Demolition & Disposal Requirements

JAKE BRADY
MPCA
The purpose of this Rule is to ensure that hazardous materials or items present in structures are removed prior to the commencement of renovation or demolition and that the hazardous materials or items generated as a result are properly characterized and disposed of or recycled.

Subp. 5. requires removal of a variety of materials including household waste, hazardous waste, furniture, waste tires, appliances, fluorescent lighting, mercury containing devices, and PCB containing devices.
Pre-renovation or demolition requirements

Minnesota Administrative Rules
https://www.revisor.mn.gov/rules/?id=7035.0805

MPCA website has guidance sheet and checklist
https://www.pca.state.mn.us/waste/asbestos-demolition-or-renovations
What is Asbestos?

- It’s a natural fibrous mineral that was once praised for its versatility.
- Physically strong
- Resistant to heat, friction & chemical wear –and-tear

*Not MPCA recommended practice!*
Why is Asbestos Regulated?

It’s Dangerous!
Exposure increases risk of developing lung disease.

- Asbestosis
- Lung Cancer
- Mesothelioma

*Disease symptoms take many years to develop following exposure. 15-40yrs!
Where can Asbestos be found?

- Attic & wall insulation (vermiculite)
- Vinyl floor tiles & backing on vinyl flooring & adhesives
- Roofing & siding shingles
- Textured paint & patching compounds used on walls & ceilings
- Hot water & steam pipes (asbestos blanket or tape)
Both federal & state laws regulate the use of asbestos & how it is handled.

- 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 (OSHA) staff becomes involved when worker safety issues exist.

- The MPCA enforces the federal NESHAP 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.
Adopted by reference via Minnesota Administrative Rule 7011.9920

40 CFR Part 61, Subpart M (Asbestos NESHAP)

Code of Federal Regulations, title 40, part 61, subpart M, as amended, entitled "National Emission Standard for Asbestos," is adopted and incorporated by reference, except that decisions made by the administrator under Code of Federal Regulations, title 40, sections 61.149(c)(2), 61.150(a)(4), 61.151(c), 61.152(b)(3), 61.154(d), and 61.155(a), are not delegated to the commissioner and must be made by the administrator.

https://www.revisor.mn.gov/rules/?id=7011.9920
NESHAP Facility

NESHAP defines “facility” as:

- Any institutional, commercial, public, industrial, or residential structure, installation, or building (including any structure, installation, or building containing condominiums or individual dwelling units operated as a residential cooperative, but excluding residential buildings having four or fewer dwelling units)

- Any ship

- Any active or inactive waste disposal site.
NESHAP defines “installation” as:

• Any building or structure or any group of buildings or structures at a single demolition or renovation site that are under the control of the same owner or operator (or owner or operator under common control).
<table>
<thead>
<tr>
<th>Description of Project</th>
<th>Regulated</th>
<th>Unregulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any urban renewal or public project involving one or more residential buildings being renovated or demolished over a period of time.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Any industrial, commercial or institutional use of the residential building or property. Includes one or more residential properties on either one or more sites.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>A residential building having four or fewer dwelling units not part of any larger commercial or public project and is demolished to build a new residential building with four or fewer dwelling units.</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Small, isolated residential buildings with four or fewer dwelling units demolished for public safety or similar purposes – where the building will be replaced by another residential building with four or fewer dwelling units or the land will remain vacant.</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Any residential building demolition project that consists of demolition of two or more residential buildings at a single site.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Any intentional burning of a residential building constitutes an institutional use of the building and is therefore subject to the asbestos NESHAP.</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
If it’s regulated

• Have an asbestos survey done by a Minnesota Department of Health (MDH) licensed inspector.

• Remove regulated asbestos containing material (ACM). For more about regulated ACM contact MDH.
  651-201-4620 - or- health.asbestos-lead@state.mn.us
  http://www.health.state.mn.us/divs/eh/asbestos/prof/notification.html

• Submit an “Intent to Perform a Demolition Notification” to the MPCA.
  https://www.pca.state.mn.us/waste/asbestos-demolition-or-renovations

• Follow any county requirements.

• Ensure proper disposal. One of the following methods:
  1. Permitted solid waste management facility
  2. Demolition debris disposal facility Permit-by-Rule (PBR)
If it’s unregulated

- Follow any county requirements.

- Ensure proper disposal
  Demo debris
  1. Permitted solid waste management facility
  2. Demolition debris disposal facility PBR

Clean concrete only
1. “Farm Exemption” MN. Statute 17.135
2. Disposal of Uncontaminated Concrete – General permit
Permitted solid waste management facility's

- Demolition landfills
  [https://www.pca.state.mn.us/sites/default/files/w-sw5-04.pdf](https://www.pca.state.mn.us/sites/default/files/w-sw5-04.pdf)

- Transfer facilities
  [https://www.pca.state.mn.us/sites/default/files/w-sw3-37.pdf](https://www.pca.state.mn.us/sites/default/files/w-sw3-37.pdf)

These facilities are constructed and operated according to regulations, and are designed to:
- minimize or eliminate health hazards,
- avoid damage to the environment,
- avoid liability and cleanup responsibilities, and reduce nuisances (such as litter, odor & noise) to the lowest possible level.
Demolition Permit –By- Rule (PBR)

“Demo PBR’s” are typically for when a permitted facility is not a viable option.

Eligible criteria

- Low potential for adverse effects human health & the environment
- Involve less than 15,000 cubic yards of demolition debris
- Operate less than a total of 12 consecutive months
- Not be located adjacent to another demolition debris PBR facility

https://www.pca.state.mn.us/waste/solid-waste-permit-application-forms
Demo PBR continued

- County acknowledgment
- Certified Landfill operator
- Have an Emergency Response Plan
- Inspect the site at least once each year
- Solid waste tax must be paid.
- Description of the types & quantities of wastes buried must be recorded on or as an attachment to the property deed.
- Land owner must inspect the site annually for 20 years and provide landfill maintenance are required.
A permit is not required from a state agency, except under sections 88.16, 88.17, and 88.22 for a person who owns or operates land used for farming that buries, or burns and buries:

(2) concrete or reinforcing bar from a building or structure located on the land used for farming.
• Must be buried in a nuisance-free, pollution-free, and aesthetic manner on the land used for farming.

• Within 90 days after completion of the burial, an owner of land used for farming who buries material, shall record with the county recorder.
General Concrete Permit

- Concrete must be Adequately characterized
- Only uncontaminated concrete that originates on the site used for disposal may be disposed under this permit.
- May not exceed 5,000 cubic yards
- Must be approved by a local zoning official prior to use
- Must not be located within a floodplain, shoreland, or wild and scenic river land use district, or wetland.
- Record with county
- The depth of final cover, at a minimum, must be two-feet thick (top 12 inches of soil suitable for sustaining vegetative growth)
- Final cover must be sloped, minimum 2%, maximum 20%
- Pay the solid waste management tax ($.60/cubic yard)

https://www.pca.state.mn.us/waste/solid-waste-permit-application-forms
It’s illegal to intentionally burn a structure for disposal
Burning of a structure is only allowed in a legitimate fire training burn. In order to qualify for this type of burn, you must follow the requirements described in the “How to Conduct a Fire Department Training Burn in Minnesota” fact sheet.

http://files.dnr.state.mn.us/assistance/grants/ruralfire/fd_training_burn_app.pdf

*Burning waste to avoid disposal costs can be a costly choice. If you are caught, you will be required to dispose of the unburned waste and ash at a facility this is lined, and which likely will charge more. You may also be required to pay a fine.
State law does not permit the burning of oils, rubber, plastics, chemically treated materials, or other materials that produce excessive or noxious smoke.
Why is it illegal to burn waste?

It can cause severe health problems and pollute air, soils and water.

How?

Due to the low burning temperatures and lack of pollution control equipment, the smoke from burning household garbage produces high levels of dangerous toxins.

Smoke created from burning household waste releases many toxic materials such as acidic gases, heavy metals, and dioxins. Inhalation of, and contact with, these materials may cause severe health problems including eye and throat irritations, respiratory problems, and an increased risk of cancer.
Acceptable burning

- Clean Wood
  - Untreated
  - Unpainted/Unstained
  - No glues or resins

- Trees/Brush

- Materials listed on DNR burn permit
  [http://www.dnr.state.mn.us/forestry/fire/questions.html](http://www.dnr.state.mn.us/forestry/fire/questions.html)

- Firefighter Training Burns
When do you need a burning permit?

- When the fire is more than 3 feet high & 3 feet in diameter.
- When the ground is not completely covered by a minimum of 3 inches of snow.
• A permit is not required from a state agency, except under sections 88.16, 88.17, and 88.22 for a person who owns or operates land used for farming that buries, or burns and buries:

• (1) solid waste generated from the person's household or as part of the person's farming operation
Farm Exemption continued

- Items in clauses (1) and (2) must be buried in a **nuisance-free, pollution-free, and aesthetic manner** on the land used for farming.

- The exception in clause (1) **does not** apply if regularly scheduled pickup of solid waste is reasonably available at the person's farm, as determined by **resolution of the county board** of the county where the person's farm is located.
Farm Exemption continued

• The exemption in paragraph (a), clause (1), **does not** apply to burning **tires** or **plastics**, except plastic baling twine, or to burning or burial of the following materials:

• (1) **household hazardous waste** as defined in section 115A.96, subdivision 1;

• (2) **appliances**, including but not limited to, major appliances as defined in section 115A.03, subdivision 17a;

• (3) **household batteries**;

• (4) **used motor oil**; and

• (5) **lead acid batteries** from motor vehicles.
Prohibited Materials

- Appliances
- Asbestos
- Electronics
  - Smoke alarms
  - Home Entertainment Systems
- Hazardous Waste
  - Lawn Chemicals
  - Paints
- Lead Containing Items
- Oils
Prohibited Materials

- Refrigerants & Halons
  - Fire Extinguishers
- Solid Wastes
  - Furniture
  - Trash
- Submersible Well Pumps
  - PCBs
  - Mercury
- Radioactive
- Infectious Waste
Example of prohibited burning
Example of prohibited burning
Example of prohibited burning
Questions?