described throughout several regulations.

A major area of concern when dealing with visual inspections and final air clearance is the question of what procedures are required and what are recommended. When dealing with public / private schools (K-12), there is little argument about what is required. Mandatory and non-mandatory methods for transmission electron microscopy (TEM) analysis are clearly presented in the Asbestos Hazard Emergency Response Act (40 C.F.R. Part 763, Subpart E, Appendix A).

The mandatory method stipulates that *"After the area has passed a*

continued on page 2

INSIDE THIS ISSUE

- 1 Featured Topic Discussion: Visual Inspections Prior To Final Air Clearance
- 1 Asbestos Program 2002 Statistics
- 3 Industry Update
- 3 Enforcement Alley
- 4 Application Questions & Answers
- 4 What's Going on With...

Asbestos Program 2002 Statistics

Training

Approved Training Courses:

As of December 31, 2002, there were 69 ODH approved training courses provided by 18 different training course providers. The following is a breakdown showing the number of approved courses per category:

Course	Initial	Refresher
Abatement Specialist	11	13
Abatement Worker	12	14
Evaluation Specialist	5	6
Project Designer	3	4
Air-Monitoring Technician	1	--

Notifications:

In 2002, the ODH received 696 Asbestos Training Course Notifications. There were 186 cancelled notifications. The following is a breakdown showing the number of notifications and cancellations per category:

Course (I=Initial / R=Refresher)	Notified	Cancelled	% Cancelled
Abatement Specialist (I)	65	30	46%
Abatement Specialist (R)	191	42	22%
Abatement Worker (I)	62	26	42%
Abatement Worker (R)	161	44	27%
Evaluation Specialist (I)	31	8	26%
Evaluation Specialist (R)	125	16	13%
Project Designer (I)	12	10	83%
Project Designer (R)	46	10	22%
Air-Monitoring Technician	3	0	0%

Students:

The ODH found there were approximately 4,600 students who successfully completed approved training in Ohio during 2002. The following table is a breakdown showing the number of students per training course:

Course	Initial	Refresher
Abatement Specialist	341	1486
Abatement Worker	410	1011
Evaluation Specialist	147	985
Project Designer	7	208
Air-Monitoring Technician	12	--
TOTAL =	917	3690

continued on page 3

Ohio Department of Health | (614) 466-0061...phone
246 N. High Street | (614) 752-4157...fax
Columbus, Ohio 43215 | www.odh.state.oh.us

continued from page 1

thorough inspection, use aggressive sampling conditions to dislodge any remaining dust (II.B.15).” The mandatory method also states that “the final plastic barrier around the abatement area remain in place for the sampling period (II.B.14).” The importance of these steps under the mandatory method is reinforced in the non-mandatory section of the Appendix. The non-mandatory method says to “conduct final clearance sampling only after the primary containment barriers have been removed, the abatement area has been thoroughly dried, and it has passed visual inspection tests by qualified personnel (III.B.7.a).” The non-mandatory method also states that “containment barriers over windows, doors, and air passageways must remain in place until the TEM clearance sampling and analysis is completed and results meet clearance test criteria. The final plastic barrier remains in place for the sampling period (III.B.7.b).”

A “final plastic barrier” is equivalent to what is commonly referred to as a “critical barrier” in the asbestos abatement industry. Polyethylene sheeting erected to protect walls and floors is not considered the “final plastic barrier” but rather the “primary barrier” and should be removed prior to the visual inspection and final air clearance.

This procedure is reinforced in the United States Environmental Protection Agency’s (U.S. EPA) “Guidance for Controlling Asbestos-Containing Materials in Buildings” (EPA 560/5-85-024, June 1985), commonly referred to as the “Purple Book”. The Purple Book discusses such issues as visual inspection and air testing. The visual inspection section (6.4.1) discusses the purpose and importance of a visual inspection as well as suggests several inspection techniques:

- Next, the inspector should determine that the work site has been adequately cleaned. Any activity that disturbs ACM will release fibers. Therefore, work site cleanup after removal, repair, enclosure, or encapsulation is critical.
- Examine all surfaces for dust and debris, especially overhead areas like tops of suspended light fixtures. Use a damp cloth to collect dust from these surfaces and then inspect the cloth for evidence of dust. This is a practical way to establish that the “no dust” requirement has been met.
- A more sensitive test for dust is to darken the room and shine a flashlight so that the beam just glances any smooth horizontal surface. Run your finger across the illuminated area. If a line is left on the surface, or if airborne particles shine in the light, dust is still present.
- If dust is found by either of the two tests, the entire work area should be re-cleaned and the tests repeated.

The air testing section (6.4.2) stipulates that air monitoring be conducted only after the site has passed visual inspection and indicates that the preliminary step should be to: *“First, remove all plastic sheets covering floors, walls, and other surfaces. (The plastic barriers separating the site from the rest of the building and the plastic sheets covering doors, vents, and windows should be left in place until the air test has been passed.) If negative pressure ventilation system was used during abatement, it should continue operating while air monitoring is in progress.”*

ASTM International, formerly known as the American Society for Testing and Materials (ASTM), provides standards that are accepted and used in industry and may serve as the basis for

regulatory activities. ASTM has established recommended guidelines for visual inspections (“Standard Practice for Visual Inspection of Asbestos Abatement Projects” ASTM-E-1368). The scope within the ASTM standard includes specific procedures for *evaluating the completeness of the abatement and the cleanliness of the work area prior to, and subsequent to, final air testing for clearance as well as criteria for certifying work as complete on the basis of the visual inspections.*

Key citations in the ASTM standard include: *“Completeness of Clean-up...Final air samples for clearance and re-occupancy shall not be taken until the visual inspection for completeness of clean-up is passed (5.2.1.4)”* and *“This inspection should occur prior to clearance sampling and should be performed with all the seals on windows, doors, and vents intact and the isolation barriers separating the work area from the adjacent areas in place (9.4.5.7).”* The importance of passing a completed visual inspection prior to final air clearance is stressed several times throughout the ASTM standard.

Some individuals may argue the methods prescribed in Appendix A of AHERA are only required for schools and that the EPA “Purple Book” and the ASTM “Standard Practice for Visual Inspection of Asbestos Abatement Projects” are just recommended protocols. However, the industry relies quite heavily on the principle of “state-of-the-art” work practices. State-of-the-art is defined as “the highest level of development, as of a device, technique, or science, achieved at a given time” (Webster’s II New College Dictionary, 1999). The majority of the asbestos industry considers the methods prescribed in AHERA, the EPA “Purple Book”, and the ASTM Standards as being state-of-the-art. Imagine the difficulty of trying to defend, in a court of law, procedures that are not considered state-of-the-art.

All this being said, remember that in order to perform clearance air sampling in Ohio, an individual must be certified as an air-monitoring technician (AMT) or an asbestos hazard evaluation specialist (AHES), unless he or she is a certified industrial hygienist or an industrial-hygienist-in-training [OAC 3701-34-02(E)]. Standards of conduct prescribed in the OAC for both the AMT and AHES include (1) conducting a final inspection of any contained work area to ensure all asbestos debris has been adequately cleaned up prior to the performance of clearance air sampling [OAC 3701-34-06(C)(3) and 3701-34-10(C)(2)] and (2) conducting air-monitoring in compliance with all applicable federal, state and local regulations and state-of-the-art asbestos air sampling methodologies [OAC 3701-34-06(C)(2) and 3701-34-10(C)(1)]. In addition, OAC 3701-34-11(A)(2)(b) states *“All clearance air-sampling to be analyzed by Transmission Electron Microscopy (TEM) shall be conducted in accordance with the regulations established by the United States environmental protection agency, 40 C.F.R. Part 763, Subpart E, Appendix A.”*

If a certified individual is not performing final visual inspections and air clearance methodologies in accordance with required procedures as well as recommended (state-of-the-art) procedures, then the individual could be subjected to enforcement based on violation of duties prescribed under Chapter 3701-34 of the OAC. In an effort to curb problems being observed around the State regarding visual inspections and final air clearance, ODH is strongly encouraging approved training course providers to reinforce proper visual inspection and final air clearance procedures, especially during AHES refresher training courses.

continued from page 1

Contractors

Notifications:

There were 121 contractors who notified for a total of 2,232 projects in 2002. The following is a breakdown showing the top ten contractors in regards to number of notifications:

Rank	Contractor	# Notifications
1	Precision Environmental Company	181
2	Cardinal Environmental Services, Inc.	151
3	Central Insulation Systems, Inc.	104
3	Lepi Enterprises, Inc.	104
5	GCS Industrial Services, Ltd.	101
6	Rainbow Environmental Services, Inc.	100
7	American Services Group, Inc.	86
8	Pioneer Environmental Services, Inc.	77
9	AHC, Inc.	67
10	Premium Air, Inc.	64

INDUSTRY UPDATE...

ODH conducted a records request in which sign-in sheets for all training conducted in 2002 were obtained. Upon review of the records, ODH discovered several instances in which training course providers failed to properly revise or cancel their original notifications. Adherence to the notification procedures is important to ODH staff that may be planning to audit a training course and for maintaining accurate public records. The 2001 revised memorandum titled "Final Procedures for Completing Prior Notification for Asbestos Training Course" can be obtained from the ODH website at www.odh.state.oh.us/ODHPrograms/ASBES1/asbmem.htm



Floor tile considered intact? Friable?

Ohio Administrative Code 3701-34-07(3)(a) requires that the student's name and social security number (SSN) be included on the training course certificate. ODH is aware that a growing number of students are refusing to have their SSN listed on their certificate. In the future, if a student refuses to have a SSN appear on a certificate, the training provider must clearly indicate the student's choice on the certificate. This may be done by either indicating **XXX-XX-XXXX** or **XXX-XX-1235 (last four digits of SSN)** in the place where the SSN would normally appear and by including a statement that the **student refused to have the SSN appear on the certificate.**

ENFORCEMENT ALLEY:

(Finalized cases since April 2002)

ABATEMENT CONTRACTOR

LICENSE REVOKED

The ODH revoked the license held by Genesis VII of Wayne, Michigan based on violations of Ohio Revised Code (R.C.) 3710 and Ohio Administrative Code (OAC) 3701-34. Representatives from ODH, OSHA, and OEPA observed violations of various state and federal asbestos laws and regulations including the creation of multiple public health emergencies (asbestos-containing dust and debris outside the work area and unauthorized dry removal). Additional observations included glovebag operations on hot pipes (pipes were so hot that proper cleaning had not occurred), asbestos-containing debris was found on the floor beneath pipes where removal had occurred, warning signs were not properly posted and the employees were not using the decontamination area.

SETTLEMENT AGREEMENT

The ODH reached an agreement with Hazard Management Group (HMG) of Ashtabula, Ohio for violations of R.C. 3710 and OAC 3701-34. HMG created multiple public health emergencies (asbestos-containing dust or debris outside the contained work area). HMG agreed to have all asbestos hazard abatement specialists and the company owner attend remedial training, submit asbestos hazard abatement notifications and project designs for the next six friable and non-friable projects (regardless of size) and pay a \$2,000 fine.

SETTLEMENT AGREEMENT

The ODH reached an agreement with DJ Abatement of North Royalton, Ohio for violations of R.C. 3710 and OAC 3701-34. DJ Abatement created multiple public health emergencies (asbestos-containing dust or debris outside the contained work area). Jaser Ali of DJ Abatement, agreed to attend an initial asbestos hazard abatement project designer training course, become certified as an asbestos hazard abatement project designer, submit asbestos hazard abatement notifications for the next five friable and non-friable projects (regardless of size), submit to the ODH project designs for the next six notified projects, and pay a \$2,400 fine.

SETTLEMENT AGREEMENT

The ODH reached an agreement with Arick's Environmental Management Services, Inc. (AEMS) of Warrensville Heights, Ohio for violations of R.C. 3710 and OAC 3701-34. AEMS created multiple public health emergencies (asbestos-containing dust or debris outside the contained work area and unauthorized dry removal). AEMS agreed to have all asbestos hazard abatement specialists, abatement workers, and the company owner attend an eight hour remedial training session, submit asbestos hazard abatement notifications and written descriptions of how each asbestos hazard abatement project will be conducted for the next twenty friable and non-friable projects (regardless of size) and pay a \$5,000 fine.

EVALUATION SPECIALIST

NOTICE OF WARNING

The ODH sent a Notice of Warning to Eric Snyder of B & P Wrecking Company of Toledo, Ohio based on violation of OAC 3701-34. The warning was issued based on a determination that he did not accurately, truthfully and competently perform inspections. Mr. Snyder had completed two inspections for asbestos-containing materials for NESHAP compliance. After investigation, suspect

continued on page 4

APPLICATION QUESTIONS AND ANSWERS

Q: Does my application for certification have to be typed?

A: No. Although the application states that the information must be typed, ODH will accept applications that are hand-written as long as the information is legible.

Q: Why was my ODH card sent to my employer's address instead of my home address?

A: ODH worker cards are sent to the worker's home address unless stated otherwise on the application. Every other certification card (i.e. Abatement Specialist) is sent to the employer's address unless stated otherwise on the application.

Q: Can I obtain an ODH Worker card with Contractor/ Supervisor training?

A: Yes. But you must remember to take the Contractor/ Supervisor refresher training course on an annual basis. You may not switch over and begin taking Worker refresher training.

Q: Does the application have to be notarized?

A: Yes.

Q: My Abatement Specialist and Evaluation Specialist certifications are due to be renewed around the same time. Can I submit one application with both categories checked?

A: No. A separate application must be submitted for each desired category.

Q: I just realized my certification expires tomorrow, can I fax a copy of the application to ODH for approval today?

A: No. ODH must have the original signed application for certification approval (along with the appropriate fee and training certificates).

Q: I was convicted of a DUI last year. Does that mean I have to answer "yes" to question # 12?

A: No. Question # 12 refers to if an individual has been convicted of a felony [designated to protect the environment](#).

Q: If I bring my application and fee to the ODH office, can I leave the same day with my certification card?

A: No. It takes approximately two weeks for an application to make its way through the approval process. ODH does not have same-day service!

continued from page 3

asbestos-containing materials were not identified and inspections that were claimed to have been done were actually not completed.

CERTIFICATION REVOKED

The ODH revoked the certification held by John Murphy of Monit-Air, Bolivar, Ohio based on failure to meet the terms of his Settlement Agreement with the ODH.

OTHER TYPES OF ENFORCEMENT

The Asbestos Program participated in execution of a Federal Search Warrant in cooperation with the U.S. EPA-Criminal Investigation Division, Ohio EPA-Special Investigations Unit and the Ohio Attorney General-Bureau of Criminal Investigation at a building in Marion, Ohio known as the "Kresge Building." After the inspection, the ODH issued a Public Health Emergency Order. The Order required the building owner to immediately hire certified individuals and licensed companies to inspect, design and abate the asbestos hazards in the building.

The ODH and OEPA conducted a joint complaint investigation at the Blue Cat Building in Bellefontaine, Ohio. It was discovered that uncertified persons had removed asbestos-containing pipe insulation. Prior to a Public Health Emergency Order being written, the owner of the building hired a licensed asbestos hazard abatement contractor to conduct abatement.

The ODH conducted a complaint inspection at an apartment building in Cincinnati, Ohio. Upon inspection, ODH identified that Trinity Cleaners of North Bend, Ohio had removed asbestos to install a new furnace. A licensed asbestos hazard abatement contractor was hired to decontaminate the apartment building. Trinity Cleaners was issued a citation by OSHA for violations of the asbestos construction standard.

WHAT'S GOING ON WITH...

LIBBY, MT?

The U.S. EPA, Region 8 has provided a website for information on the Libby, MT cleanup. The website can be found at:

<http://www.epa.gov/region8/superfund/libby/lbybkqd.html>

WORLD TRADE CENTER (WTC)?

The U.S. EPA has developed a website to detail EPA's response to the tragedies at the WTC and Pentagon sites.

The website can be found at: <http://www.epa.gov/wtc/>

SENATOR MURRAY'S ASBESTOS BAN LEGISLATION?

On June 18, 2002, Senator Murray (D-Wash) introduced the **Ban Asbestos in America Act S.2641**. The proposed legislation would (1) ban the six regulated forms of asbestos (what EPA tried to do in 1989), (2) require a public education campaign, (3) require additional research (medical), (4) require a study on asbestos-containing products and contaminant-asbestos products, and (5) require EPA to convene a Blue Ribbon Panel. Senator Murray's website detailing her campaign on asbestos can be found at:

<http://murray.senate.gov/asbestos.html>