

## **SYNOPSIS OF APPLICABLE ASBESTOS REGULATIONS FOR DEMOLITION WORK**

**U.S. Environmental Protection Agency (EPA)** mandates, through their National Emissions Standards for Hazardous Air Pollutants (NESHAP), that Regulated Asbestos-Containing Materials (ACM) be removed prior to start of demolition work. Ohio Environmental Protection Agency (Ohio EPA) administers asbestos NESHAP regulations in Ohio through their Asbestos Emission Control Program Rules. EPA and Ohio EPA regulations distinguish between three types of ACM:

- Friable ACM which is defined as material that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. Examples of friable ACM include acoustical plaster, fireproofing, and many insulation products;
- Category I nonfriable ACM which includes asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products; and
- Category II nonfriable ACM which includes all other nonfriable ACM. Category II nonfriable ACM includes, but is not limited to: hard plaster systems, gypsum board systems, mastics, cement board, etc.

EPA and Ohio EPA regulations further distinguish between Regulated ACM, those ACM that need to be removed prior to demolition, and Non-Regulated ACM, those materials that do not need to be removed prior to demolition. Regulated ACM is defined as:

- Friable ACM or Category I nonfriable ACM that has become friable;
- Category I nonfriable ACM that is in poor condition;
- Category I nonfriable ACM that is subjected to sanding, grinding, cutting or abrading activities; and
- Category II nonfriable ACM that is subjected to forces during demolition operations that have a high probability of crumbling, pulverizing, or reducing the material to powder.

If Category I and II nonfriable ACMs do not have a high probability of becoming Regulated ACM, then they need not be removed prior to demolition work where standard demolition procedures and equipment are utilized (i.e., wrecking ball and cranes, bulldozer wrecking, explosions/implosions, heavy equipment loading and materials handling, etc.).

Note that EPA and Ohio EPA regulations require the removal of all ACM (or portion thereof as appropriate) in the following situations:

- Facility or any of its demolished components will be intentionally burned;
- Materials will be salvaged, subjected to waste consolidation, or disturbed during recycling efforts (e.g., floor tiles, carpet, and windows); or
- Materials will be sold prior to demolition (e.g., auctions).

Under NESHAP, if quantity of Regulated ACM associated with demolition work of any given project exceeds EPA's threshold amounts (260 linear feet, 160 square feet, or 35 cubic feet) then Regulated ACM must be removed prior to demolition and disposed at an EPA-approved landfill. Additionally, EPA must be notified at least two weeks in advance of commencement of abatement work (if necessary) and demolition work; presence and quantity of ACM that will be removed or remain in the facility during abatement or demolition operations must be recorded on this Notification. Demolition debris which includes non-regulated ACM must be disposed in a landfill permitted to accept ACM.

U.S. Department of Labor's **Occupational Safety and Health Administration (OSHA)** Standards require implementation of appropriate engineering controls and work practices for demolition work where ACM is present. These controls and practices include, but are not limited to: specific methods for removal of each type of ACM; asbestos exposure monitoring;

appropriate personal protective equipment; hygiene facilities; and proper containerization and disposal of asbestos waste.

**Ohio Department of Health (ODH)** regulations require that credentialed and licensed personnel be used for asbestos-related work (inspection design, abatement supervision, air monitoring, abatement work, etc.). If quantity of ACM to be removed as part of any given project exceeds ODH's threshold amounts (50 linear feet or 50 square feet of friable ACM or nonfriable ACM that will become friable), then ODH must be notified of such work at least two weeks in advance of its commencement.

Under EPA, Ohio EPA, OSHA and ODH Regulations, ACM is defined as materials containing greater than 1% asbestos (using appropriate laboratory analysis). Note that while materials containing less than or equal to 1% asbestos are not ACM, OSHA regulates disturbance of such materials as follows: use of a competent person; air monitoring of employee exposures; use of wet methods; prompt clean-up and proper containerization of waste; proper training and use of PPE when exposure monitoring shows that permissible exposure limit is exceeded; record keeping; etc. Additionally, although EPA does not regulate materials containing less than or equal to 1% asbestos, they recommend that these materials not be subject to methods which will sand, grind or abrade them.

Facility owners have certain responsibilities under OSHA and EPA regulations; these include, but are not limited to:

- Determine presence, location and quantity of ACM prior to disturbing these materials (e.g., maintenance and renovation or demolition activities);
- Notify the following persons of the presence, locations and quantity of ACM: prospective employers applying or bidding for work whose employees will work in or adjacent to areas containing ACM; employees of Owner who work in or adjacent to areas with ACM; and tenants who will occupy areas with ACM;
- Post signage at entrances to mechanical rooms/areas which provide identification and location of ACM as well as appropriate work practices to ensure that such ACM will not be disturbed, and if a school (K-12), label all ACM in routine maintenance areas;
- If a school (K-12), notify workers, building occupants, and legal guardians yearly about inspections, response actions, etc.;
- Provide proper training for employees who contact or disturb ACM; and
- Maintain records of inspections, notifications, training, medical surveillance, exposure measurements, and abatement work.

NESHAP, OSHA, and ODH Regulations require proper inspections (such as AHERA format) to identify ACM (or presumption that suspect materials are ACM) prior to demolition work. A copy of the Report of Findings of Inspection for Asbestos-Containing Materials should be kept on Site during abatement and demolition work.

*Note that this document has been prepared for guidance purposes only. Although Gandee & Associates, Inc. strives to provide accurate, complete and useful information, this document is not intended to cover all regulatory issues, interpretations or requirements applicable to the subject. Neither Gandee & Associates, Inc. nor any person contributing to the preparation of this document make any warranties, guarantees, or representations (express or implied) with respect to usefulness or effectiveness of information disclosed in this document or assume any liability for the use of or for any damages arising from the use of information disclosed in this document. User should review applicable regulations prior to starting any work which will disturb asbestos-containing materials.*