

MnDOT Office of Environmental Stewardship

Pesticide Guidance

Contact Information:

Roadside Vegetation Management Unit:

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MnDOT has prepared this guidance document to provide its internal procedures and requirements for work performed on MnDOT right-of-way, including MnDOT-owned facilities. Any optional procedures will be indicated in the document. Any deviation from procedures contained in this document must be approved by Roadside Vegetation Management Unit personnel prior to implementation.

This document should not be construed as a full description of all regulations pertaining to the subject matter. Contact the Roadside Vegetation Management Unit in the MnDOT Office of Environmental Stewardship for additional information or legal requirements.

This document should be used in conjunction with MnDOT's Pesticide Policy

Subjects addressed in this guidance:

- Background
- Pesticide Licenses
- Herbicide Use
- Insecticide Use
- Application Records
- Application to MnDOT Facilities within Tribal Boundaries
- Storage
- Disposal

Background

Pesticides are defined by U.S. Environmental Protection Agency (EPA) as:

- Any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest.
- Any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant.
- Any nitrogen stabilizer.

[\(7U.S.C. § 136 \(u\), Federal Insecticide, Fungicide, and Rodenticide Act \(FIFRA\).\)](#)

Pesticides commonly used at MnDOT include herbicides, insecticides, rodenticides, and fungicides.

The Minnesota Department of Agriculture (MDA) enforces compliance to pesticide labels. According to the EPA, the regulations for each pesticide are listed on its label. Therefore, the label is the law. If there is discrepancy between the EPA and MDA rules, the more stringent requirement applies.

Pesticide Licenses

The Minnesota Department of Agriculture through its Pesticide Program licenses non-commercial and commercial pesticide applicators in accordance with Mn Statute 18B. There are a number of different categories of licenses that reflect different pesticides and environments. Non-commercial applicators use pesticides on lands owner or under the control of their employer. Commercial applicators use pesticides “for hire”.

Employees applying any Restricted Use Pesticide must hold a valid non-commercial/commercial pesticide license issued by the MDA that includes the CORE and additional category as required by the pesticide used in accordance with Minnesota Statutes §18B.30.

Herbicide applicators need only to be licensed in Category J, Forestry, Rights-of-Way, and Natural Areas. According to MDA, truck stations, tower sites, headquarter facilities, and rest areas are considered to be covered under Category J and do not require Category E. If herbicide application is occurring to submerged vegetation, Category F will be required.

Following is an excerpt of the Pesticide Applicator License Category table from MDA web site, February 2017.

All applications to MnDOT property are required to be tracked in MnDOT’s Pesticide Application Log System (PALS). If a pesticide is not listed in PALS, contact Tina Markeson to add the missing pesticide.

Category Code	License Category	For application of
A	CORE	Basic principles of pesticide regulation and application; required for all licensed applicators
E	Turf & Ornamentals	Pesticides to non-agricultural areas or for ornamental propagation including lawns, parks, athletic fields, golf courses, nurseries, greenhouses. Note that fertilizer applications are licensed separately.
F	Aquatic	Pesticides to surface water or areas where water is present to control aquatic organism, plants
I	Anti-Microbial	Pesticide to HVAC ventilation systems, cooling towers and for indoor mold mitigation & remediation
J	Forestry, Rights-of-Way, and Natural Areas	Pesticides to Forestry (forested areas and forest plantations), rights-of-way (including roads, utilities, and ditch banks), and natural areas (prairie restoration, buckthorn removal)

L	Mosquito and Black Fly Control	Pesticides for mosquito and black fly control
P	Vertebrate Pest Control	Pesticides for vertebrate pest control (including repellants)
S	Noncommercial Structural	Pesticides on, in, under or around structures (not for hire)

Herbicide Use

In order for herbicide applications to be most effective, herbicide applicator should have some autonomy to plan and schedule their work. Herbicide applicators must evaluate growing conditions in order to determine when target vegetation is most susceptible to herbicide. Herbicides should be applied at the smallest rate to achieve the desired result.

Herbicide applicators should have a working knowledge of integrated vegetation management, plant biology, herbicide mode of action, and safety precautions. Herbicide applicators should have a basic understanding of potential interactions that can occur between soils, water chemistry, topography, and target vegetation including possible interactions related to weather conditions and potential impacts to surrounding land use.

Herbicide applicators need only to be licensed in Category J, Forestry, Rights-of-Way, and Natural Areas. According to MDA, truck stations, tower sites, headquarter facilities, and rest areas are considered to be covered under Category J and do not require Category E. If herbicide application is occurring to submerged vegetation, Category F will be required.

Applicators should:

- Be knowledgeable about target and common non-target plant identification
- Be aware of integrated approaches to vegetation control
- Use the correct application rate with the smallest amount of herbicide needed to achieve the desired result.
- Treat vegetation when it is most susceptible to the herbicide
- Not treat woody vegetation over six feet in height with foliar-applied herbicide prior to September 15.
 - When application to woody vegetation above 6 feet is necessary prior to September 15, cut vegetation as low to the ground as possible and treat re-growth.
 - After September 15, when foliar application is performed over six feet in height, equipment must have an enclosed cab.
- Refer to the Herbicide Options sheets [<ADD LINK>](#) for information on commonly used herbicides

The appropriate equipment should be used to apply the most effective rate with little to no off target application.

Herbicide Application at MnDOT Facilities with Public Use Areas

MnDOT rest areas and high public use areas that are treated with herbicides, including weed-n-feed, should be posted/flagged to notify users of application. Posting/flagging should include the following:

- Name of herbicide applied
- Date of application
- When it is safe to enter the area

Insecticide Use

Trained, non-licensed applicators may only apply general use, ready to use insecticides. In general, insecticides are limited to treating only high value, functional vegetation at high risk of infestation or to control insects which pose a threat to public health in high-use areas. Applicator must use all required personal protective equipment listed on the label and adhere to restrictions as directed by the label.

Applicator must limit use of systemic insecticides, including neonicotinoids. If a neonicotinoid insecticide is required, the applicator must work with the Office of Environmental Stewardship, Roadside Vegetation Management Unit to apply for a verification of need by the MDA.

Application Records

All applications to MnDOT property are required to be tracked in MnDOT's Pesticide Application Log System (PALS). PALS is accessible to MnDOT employees only through the RCA program. Each District/Office which applies or contracts application of pesticides should have a key user. This key user will be responsible for granting access to other users and making changes to application records greater than 3 days old as needed. A PALS User Guide [<ADD LINK>](#) is available. Contact Tina Markeson with questions regarding PALS.

Use on MnDOT Property within Tribal Boundaries

MnDOT has two different communication tools with various tribes in Minnesota. An environmental communication index is in place for all tribes. This document identifies the contact personnel for the tribe and MnDOT regarding specific environmental topics, including herbicide application. Refer to the communication index to determine the steps necessary prior to applying pesticides within a tribal boundary.

Fond du Lac and Grand Portage tribes have a Memorandum of Understanding with MnDOT to address vegetation and vegetation control on rights of way through their respective tribal boundaries. Refer to the applicable MOU prior to applying pesticides within these tribal boundaries.

Storage

The following are MDA's storage requirements for pesticides in container(s) 55 gallons or less.

- 1) Read and follow label instructions. When handling or storing small package pesticide products it is important that you read and follow the label language. Label instructions will provide the appropriate information for use, safe handling and storage for the particular product. Following label instructions will help you avoid misuse, human health risks and possible environmental contamination.
- 2) Open and partial containers or broken bags of pesticide cannot be resold.
- 3) Annually update Incident Response Plans. Incident Response Plans must be stored both in the building containing the pesticide, accessible to all employees and in vehicles that are applying the pesticide. The Incident Response Plan must contain:
 - o Identity and telephone numbers of persons and agencies to be contacted in the event of a release;
 - o Complete copy of the container label for each bulk pesticide stored at the facility;
 - o Complete copy of the safety data sheet (SDS) for each bulk pesticide stored at the facility;
 - o Procedures and equipment to be used to control and respond to a release and to recover released product;

Further information can be found on the [MN Department of Agriculture web site](#)

In addition to these requirements, MnDOT procedures for pesticide storage are:

- 1) Ordering of pesticides will be limited to container volumes of 55 gallons or less
- 2) Store pesticides indoors in a secure area (building that can be locked) where the minimum temperature is 32° F. Some pesticides may require a higher minimum storage temperature. Read all pesticide labels and follow the requirements.
- 3) Secondary containment located in a designated area dedicated for pesticides is required for all pesticides.
 - o Pesticide containers must be stored within the secondary containment or within a structure built with its own secondary containment.
 - o Secondary containment is required anywhere pesticides are stored, including short-term storage.
- 4) Fire extinguishers must be present in the designated pesticide area.

Disposal

Follow MDA Guidance on [Pesticide Containers: Management & Disposal](#).

In addition to this guidance, MnDOT procedures for pesticide disposal are:

- Return unused pesticide to vendor(s) if possible.
- Return reusable pesticide containers to vendor(s) if possible
- Dispose of unwanted pesticides through the local [District's Hazard Waste Coordinator](#) to dispose of through a MnDOT approved [Hazard Waste Contractor](#).
- If pesticide or pesticide containers are abandoned and found on MnDOT right-of-way, contact the District's Hazard Waste Coordinator for disposal.