



Minnesota Pollution Control Agency

[Home](#) | [Site Index](#) | [Glossary](#) | [What's New](#) | [Ask MPCA](#) | [Visitor Center](#)

[Asbestos Program](#)

Related Pages:

[Cleanup](#)

[Waste](#)

This Web site contains PDF documents that require Adobe Acrobat for viewing.

[MPCA Home](#) > [Programs](#) > [Asbestos Program](#) > [Asbestos in the Home](#) — Commonly Asked Questions

Asbestos in the Home — Commonly Asked Questions

Asbestos may be present in many materials in your home. It may be found in older home insulations and floor coverings, and in older electrical equipment such as fuse boxes, lamp socket collars and receptacle boxes. Asbestos is hazardous if it can be crushed by hand pressure and its surface is not sealed. Without sealing its surface, small fibers may escape and enter your lungs.

- [What is asbestos and why is it a health concern?](#)
- [How can I identify asbestos?](#)
- [How do I take a sample?](#)
- [If I do find asbestos in my home, what should I do?](#)
- [What is involved in asbestos repair?](#)
- [If I suspect asbestos fibers have gotten into the air, what should I do?](#)
- [What about dealing with asbestos in major home remodeling or dismantling projects?](#)
- [What specific requirements are there for asbestos disposal?](#)
- [Where might I find asbestos in my home?](#)
- [What about lung cancer?](#)

Q. What is asbestos and why is it a health concern?

A. Asbestos is a naturally occurring mineral that separates into strong, very fine fibers. Since the fibers are heat-resistant and durable, asbestos often has been used in construction and industry. Asbestos fibers are up to 1,200 times thinner than a human hair. These fibers can float in the air for a long time and easily be breathed into the lungs. The fibers can remain in the lungs for many years and cause asbestos-related diseases. It can be 10 to 30 years after exposure before any symptoms of disease appear. **There is no known safe level of exposure to asbestos.**

Q. How can I identify asbestos?

A. Plumbers, contractors and heating specialists who work with asbestos-containing material often can tell by looking at it, whether or not a material contains asbestos. However, for most of us, the only way to identify asbestos is to have a sample of the suspect material analyzed by a laboratory. Laboratories that do this work usually can be found in the telephone yellow pages under the "Asbestos - Consulting and Testing" listing. If you think a material might contain asbestos, don't guess. Treat it as though it does contain asbestos until you have it sampled and analyzed.



cleanup work performed at sites that have buried asbestos and at sites with building demolition or renovation activity, in order to provide liability assurances.

Building Demolition

Regulations for building demolition are enforced by the MDH and the MPCA asbestos compliance programs. The VIC Program becomes involved in building demolition when the building contains hazardous substances such as asbestos and a voluntary party wishes to obtain liability assurances related to the potential release of these hazardous substances to the environment.

Prior to demolition, the voluntary party hires a licensed, asbestos abatement company to conduct a building survey to determine if potentially hazardous building materials are present. In addition to identifying asbestos-containing materials, the building survey is designed to identify other hazardous materials, such as thermostats and light bulbs containing mercury. Typically, the next step is for all hazardous materials, including the asbestos-containing materials, to be removed and properly disposed of by the abatement company. Ten working days prior to demolition, a demolition notice must be submitted with the asbestos survey report to the MPCA asbestos compliance program. MPCA inspectors conduct a building walk-through. Often, the walk-through is conducted with the VIC Program staff, who may also review the asbestos survey report. In some situations, soil sampling may be needed to determine if an asbestos release occurred at the property.

Buried Asbestos Materials

Historical Investigations

The initial investigation phase is called a "Phase I Investigation" or historical investigation. This investigation includes a review of historical documents relating to the environmental condition of a property. In most situations, the Phase I investigation is conducted by a professional environmental consultant with input from current and past property owners, and is reviewed by VIC Program staff.

Normally, this investigation phase provides clues to the possible existence of buried asbestos-containing waste materials at the property. One of the most common sources of asbestos-containing waste materials is the historical widespread practice of demolishing buildings and burying most of the materials in-place. Old utility

lines made with cement may contain asbestos. This information might be shown in old city records, building plans, or fire insurance maps. Records of buried dumps or fill material on a property also are common indications that asbestos may be present.

Field Investigations

The second investigation phase is the Phase II or field investigation. Because the field work involves the movement of soil and waste that may be contaminated, it is important that this investigation phase be conducted by a professional environmental consultant trained in health and safety concerns and environmental regulations. Environmental consultants and contractors working with MPCA-approved plans can effectively prevent mishandling of asbestos-containing waste and avoid spreading contaminated soil or waste to clean areas.

Information from the Phase I Investigation is used to determine what areas of the property will be looked at more closely for possible environmental contamination. This information is also used to determine if a certified technician should be present to monitor for asbestos. Field investigations for asbestos-containing waste materials usually involve excavation of test pits to determine if debris is buried at the property and if the debris is likely to contain asbestos.

Debris samples are submitted to a laboratory for analysis. The lab report indicates if asbestos was found, the percentage of asbestos that is present, and the type of asbestos present. Materials containing asbestos may be friable (materials with loose asbestos fibers) or non-friable (asbestos fibers bound in a matrix). The MPCA considers non-friable asbestos materials to be potentially friable, because of the crushing and abrading of these materials during demolition and burial as well as the degradation of the matrix material over time.

Once asbestos is found, contact the State Duty Officer at (651) 649-5451 or (800) 422-0798 and MPCA Asbestos Program at (651) 297-5518. They need to be notified according to the state notification of releases law (Minn. Stat. §115.061).

Buried Asbestos Cleanups

Once a property has been investigated thoroughly enough to estimate the location and volume of asbestos material, a feasibility study is conducted to determine what cleanup

A. If the area is large, close off the room or portion of the house in which the fibers may be present. Close off any passages of escape such as air ducts, windows or door drafts. Contact a trained professional or a local health authority. Samples of dust and debris as well as air samples should be taken and analyzed by a laboratory.

Q. What about dealing with asbestos in major home remodeling or dismantling projects?

A. Depending upon the amount of asbestos in your home, you may be required to notify the Minnesota Department of Health and/or MPCA before you begin any work. They will want to know the extent of the work involved and your plans for the asbestos removal and disposal.

Q. What specific requirements are there for asbestos disposal?

A. The law says that "no visible emissions" of dust are allowed during the removal, transportation, and disposal of asbestos-containing material. All asbestos waste and material used in the cleanup, including disposable clothing, filters, equipment and building materials must be disposed of as asbestos waste. The material must be in double 6-mil plastic bags, labeled as asbestos and hauled to an approved asbestos landfill in a covered vehicle and disposed of in accordance with EPA, state and local regulations. Do not place asbestos-containing materials in your household trash. The MPCA can give you the location of a landfill approved for asbestos disposal. Remember, as a homeowner, you are legally responsible for the safe disposal of the material at an approved landfill, even though you have hired someone else to do the work for you.

Q. Where might I find asbestos in my home?

A. Older wall and ceiling insulation in homes built between 1930 and 1950 are common places to find asbestos. Floor coverings, such as sheet vinyl, vinyl tile and vinyl adhesive may all contain asbestos. These materials are generally considered safe unless damaged or disturbed. Sprayed-on or trowelled-on surface material on wall and ceiling surfaces may contain asbestos. If the material is hard and firmly attached and unless it produces powder or dust by hand pressure, it shouldn't be hazardous.

Cement asbestos board (called CAB, or by the trade name Transite™ has been used as sheets for straight and lap siding and has been cut and shaped as a substitute for wood shingles. Since this material is mainly outside the home and bound in a hard material, it presents little hazard unless disturbed.

Other potential sources include older electrical equipment such as lamp socket collars, switch and receptacle boxes, fuse boxes and old-fashioned "knob and tube" wiring. You may also find asbestos in the insulation blankets of older ovens, dishwashers, freezers and water heaters. If these materials remain in place, they shouldn't pose a hazard.

Q. What about lung cancer?

A. Most cases of asbestos-related lung cancer occur among people who smoke and were exposed to asbestos. People who smoke and are exposed to asbestos have an increased risk of lung cancer **fifty to ninety times** greater than people who don't smoke and aren't exposed to asbestos.

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If you have suggestions on how we can improve this site, or if you have questions or problems, please [contact us](#).

If you have questions or problems with this Web site, contact webmaster@pca.state.mn.us

Minnesota Pollution Control Agency, 520 Lafayette Road, St. Paul, MN 55155-4194

Phone: 651-296-6300, 800-657-3864; 24-hour emergency number: 651-649-5451 or 800-422-0798; TTY: 651-282-5332,

TTY 24-hour emergency number: 651-297-5353 or 800-627-3529

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Minnesota
Pollution
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Asbestos-containing Waste Materials at Voluntary Investigation and Cleanup Sites

Cleanup/Voluntary Investigation and Cleanup/#1.01/June 2004

Majors and
Remediation
Division

This Minnesota Pollution Control Agency (MPCA) fact sheet provides an overview of the procedures for investigating and cleaning up asbestos-containing waste materials at sites in the Voluntary Investigation and Cleanup (VIC) Program.

Both federal and state laws regulate the use of asbestos and how it is handled during cleanups involving human health exposure risks. The Minnesota Department of Health (MDH) enforces regulations related to existing buildings and provides licensing and certification of asbestos abatement companies and technicians. The Minnesota Occupational Safety and Health Administration staff becomes involved when worker safety issues exist.

The MPCA enforces the federal National Emissions Standard for Hazardous Air Pollutants regulations that cover activities which may cause a release of asbestos to the environment. The MPCA's Asbestos Program enforces disposal regulations for asbestos-containing materials. Specifically, the program regulates building demolition, building renovation, and buried asbestos-containing waste materials. The MPCA's VIC Program reviews the investigation and

Materials That May Contain Asbestos

- *Insulation*
- *Fireproofing material*
- *Brake pads and linings*
- *Adhesives*
- *Fireproof fabrics*
- *Paint*
- *Filters*
- *Roofing materials*
- *Floor tile*
- *Ceiling tile*
- *Wall fire retardant (sheeting and spray-on)*
- *Wallboard*
- *Building siding*
- *Plastics*
- *Rubber*
- *Furnaces*
- *Boilers*
- *Electrical Equipment*
- *Appliances*
- *Utility pipes and pipe wrap*

What is asbestos and why is it harmful?

Asbestos is a fibrous, naturally occurring material commonly found in buried demolition debris and building materials. It continues to be used in some building materials today.

People can be exposed to asbestos primarily through inhaling airborne asbestos fibers. Less likely, but still possible, is exposure through drinking water that contains asbestos.

Asbestos is known to cause cancer in humans. Lung cancer and mesothelioma (cancer of a membrane surrounding the lungs and other organs) can be caused by inhalation of asbestos. Asbestos fibers can cause scarring of the lungs leading to a hardening of the lungs known as asbestosis. Drinking water containing asbestos may be a factor in the development of cancer of the esophagus, stomach, and intestines.

The best way to reduce exposure to asbestos is to keep asbestos fibers contained, so they cannot become airborne or reach surface water or ground water used to supply drinking water.



Licensed contractors removing asbestos waste material from a site near the University of Minnesota in Minneapolis

Q. How do I take a sample?

A. It is important that you don't release fibers into the air or on yourself when taking a sample. Spray the material with a fine mist of water first. Trying not to disturb it any more than necessary, penetrate the depth of the dampened material with a clean sample container such as a small plastic or glass vial. When you have the sample in the container, tightly seal it. Clean up any material on the outside of the container or that spilled on the floor, using a damp paper towel. Label the container with an identification number and indicate when and where you took the sample. If you suspect asbestos in several different places or in a large surface area, take several samples to ensure accuracy.

Q. If I do find asbestos in my home, what should I do?

A. Even if the asbestos-containing material in your home has deteriorated, there's a good chance that the problem can be taken care of by repair instead of removal. Removal is the last option since it involves disturbing the material and possibly sending more fibers into the air. If it is necessary to repair an asbestos-containing item or when it is necessary to remove asbestos-containing material such as ceiling finish or pipe insulation, a professional with special training in the asbestos field should be consulted. Call the Minnesota Pollution Control Agency (MPCA) at 651-297-8685 or 800-657-3864 for a list of licensed contractors. The professional should have, among other specific equipment, vacuum machines specially designed to filter out the asbestos fibers. Standard household or industrial vacuum cleaners will only scatter the fibers, making the situation worse.

Before signing a contract with an asbestos removal specialist, get references from the contractor's former customers. You also may want to check with the MPCA or the Minnesota Department of Health to see if we have received complaints about or found violations of regulations by the prospective contractor.

Q. What is involved in asbestos repair?

A. In dealing with pipe, furnace and boiler insulation, if the insulation material moves when you touch it, or the cover is no longer firm, the insulation is probably too deteriorated to repair. Call a professional.

For areas with minor damage, you can obtain commercial products from safety equipment stores to fill holes and seal damaged areas. Repair by the homeowner should only be attempted if at all, where the insulation is firm and the cover tight, with a minimum of holes or tears.

Sprayed on asbestos-containing material on walls and ceilings should not be disturbed by the homeowner. If the material hasn't been painted, a coat of "penetrating encapsulant," a thin liquid which soaks in and sets hard like a plastic, can be sprayed on with an airless sprayer to seal the surface. The encapsulant will, however, make any future removal more difficult. A bridging encapsulant, such as a light coat of latex base paint can be used if the material has previously had an encapsulant applied. Don't build up so thick a coat that the weight will increase the chances of the treated material falling. If the surface is stable and sealed, the material is considered safe until damaged.

Q. If I suspect asbestos fibers have gotten into the air, what should I do?



activities will be conducted. The feasibility study provides a review of cleanup options in order to make the best decision based on current and future property use, possible long- and short-term health effects from exposed asbestos, cleanup cost, and technical feasibility. The feasibility study takes into consideration any other environmental contaminants discovered at the property and any planned construction activities for the property. Input from the community may be requested by the MPCA at this time.

After the final cleanup option has been chosen, a Response Action Plan is prepared detailing the cleanup activities. The MPCA reviews and approves the Response Action Plan prior to the start of the cleanup activities. When asbestos-containing waste materials are excavated or exposed, the Response Action Plan includes a separate Asbestos Emission Control Plan which is reviewed by the MPCA Asbestos Program.

Cleanup Options

Generally, two types of cleanups are conducted at properties with buried asbestos materials: engineering controls with land use restrictions, and removal of the asbestos materials with disposal at a landfill. The MPCA policy regarding buried asbestos is to avoid leaving buried materials in place and, whenever reasonable, to remove and dispose of asbestos materials at a landfill. This practice reduces the number of inactive asbestos waste disposal sites, properties that may require cleanup in the future, and properties with restrictions on land use.

Minnesota landfills permitted to accept asbestos-containing waste materials dispose of these materials in certain cells, which are documented for future generations. Due to the special disposal requirements for asbestos, the disposal cost for asbestos-containing waste materials is more expensive than municipal solid waste. For any excavation of asbestos-containing waste materials, a certified technician from a licensed asbestos abatement company is required to oversee the excavation and disposal.

Engineering controls typically involve leaving the buried asbestos-containing materials in-place and covering them with a clean soil cover. In some situations, geotextile fabrics or other landscaping measures are used to reduce erosion and serve as a distinctive marker for the asbestos-containing waste materials. In areas covered with a building or paved area, a minimum of two feet of clean soil is used for the cover to protect against accidental excavation into the soil with asbestos debris. In areas left

as open green space, such as parks and landscaped areas, a minimum of four feet of clean soil is typical, with a thicker cover required when the property is sloped and erosion may be a problem.

When asbestos-containing waste materials remain at the property, an institutional control, in the form of an Affidavit or Restrictive Covenant is required. The institutional control is filed with the property deed. The Restrictive Covenant limits the use of the property and requires MPCA approval for excavation into the area where asbestos materials are present. The Affidavit serves to notify future owners of the presence and location of contaminated media. For properties with large volumes of asbestos-containing materials, a general contingency plan for any future excavation work may accompany the institutional control.

Construction Contingency Plans

Contingency plans are commonly used for construction projects, for which the potential to find buried asbestos-containing wastes exists. The contingency plans are reviewed by the VIC Program staff prior to the start of excavation activities. These plans describe measures that will be taken to segregate and stockpile suspect materials that may contain asbestos or other hazardous materials. Compliance with a contingency plan usually allows construction to continue while the suspect materials are investigated and reported.

For More Information on the Asbestos Program and VIC Program

To access the MPCA Asbestos Program fact Sheet titled "Asbestos Guidance on Excavation Projects," go to the Web site below:
<http://www.pca.state.mn.us/publications/w-sw4-03.pdf>
You can also call the Asbestos Hotline at (651) 297-8685. For guidance documents from the VIC Program, go to the VIC Program Web site at:
<http://www.pca.state.mn.us/cleanup/vic-guidedoc.html>

The new VIC Program Guidance Document # 9: Guidance for Investigating and Remediating Asbestos Containing Materials is now available on the Web site above.

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



Minnesota
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Metro District,
Regular
Facilities
Section

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

Air Quality/Asbestos Program/#4.05/January 2002

This document offers guidance on the removal, transport, and disposal of Category II 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 II ACM

Category II ACM consists of any material, excluding Category I nonfriable ACM (i.e. floor tile, linoleum, asphalt roofing products), containing more than one percent asbestos as determined using the methods specified in appendix A, subpart F, 40 CFR part 763, section 1, Polarized Light Microscopy that, when dry, cannot be crumbled, pulverized or reduced to a powder by hand pressure. The most common form of Category II ACM is cementitious asbestos board, which is often referred to by its trade name "Transite®." Other Category II ACM includes but is not limited to, Transite® shingles and siding, asbestos cement, asbestos putties, asbestos sealants, and certain asbestos-containing adhesives.

When Does the Asbestos NESHAP Apply

Category II ACM is regulated by the asbestos NESHAP if it is or will become friable and/or crushed, crumbled and reduced to a powder, due to the forces expected to act on the ACM during a

renovation or demolition project. Friable ACM is any ACM that can be crushed, crumbled, pulverized, or reduced to powder by hand pressure when dry.

Category II ACM that is going to be or has been subjected to demolition forces or removal methods that would crush, crumble, pulverize, or reduce the Category II ACM to a powder including sanding, cutting, grinding, abrading, or intentional burning, is considered Regulated Asbestos-Containing Material (RACM) and therefore, must be removed by licensed asbestos abatement contractors using specific work practice methods.

Removal of Category II ACM

The first consideration in your renovation or demolition project must be the determination of what materials are present that contain asbestos. Certain building materials have been known to contain asbestos (i.e. slate-like siding on homes) but others must be tested to determine if the material contains asbestos. Once you have identified a Category II ACM in your renovation or demolition project, the next considerations are the quantity of ACM and the methods 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 II ACM that is able to be





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.



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Metro District,
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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





crushed or crumbled by hand pressure is friable. The determination of friability must be made prior to any other regarding the removal of the Category II ACM. If you elect to remove nonfriable Category II ACM, the removal must be done in such a manner that does not cause the Category II ACM to be crushed, crumbled, pulverized, or reduced to powder and does not subject the ACM to any sanding, cutting, grinding, or abrading which would cause the Category II ACM to become RACM. Examples of removal methods that would render the Category II ACM to RACM are smashing it, dropping it to the ground, intentional burning, subjecting it to crushing by heavy machinery, or specific grinding, sanding, cutting, or abrading.

- B) Nonfriable Category II ACM that is carefully removed by hand tools and not subject to extensive breakage may be removed by nonlicensed contractors. During the removal, care must be taken to keep the Category II ACM as intact as possible. For example, in removal of Category II ACM panels, the bolts or nails holding the panels in place can be removed first allowing for the panel to be removed intact which is not likely to cause the Category II ACM to become RACM.
- C) The Minnesota Pollution Control Agency 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 & 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 II 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 II 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) All Category II ACM must be packaged and transported in the same manner as RACM. In addition, landfills will only accept ACWM that has been properly wetted, packaged, and manifested.
- C) Some types of Category II 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 or dumpster. Asbestos warning signs must be placed on the vehicle or dumpster during the loading and unloading of ACWM in accordance with 40CFR 61.150(c).

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 II ACM in Demolition Projects

The forces of a demolition project can and will cause Category II ACM to be crushed, crumbled, and reduced to a powder. Therefore, in a demolition project all Category II ACM is considered to be RACM and must be removed prior to the commencement of demolition.



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. If you intend to remove Category II ACM on your own please call for instructions specific to your situation.

(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 their applicability to your asbestos removal or demolition project. Examples in this 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>