

# Infectious Waste

## Management guidance for storage, decontamination and disposal facilities

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**I**nfectious waste poses an environmental danger due to its *biological* risk. It is different from **hazardous** waste, which poses an environmental danger due to its *chemical* risk. **Pathological** waste also poses a *biological* risk and is regulated the same as infectious waste.

### Infectious and pathological waste

**Infectious waste** includes the following wastes generated in Minnesota by a business or government entity:

- liquid blood or body fluids from humans or research animals
- wastes which will release blood or body fluids when compressed
- contaminated sharps from human or any animal use
- live or attenuated human vaccines
- infectious cultures and contaminated laboratory items used to manipulate those cultures.

**Pathological waste** includes human body parts or tissue removed and intended for disposal, except teeth.

**Hazardous waste** includes waste with chemical qualities that make it harmful to human health and the environment.

Some wastes can be both infectious and hazardous. The Minnesota Pollution Control Agency (MPCA) refers to such wastes by the term-of-convenience **dual waste**. When storing and treating dual waste, you must comply with both infectious and hazardous waste requirements.

This document is intended to provide guidance only on requirements under the Minnesota Infectious Waste Statutes and Rules, found at Minn. Stat. § Ch. 116 and Minn. R. Ch. 7035, administered by the MPCA. Infectious waste may also be regulated concurrently as:

- regulated waste under the Federal Bloodborne Pathogens standard (BBP) found at 29 CFR 1910.1030 and administered by the Minnesota Department of Labor and Industry, Occupational Safety and Health Division (MNOSHA)
- regulated medical waste under the Federal Hazardous Materials Regulations (HMR) found at 49 CFR 173.134, administered by the U.S. Department of Transportation (DOT)

Be aware that the BBP and HMR may regulate wastes that are not included in the definition of infectious waste as used in this document. For example, the HMR regulates all animal-generated veterinary waste, while 'infectious waste' includes only veterinary sharps. Although this document does not discuss other regulations, facilities that store, decontaminate or dispose of infectious waste must ensure they meet all applicable requirements.

## Regulated facilities

A regulated facility is any business or government entity that stores, decontaminates, or disposes of infectious or pathological waste it did not generate.

- **Storage** of infectious or pathological waste is the holding of such waste for more than 48 hours, except in the course of transportation, at any site not owned or operated by the original waste generator.
- **Decontamination** means to treat an infectious or pathological waste to render it safe to manage as an industrial solid waste.  
Contaminated sharps, however, even after decontamination remain a regulated waste until disposal unless rendered incapable of penetrating human skin.
- **Disposal** means to place an infectious or decontaminated waste in or on the land or water.

All infectious waste storage, decontamination and disposal facilities in Minnesota are required to have an infectious waste management plan certified by the MPCA, except for wastewater treatment facilities disposing of wastewater containing liquid infectious waste under a National Pollutant Discharge Elimination System (NPDES) permit issued by the MPCA.

## Facility infectious waste management plan certification

To receive certification, submit to the MPCA a management plan that includes the following items.

### All facilities

- The corporate identity of the facility owner and operator, if different. Ensure that the corporate identity submitted to the MPCA has been registered with the Minnesota Secretary of State.
- The facility location
- The types of infectious or pathological wastes to be stored, treated, or disposed
- The method of receiving waste that will ensure infectious and pathological wastes are segregated from other wastes, such as hazardous waste and dual wastes, and handled separately. Describe the specific actions, such as:
  - developing waste acceptance criteria of which customers will be informed;
  - contract terms specifying compliance with the waste acceptance criteria, with monitoring and penalty elements; or any

- other reasonable methods implemented by the facility to ensure it does not collect and transport hazardous waste inadvertently or deliberately comingled at customer sites with acceptable infectious waste.

- How the waste will be packaged and labeled
- How the waste will be managed during unloading and handling to minimize the number of employees exposed to the waste and the amount of exposure they receive. (An exposure control plan prepared to meet the BBP may meet this requirement, but it then must be integrated into the management plan.)
- The methods used to disinfect emptied reusable containers, the transport vehicle and facility surfaces that have been in contact with infectious waste.
- The methods used to prevent putrefaction of collected infectious waste and a description of any equipment or policies necessary to implement those methods.
- A detailed staff training and continuing education plan describing (at a minimum) how employees will be trained in relevant elements of the infectious waste management plan, including waste identification and acceptance criteria.
- A spill response plan itemizing the spill kit maintained at the facility and describing actions employees will take after a spill including personal protection methods, cleanup and repackaging of the waste.
- A list containing the identity, location, and contact staff for all infectious waste storage, decontamination, and infectious or solid waste disposal facilities to be used by the facility creating the plan.
- A list identifying infectious waste transporters bringing waste to the facility.
- The name and title of the individual responsible for implementing the management plan.
- The signature of the facility's chief executive officer or its designated representative.

### Storage facilities

In addition to the information in the 'All facilities' section above, any facility that might store infectious waste must also include the following information:

- The maximum length of time that infectious waste will be stored at the facility and the maximum amount of waste potentially stored for that time.

- The total estimated closure cost of the facility. The estimated cost must include a per-unit cost for decontamination and disposal of the maximum amount of waste to be stored at the facility. The per-unit cost must identify the decontamination and disposal facility to be used, the agreed rate for that facility, the identity of the transporter to be used, and the agreed unit-based transport cost for that transporter. A facility owner who also operates a registered infectious waste transporter service may plan to self-transport the waste but must still assess a market-based transport cost.
- Financial assurance in an amount equal or greater than the total estimated closure cost. Documentation of financial assurance must consist of one of the following:
  - Financial securities deposited with the State of Minnesota solely for this purpose
  - A surety bond from an accepted surety company
  - A letter of credit from a federally- or Minnesota-regulated institution.

The language of surety bonds or letters of credit must conform to Minn. R. 7035.9150.

The MPCA is currently waiving the requirements to calculate closure cost and provide financial assurance documentation for government-owned and operated storage facilities that will store less than 100 pounds of infectious waste. Such facilities must meet all other facility requirements, including certification of their infectious waste management plan.

### Decontamination facilities

In addition to the information in the 'All facilities' section above, any facility that will decontaminate infectious waste must also include the following information:

- The method by which the facility will ensure it does not store untreated infectious waste for more than 48 hours before decontamination (except for the additional 24 hours allowed over a weekend), or all of the information required in the 'Storage facilities' section above.
- The decontamination method to be used to treat the infectious waste. Incinerators must comply with all applicable MPCA air-quality requirements, including getting an Air Quality Permit. Autoclave treatment must consist of at least one-hour exposure of the waste at 250° Fahrenheit and 15 pounds per

square inch gauge pressure or its equivalent. All other methods must receive specific MPCA approval. To be approved, the proposed method must be verified by biological indicators equivalent in resiliency to the most resilient infectious agents that might reasonably be expected in the infectious waste.

- A contingency plan that identifies alternate specific decontamination facilities or on-site decontamination methods to be used during an unplanned shutdown.

### Facility permits

Infectious waste disposal facilities must obtain a Solid Waste Permit in addition to the management plan requirements in the 'All facilities' section above.

The MPCA exempts those storage and decontamination facilities that have certified infectious waste management plans from any otherwise applicable requirement to obtain a Solid Waste Permit or Permit-By-Rule, however all such facilities must comply with the emergency procedure requirements applicable to permitted facilities.

### Submitting management plans for certification

The MPCA no longer requires or provides a standardized form for facilities to submit an infectious waste management plan for review and certification. Facilities may submit management plans in hard copy form or via fax or e-mail. If submitted electronically, an image of the original signature required must be included. Contact the MPCA to determine the current staff person to whom to direct submitted plans. The MPCA is currently waiving management plan-review fees.

Facilities must keep a printed or electronic copy of the plan and the MPCA's issued certification at the facility.

Although the Minnesota infectious waste standards mandate biennial re-certification, the MPCA now issues management plan certifications valid until revoked by the MPCA. However, facilities with a certified management plan must submit a revised management plan when there is a substantive change to the previously submitted plan, or upon request of the MPCA or county authority.

## Facility operational requirements

During normal operation, facilities:

- must keep a log of the volume of infectious waste stored, treated, or disposed of at the facility in the preceding two years.
- must comply with their certified infectious waste management plan.
- may not treat any hazardous or dual waste on-site without a Hazardous Waste Permit.
- may operate a Ten-Day Transfer Facility for hazardous waste if
  - the operator is a licensed hazardous waste transporter
  - the facility has notified the MPCA of its hazardous waste activity using MPCA hazardous waste fact sheet #7.09, [Notification of Regulated Waste Activity](#), available on the [hazardous waste publications](#) Web page.

In the event of any emergency involving infectious waste at a facility, the facility owner or operator must:

- take all reasonable measures to ensure that fires, explosions, and releases do not occur, recur, or spread.
- contain, recover, and treat liquids that come in contact with the waste during an emergency response action.
- submit a written report to the MPCA within two weeks of such an emergency or release describing the emergency, the facility's response, and any revisions necessary to the management plan to minimize the potential for recurrence of the incident. No infectious waste that is involved in an incident and has not been decontaminated may be disposed of without prior MPCA approval.

## More information

For more information on hazardous waste, see the Minnesota Pollution Control Agency (MPCA) hazardous waste publications Web site at [www.pca.state.mn.us/waste/pubs/business.html](http://www.pca.state.mn.us/waste/pubs/business.html).

Address questions regarding the Bloodborne Pathogens standard (BBP) to MNOSHA.

Address questions regarding the Federal Hazardous Materials Regulations (HMR) to the U.S. DOT or Minnesota DOT.

### Minnesota Pollution Control Agency

Toll free (outstate only) ..... 1-800-657-3864  
Metro ..... 651-296-6300  
Web site ..... [www.pca.state.mn.us](http://www.pca.state.mn.us)

### Minnesota Department of Labor and Industry, Occupational Safety and Health Division (MNOSHA)

Toll free ..... 1-800-DIAL-DLI  
Web site ..... [www.doli.state.mn.us/MnOSHA.asp](http://www.doli.state.mn.us/MnOSHA.asp)

### Minnesota Department of Transportation

Hazardous Materials ..... 651- 215-6330  
Web site ... [www.dot.state.mn.us/cvo/hazmat.html](http://www.dot.state.mn.us/cvo/hazmat.html)

### Minnesota Technical Assistance Program

Toll free (outstate only) ..... 1-800-247-0015  
Metro ..... 612-624-1300  
Web site  
....[www.mntap.umn.edu/healthcarehw/index.html](http://www.mntap.umn.edu/healthcarehw/index.html)

### U.S. Department of Transportation

Hazardous Materials ..... 1-800-467-4922  
Web site ..... [www.phmsa.dot.gov/hazmat](http://www.phmsa.dot.gov/hazmat)