



Minnesota
Pollution
Control
Agency

Metro District,
Regular
Facilities
Section

Guidance for the Removal, Transport, and Disposal of Category I Asbestos-Containing Materials

Air Quality/Asbestos Program/#4.04/December 2000

This document offers guidance on the removal, transport, and disposal of Category I Asbestos-Containing Materials (ACM) as defined by the asbestos National Emission Standards for Hazardous Air Pollutants (asbestos NESHAP), 40 Code of Federal Regulations (CFR) pt. 61, subp. M, which has been incorporated into Minn. R. 7011.9920.

What is Category I ACM

Category I ACM consists of asbestos-containing gaskets, resilient floor coverings (including vinyl asbestos tile and linoleum), and asphalt roofing products that contain greater than one percent asbestos using the method described in appendix A, subpart F, 40 CFR Part 763, section 1, Polarized Light Microscopy.

When does the Asbestos Neshap Apply

Category I ACM is regulated by the asbestos NESHAP if it is or will become friable due to the forces expected to act on it. Friable ACM is any ACM that can be crushed, crumbled, pulverized, or reduced to powder by hand pressure when dry. Also, any sanding, cutting, grinding, abrading, or intentional burning of Category I ACM will render the ACM regulated.

Category I ACM that is subjected to forces or removal methods that would crush, crumble, pulverize, or reduce the Category I ACM to a powder by sanding, cutting, grinding, or abrading, including the use of mechanical chippers, is considered

Regulated Asbestos-Containing Material (RACM) and therefore, must be removed by licensed asbestos abatement contractors using specific work practice controls.

If any of the demolition materials are to be recycled it is necessary to remove any Category I ACM that may be present. The recycling process could result in previously nonfriable Category I ACM becoming crushed, crumbled, or reduced to a powder. If the Category I ACM is not removed prior to demolition then the building materials containing, mixed in with, or coated with Category I ACM may not be used for recycle.

Removal of Category I ACM

The first consideration in your renovation must be the determination of what materials are present that contain asbestos. Certain building materials have been known to contain asbestos (i.e. 9"X 9" floor tiles), but others must be tested to determine if the material contains asbestos. Once you have identified a Category I ACM in your renovation, the next consideration is the method of removal. If the removal involves quantities greater than 160 square feet, then the following procedures must be followed:

- A) Friable ACM must be removed by licensed asbestos removal contractors. Category I ACM that is able to be crushed or crumbled by hand pressure is friable. This determination must be made prior to any other regarding the





removal of the Category I ACM. The Minnesota Pollution Control Agency (MPCA) and the U.S. Environmental Protection Agency maintain that in most cases the asbestos-containing paper backing of a linoleum product is considered to be friable material. If you elect to remove *nonfriable* Category I ACM the removal must be done in such a manner that it does not cause the Category I ACM to be crushed, crumbled, pulverized, or reduced to powder or subject the ACM to any sanding, cutting, grinding, or abrading rendering the Category I ACM to become RACM. Examples of removal methods that would render the Category I ACM to RACM are shot blasting, mechanical chipping, intentional burning, or specific grinding, sanding, cutting, or abrading.

- B) Nonfriable Category I ACM that is removed by hand tools and not subject to extensive breakage may be removed by nonlicensed contractors. The removal must be careful to keep the Category I ACM as intact as possible. For example, the use of solvents, heat machines, or dry ice to loosen Category I ACM nonfriable floor tiles are examples of removal methods that are not likely to cause the Category I ACM to become RACM.
- C) The MPCA reminds you that asbestos removal projects may be subject to other applicable rules and regulations regarding asbestos removal and disposal. Removal of asbestos is also governed by:
 - 1) 29 CFR Parts 1910 et. al., Occupational Safety and Health Administration (OSHA) laws; and
 - 2) Minn. R. 4620.3000 - 4620.3700, Asbestos Abatement Rules, administered by the Minnesota Department of Health. For more info call (651) 215-0900.
- D) The determination of who is allowed to remove Category I ACM is dependent on the removal method used and the quantity of ACM involved. Proceeding with an incorrect understanding of applicable rules, regulations, or standards could lead you to be out of compliance and subject you to an enforcement action that could potentially include monetary penalties.

Packaging and Transport of Category I ACM

- A) All Asbestos-Containing Waste Material (ACWM) must be adequately wet, packaged in leak-tight containers, and appropriately labeled with asbestos warning signs and waste generator labels.
- B) The MPCA recommends that all Category I ACM be packaged and transported in the same manner as RACM and reminds you that approved landfills will only accept ACWM that has been properly wetted, packaged, and manifested.
- C) Some types of Category I ACM may have sharp edges and will need to be packaged to avoid any further breakage of the ACWM or puncturing or tearing of the containers.
- D) Asbestos is considered a hazardous air pollutant and a class 9 hazardous waste. Proper labeling and transportation of ACWM includes identification of it as a class 9 hazardous waste and proper placards placed on the vehicle during the loading and unloading of ACWM.

Disposal of Asbestos-Containing Waste Material

- A) All ACWM must be disposed of at a site approved by the U.S. Environmental Protection Agency which is operated in accordance with 40 CFR § 61.154.
- B) For a complete listing of landfills currently approved to receive ACWM in Minnesota, please contact the MPCA asbestos team.

Category I ACM in Demolition Projects

Category I ACM may remain in place during normal demolition as long as the Category I ACM is nonfriable, in good condition, and will not specifically be subjected to sanding, cutting, grinding, abrading, or intentional burning. As a reminder, you are advised that all ACM other than Category I ACM cannot remain in place for demolition and must be removed prior to demolition or any activity that would break up, disturb, dislodge, or preclude access to the material.



If you have any questions regarding the classification, removal, transport, disposal, or any questions regarding asbestos rules, regulations, or standards, please feel free to contact the MPCA asbestos team at the numbers below:

(651) 296-6300

(800) 657-3864

This guidance document is not intended as a substitute for reading the rules or regulations and making your own independent determination of its applicability to your asbestos removal or demolition project. Examples in the guidance document do not represent an exhaustive listing of projects or removal methods to which the regulation might apply.

MPCA Web site: <http://www.pca.state.mn.us>