ADVISORY NO. 3.5: DISPOSAL OF ASBESTOS CONTAMINATED WASTE MATERIALS

INTRODUCTION
Procedures for proper disposal of asbestos-containing wastes involves proper isolation, collection and packaging. The asbestos-containing waste must be kept wet during each step of the procedure to prevent fiber release into the air. Landfilling is the recommended disposal method because asbestos fibers are virtually immobile in soil. The landfill must be an EPA approved landfill. The EPA has established asbestos disposal requirements for active and inactive disposal sites under NESHAPS (40 CFR Part 61, Subpart M) (www.epa.gov/opptintr/asbestos.htm).

COLLECTION
All asbestos waste collecting and packaging procedures shall be done in the asbestos abatement area by workers wearing full protective equipment. This includes a full-body disposable suit and air-purifying respirator with the appropriate asbestos filter cartridges.

All asbestos waste shall be kept wet during the collection and packaging procedure. The waste shall be collected in 6-mil polyethylene bags, which are airtight and puncture resistant. The bags must be labeled with the required OSHA statement:

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD

If the abatement job is a conventional removal job requiring a full containment area, the following procedures should be followed. All asbestos-containing waste materials shall be bagged inside the removal containment area. Any waste materials with sharp edges such as floor, wall or ceiling tiles should not be placed in the bag. These items should be neatly stacked together. Then each stack is wrapped in 2 layers of 6-mil polyethylene.

A bag is considered “full” when it is half filled because the waste material will be much heavier since it is saturated with water. Before the bag is sealed any excess air should be squeezed out of it. The bag is sealed by twisting the top closed, folding this over and sealing with duct tape. The outside of the bag should be wet wiped or HEPA-vacuumed before it is moved from the abatement area to the decontamination area. Once in the decontamination area, the bag should be placed into a second 6-mil polyethylene bag. Disposable suits, respirator cartridges and other disposable protective equipment should be placed in this bag and the bag should be closed the same way as stated above. The bags are then placed into fiber drums with locking rims. The drum must then be labeled with the above listed OSHA warning label.

If the abatement job is a glove bag removal the following procedure should be followed. With the glove bag still on the pipe and the removed insulation in the bottom of the bag, the bag should be twisted several times and taped shut with duct tape. A 6-mil polyethylene bag can then be slipped over the glove bag, the tape removed and the top of the glove bag folded down into the disposal bag. Disposable suits are then removed and placed in the disposal bag. The top of the bag should be twisted closed, folded over and taped shut with duct tape. The sealed bags are then placed in fiber drums with locking rims. The fiber drum must be labeled with the above listed OSHA warning label. When a drum is filled, the lid or rim should be locked into place.

TRANSPORTATION
Before the asbestos waste containers are transported to the disposal site, they must be properly...
labeled according to DOT specifications. In addition to the above listed OSHA warning label, the DOT requires that all containers having more than one pound of asbestos waste be labeled as follows:

**RQ HAZARDOUS SUBSTANCE**

**SOLID N.O.S.**

**ORM-E NA 9188**

**(ASBESTOS)**

The vehicle used to transport containerized asbestos waste must have an enclosed carrying compartment. To assure that the vehicle is properly enclosed in case of container breakage, the floor of the carrying compartment shall be covered with 2 layers of 6-mil polyethylene. Duct tape should be used to properly secure the sheets.

The drums shall be loaded into the transportation vehicle by workers wearing air-purifying respirators and appropriate protective clothing. Drums should be placed on level surfaces in the cargo area and packed tightly together to prevent shifting and tipping. When all the drums are loaded, a layer of 6-mil polyethylene should be used to cover them. This can be fastened down with duct tape.

A chain-of-custody form or waste manifest must accompany the waste shipment. This form must include the name and address of the generator, the name and address of the disposal site, the estimated quantity of asbestos waste, types of containers used, and the destination of the waste.

**DISPOSAL**

Disposable must occur at an authorized disposal site in accordance with the regulatory requirements of NESHAP (National Emission Standard for Hazardous Air Pollutants). Appendix A lists disposal sites in Ohio which are authorized to accept asbestos wastes. The landfill site must be notified in advance of any shipment so a disposal site can be prepared.

Personnel off-loading the waste containers shall wear air-purifying respirators and appropriate protective clothing. The drums should be unloaded and placed in the prepared disposal site. The polyethylene sheeting should be removed and discarded along with personal protective equipment. The complete off-loading and disposal procedure must comply with EPA's requirements of "no visible emissions" to the air during the process. At the end of each working day or within 24 hours, the disposal site must then cover all asbestos-containing waste material with at least 6 inches of compacted non-asbestos-containing soil or a dust-suppressing chemical.
APPENDIX A

OHIO NESHAP ASBESTOS DISPOSAL SITES

This is a list of the acceptable disposal sites for asbestos wastes generated under the National Emission Standards for Hazardous Air Pollutants regulations. Disposal sites marked with an asterisk (*) are authorized to accept asbestos on an interim basis, until an Ohio EPA permit has been issued. The Ohio EPA recommends that a disposal site be contacted well in advance of any disposal to ascertain the specific requirements or procedures for that site.

NORTHEASTERN OHIO

Mahoning County
   CLD/Salem Sanitary Landfill (BFI)
   530 Glenwood Avenue
   Youngstown, OH  44502
   Contact:  Browning-Ferris Industries
             (216) 747-4433

   Central Wastes, Inc.
   2240 South Union Avenue
   Alliance, OH  44601
   Contact:  (216) 821-1334

Stark County:
   Breitenstine Landfill
   7916 Chapel Street, S.E.
   Waynesburg, OH  44688
   Contact:  Leroy Breitenstine
             (216) 866-3265

NORTHWESTERN OHIO

Lucas County
   EnviroSafe Services of Ohio, Inc.
   (formerly:  Fondessy Enterprises Landfill)
   876 Otter Creek Road
   P.O. Box 167571
   Oregon, OH 43616
   Contact:  Ken Humphrey
             (419) 726-1521

Wood County
   Evergreen Landfill
   2625 East Broadway
   Northwood, OH  43619
   Contact:  Tony Barbush
             (419) 666-5136

CENTRAL OHIO

Franklin County
   Franklin County Landfill
   3851 London Groveport Road
Grove City, OH  43123  
Contact:  Jim Mentel  
(614) 871-9528  
NOTE: Accepts Franklin Country wastes ONLY

Fairfield County  
Fairfield Sanitary Landfill  
10110 Hedge Road  
Amanda, OH 43102  
Contact:  Jim Wickham  
(614) 969-4757

Knox County  
Knox County Landfill  
(formerly: Central Ohio Landfill, Inc.)  
Route 5, Thayer Road, Box 580  
Mt. Vernon, OH 43050  
Contact:  Bill Tharp  
(614) 397-8046

Licking County  
Suburban Landfill  
P.O. Box 17  
Brownsville, OH 43721  
Contact:  Tony Furgiuele  
(614) 787-2327

SOUTHEASTERN OHIO  
Athens County  
Athens-Hocking Reclamation Center  
31392 Bowland Derr Road  
Logan, OH 43138  
Contact:  Edward Kilbarger  
(614) 385-6019

Brown County  
Rumpke Landfill  
9346 Sun Shine Road  
Georgetown, OH  45121  
Contact:  (513) 851-0122

Lawrence County:  
Hanging Rock Landfill  
State Route 650  
Hanging Rock, OH  
Contact:  William Dickens  
(614) 532-9197

Pike County  
Pike Sanitation Company  
State Route 220  
Waverly, OH 45690  
Contact:  Mike Migyanko  
(614) 947-4200
Martin Marietta Landfill  
U.S. Route 23 South  
Piketon, OH 45661  
Contact: Susan Lestrange  
(615) 576-6821  

NOTE: Not a commercial landfill

Washington County  
Duck Creek Sanitary Landfill (BFI)  
State Route 26  
Piketon, OH 45750  
Contact: Gary Brotherton  
(616) 792-3852

SOUTHWESTERN OHIO

Butler County  
Bobmeyer Landfill (BFI)  
2841 Bobmeyer Road  
Fairfield, OH 45014  
Contact: Bryan Slade  
(513) 771-4200  

City of Middletown Sanitary Landfill  
3500 Terry Drive  
Middletown, OH 45042  
Contact: Dave Schul  
(513) 425-7835  

Schlichter Landfill  
2601 Hamilton-Cleves Road  
Hamilton, OH  
Contact: Oscar Schlichter

Hamilton County  
Rumpke Sanitary Landfill  
10795 Hughes Road  
Cincinnati, OH 45247  
Contact: Bill Rumpke  
(513) 851-0122

Montgomery County:  
Pinnacle Road Landfill  
4220 Pinnacle Road  
Dayton, OH 45449  
Contact: Ruth Schutz  
(513) 263-3501

Warren County:  
Bigfoot Run Landfill (BFI)  
11563 Mosteller Road  
Cincinnati, OH 45241  
Contact: Bob Case  
(513) 771-4200