

Approved by:
/s/ TOM LANDWEHR
Tom Landwehr, Commissioner
Minnesota Department of Natural Resources

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Pesticide Use

Operational Order 59
Policy Executive OSD Management Resources Section Manager
Policy Owner Dave Schiller, Operations Services Division
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Policy Statement

The DNR uses pesticides to manage pest species effectively, in a manner that ensures the safety of employees and the public, and to minimize impacts to non-target natural resources.

The department established this policy to ensure that employees:

1. Procure, handle, transport, and store pesticides safely, and manage spills appropriately.
2. Understand and implement training standards for pesticide application.
3. Track and report pesticide use on a routine and consistent basis.
4. Follow the principles of Integrated Pest Management.
5. Avoid using pesticides with the highest potential for adverse environmental and human health effects.
6. Complete all procedures in accordance with the label and Safety Data Sheet (SDS) of the product.

Purpose and Scope

The DNR applies pesticides in a variety of ways, ranging from rodenticides in DNR buildings to large aerial applications to control invasive species. While all pesticide applications present some risk to non-target organisms, pesticides remain a necessary tool for managing natural resources.

DNR employees involved in pesticide use decisions and applications must adhere to all federal, state, and local laws and regulations related to pesticide use. The Minnesota Department of Agriculture (MDA) is the lead state agency for pesticide, environmental and regulatory functions in Minnesota under the pesticide control law (Minnesota Statutes, chapter 18B). This operational order provides additional guidance to DNR staff, and those working on behalf of the DNR, on the use of pesticides.

This policy covers all pesticides applications on DNR lands, facilities, and waters, and any applications conducted by DNR staff, contractors, and volunteers.

This policy does not apply to insect or tick repellents applied to skin or clothing of staff or the public.

The decision process for determining when pesticide use is warranted must be addressed in the guidelines developed by each relevant division.

Procedures

PESTICIDE USE COMMITTEE

This Operational Order authorizes the Pesticide Use Committee. Its members consist of division Pesticide Coordinators. The committee may invite non-voting consultants from the Safety, Materials, Forest Certification, or other programs to participate.

RESPONSIBLE USE

Aside from the pesticide use requirements found on product labels and in law, the following guidelines enable DNR staff to make informed decisions related to pesticide applications. These guidelines should be included in project planning, DNR pesticide trainings, refresher classes, “tailgate talks” and other opportunities as appropriate.

1. Integrated Pest Management

Integrated Pest Management (IPM) is an ecosystem-based strategy for managing pests that focuses on long-term prevention of pests through a combination of methods, such as biological control, habitat manipulation, and modification of cultural practices. Pesticides are used only after all non-chemical treatment methods have been evaluated and monitoring indicates that they are needed. Then pesticide treatments are made with the goal of removing only the target pests. Pest control strategies are selected and applied in a manner that minimizes risks to human health and the environment. The core IPM principle for the DNR is to control pests without relying solely on pesticides. To comply with Minnesota Statutes, section 18B.063, the DNR will use IPM techniques to manage public lands, waters, and facilities.

The DNR applies IPM by following these principles:

- Consider the costs and benefits of various control methods. Costs should include potential damages to beneficial and non-target species, the environment and human health.
- First, consider the use of biological controls, mechanical controls, and cultural controls before choosing a pesticide control. A ‘no action’ alternative should also be considered.
- Monitor pesticide application results, evaluate effectiveness, and determine if changes are needed.

2. Guiding Principles for Pesticide Selection and Application

When using a pesticide is determined to be the most appropriate treatment method, DNR staff shall use products and application methods that will minimize impact to humans and the environment by assessing the following criteria.

Pesticide Characteristics

Assess the following characteristics of chemicals when selecting a pesticide:

Selectivity: Some non-selective pesticides kill any pest given a certain dose, while in contrast selective products control only targeted pests or stages of pest development. Whenever possible, select artificial (and natural) pesticides that have minimal effects on organisms other than the target and on the environment.

Persistence: Some pesticides remain active in the environment more than one growing season, providing continued control. However, those compounds that persist may impact groundwater, accumulate in animal and plant tissues, or remain in the soil for years. Consider the impacts of persistence on the target and the environment.

Volatility: The degree to which a substance changes from a liquid or solid state to a gas at ordinary temperatures defines its volatility. Generally speaking, select a product with low volatility to minimize the risk of volatile drift onto non-target areas.

Adsorption: Adsorption describes how a pesticide is held or bound to a surface by physical or chemical attraction. Select a product with a high adsorption coefficient as it adheres to organic matter in the plant and soil, and is less mobile in the environment.

Solubility: The ability of a pesticide to dissolve in a solvent, usually water, defines its solubility. Products with low solubility are less likely to migrate from the application site in surface or soil water.

Toxicity: Toxicity is the degree or extent to which a pesticide or its formulation is poisonous to non-target species. If needed, consult with other divisions or research to evaluate toxicity to humans, aquatic systems, and plant and animal species. Whenever possible, select a product with minimal toxicity.

Managing Movement of Pesticides in the Environment

Follow the best management practices below to minimize pesticide movement in the **AIR**:

- Select spray equipment and calibrations that reduce drift and evaporation.
- When possible, use pesticides with no or low volatility at all temperatures to reduce spray drift potential.
- Consider using adjuvants that prevent drift and evaporation and that minimize volatilization.
- Measure wind speed and direction before, during, and after the application. Always follow label information, but in general, wind speeds of 3 to 7 mph are preferable. Avoid spraying at wind velocities greater than 10 mph. If wind speed or direction changes during an application, immediately adjust the buffer size or location, or stop the application.
- Avoid spraying when the wind speed is still or very light (0–3 mi/hr). Under these conditions, inversions may be present which can enable spray to drift over large distances. Changes in wind direction are also more likely during periods of low wind speed.
- Do not spray when the wind is blowing towards a sensitive area, unless an effective buffer zone has been established.
- Do not spray when temperatures are high and humidity is low, as water-based sprays may evaporate. Plants are often also stressed under such conditions, making the pesticide less effective.

Follow the best management practices below to minimize pesticide movement in the **SOIL**:

- Use pesticides with low water solubility to reduce potential for leaching to groundwater.

- Use pesticides with high soil absorption coefficient to reduce potential for leaching to groundwater.
- Determine the depth to groundwater in your area of application and consider protective practices in vulnerable areas.
- Consider soil texture, permeability and slope. Limit pesticide application on coarse textured soils (such as where sand, loamy sand, or sandy loam soils make up more than 25% of the area of application).

Follow the best management practices below to minimize pesticide introduction to **NON-TARGET WATER**:

- Do not mix and load pesticides near wells, lakes, streams, rivers or storm drains.
- Evaluate surface water drainage on your application site and consider mitigation measures, such as buffers, if needed.
- Delay pesticide applications if heavy rain is forecast within 24 hours to prevent runoff.
- Unless using pesticides labeled for use over water, buffer zones should be created that limit applications in riparian zones.

Minimizing Impacts to Non-target species

- Evaluate the potential impacts of surfactants or adjuvants used in combination with active ingredients on non-target organisms.
- Review Operational Order 130 for guidance on minimizing impacts to pollinators.
- All pesticide projects must undergo a natural heritage information system (NHIS) review prior to application to ensure that they will not harm endangered or threatened species, or rare native plant communities. The review should be done by checking a current version of the NHIS to determine whether there are any known locations of rare features in the vicinity of the proposed pesticide application. It is the responsibility of the originating division to conduct this review. The divisions and the Natural Heritage program must develop specific guidelines and policies to determine appropriate review and response to protect rare features.
- Refer to your pesticide label's Environmental Hazards section for toxicity information on beneficial insects such as bees.

DIVISION GUIDELINES

1. All DNR Divisions are required to develop and maintain division guidelines to accompany this operational order. The guidelines will address Integrated Pest Management, as well as contain procedures specific to each division that are necessary to implement this operational order.
2. Division guidelines must specify the procedures for dealing with emergency situations that arise within division activities.
3. Division guidelines must specify alternative procedures for activities that cannot practicably adhere to the standard operational order procedures.
4. Division guidelines must be reviewed every four years or when changes in division work responsibilities generate new work activities that are not adequately covered by existing guidelines.
5. Division guidelines must be reviewed by the Pesticide Use Committee to ensure conformity with department policy and applicable regulations, and must be approved by the responsible division directors.
6. Projects proposed by one division involving land areas administered by another division are subject to the pesticide use guidelines of the land-administering division. The land-administering division can approve or disapprove proposed projects. Conflicts among divisions must be addressed using

established department conflict resolution procedures. The division using the pesticide is responsible for reporting the pesticides used to the division manager that is the land administrator. The land-administering division manager is responsible for reporting all pesticides used.

TRAINING

1. All handlers and applicators of pesticides must be thoroughly familiar with the laws and guidelines regarding pesticides, as well as covering chemical spills.
2. All handlers and applicators shall have a MDA non-commercial pesticide applicators license or have taken a division-approved training. Such training shall include, at a minimum, the topics of integrated pest management, responsible use, mixing, storage, transport, personal protective equipment, and spills. Division pesticide use training programs must be reviewed and approved by the Pesticide Use Committee for topic coverage and consistency across divisions.
3. A MDA non-commercial licensed pesticide applicator will need to be present during the types of applications listed below:
 - a. During aerial applications using aircraft, such as an airplane or helicopter.
 - b. When applying soil sterilants.
4. A consult with a MDA non-commercial licensed pesticide applicator will be required when treating next to non-DNR lands and there is the potential for drift onto non-DNR lands.
5. During all applications, a MDA non-commercial licensed pesticide applicator DNR employee shall be available to consult or respond.

NOTIFICATION AND SIGNAGE

1. Give sufficient public notice of when and where aerial applications of pesticides will take place on DNR-administered lands or in public waters. Notification methods may include, but are not limited to, articles in local legal newspapers, posting at entrances to DNR management units or trailhead bulletin boards, written letters to adjacent landowners, radio and television announcements, and other effective methods.
2. Post all treatment sites as specified by the pesticide label, and as required by division guidelines.

PROCUREMENT

1. *General Procedures*
 - Purchasing pesticides in returnable or recyclable containers is encouraged.
 - Container size must be appropriate to the project size to reduce handling, storage, and carryover of surplus pesticide.
 - Soliciting one contract for both purchase and application of a pesticide is encouraged.
 - Pesticides damaged during shipment cannot be accepted.
2. *Pesticide Inventory.* Check existing site, division, and MR inventories before purchasing any pesticides.
3. *Pesticide Requisition.* A Pesticide Use Proposal/Approval Form must be completed and approved before purchasing any pesticides as specified by division guidelines.
4. *Purchasing Pesticides.* Pesticides can be purchased using the state contract, a vendor contract, or through Authority for Local Purchase (ALP) if not on state contract.

5. *Pesticide Procurement Bids.*
 - All bids for services that require vendor application of pesticides must be in accordance with DNR Administrative Procedures.
 - Prior approval for pesticide procurement and use must be authorized by using a Pesticide Use Proposal/Approval Form approved by the division.
6. Purchase pesticides in amounts necessary to meet defined natural resource management, site management, and public health goals. Pesticide management will be accomplished in a manner that minimizes the generation of hazardous waste.
7. Purchasing bulk pesticides for the purpose of repackaging is not allowed.
8. *Gifts or Sales Samples.*
 - No gift or sales sample for evaluating pesticides can be accepted if the DNR has no specific use for that pesticide.
 - The receiver must obtain advance approval via a Pesticide Use Proposal/Approval Form before accepting a gift or sales sample.
 - The receiver must follow procedures found in the DNR Administrative Manual, Section 06:05, Gift Acceptance.
 - Gift or sales samples of pesticides can be accepted only if they are registered by the U.S. Environmental protection Agency (EPA) and the MDA, if there is a specific use for the product, and if a Specimen Label and a Safety Data Sheet (SDS) are provided for the product.

HANDLING

1. *General Handling Safety Procedures.* Required safety equipment must be utilized whenever pesticides are handled to avoid physical injury and to reduce the potential for exposure.
2. *Labels and Labeling.* Current specimen labels and SDSs of pesticides must be on the treatment site and available for reference while handling pesticides in storage, transportation or use.

TRANSPORTING

1. *Transporting Pesticides.*
 - a) A Safety Data Sheet (SDS) for each pesticide must accompany the pesticides being transported, and the vehicle operator must understand the nature and hazards of pesticides being transported.
 - b) A spill kit must accompany the pesticides being transported regardless of the volume being transported. Spill kits may be obtained thru the DNR Warehouse or consult with regional Management Resources (MR) for assistance.
 - c) Pesticides may not be transported in the passenger compartment of vehicles.
 - d) Transport vehicles should be in good mechanical condition, including power train, brakes, tires, and steering.
 - e) Pesticide containers being transported must be secured within the carrier to prevent spills and puncturing of containers.
 - f) Leaking or unsealable containers may not be transported unless they are placed in a larger container that will contain the product. If the label of the original container is then no longer visible, a

specimen label for the product must be attached to the protective container in a readily accessible and visible location.

- g) Department vehicles transporting 1,001 pounds or more of formulated pesticides must be placarded for transportation of hazardous substances as per 49CFR 172.504c. The Regional MR Supervisor-can be contacted for information on placarding requirements.

STORAGE

1. *Labels and Labeling.* Instructions on the label and the SDS must be followed for product storage, for leaking containers, spills, and other emergency procedures, including the requirement for personal protection equipment.
2. *Storage Building or Area Requirements.* Storage buildings and storage areas within buildings must be isolated from areas used for human activity, not near a body of water or subject to flooding, and must have sufficient holding capacity to handle leaking or spilled pesticides.
3. *Storage of a Pesticide for Longer Than One Year.* Long-term storage buildings for pesticides must be constructed or modified in accordance with all approved MR plans and specifications. Whether pesticides are stored in a separate building or in a separate area of an existing building, the following are minimum conditions for long-term storage. The storage building or area must be:
 - a) Fire resistant, well lit, insulated to protect pesticides from temperature extremes, dry, kept free of unlabeled or empty containers, and kept free of other clutter.
 - b) Located on the ground floor of a building and have sufficient holding capacity to handle leaking or spilled pesticides.
 - c) Secured from unauthorized entry and locked when not in use. Doors and windows to the area should be posted with signs, e.g., "Danger--Pesticides Keep Out!" or other signs as needed to inform DNR and emergency employees of the nature of the materials stored in the area.
 - d) Constructed to facilitate cleanup of spills.
 - e) Isolated and separate from all employee use areas. Pesticides should never be stored near eating facilities, restrooms, food or feed, seed, fertilizer, equipment, supplies, materials, or any other items that may be contaminated or adversely affected by fumes, evaporation, or possible leakage of the pesticide.
 - f) Ventilated to prevent buildup of toxic or flammable vapors and dust.
4. *Storage of a Pesticide for Less Than One Year.* The following are minimum conditions for short-term storage. The area must be:
 - a) Dry and kept free of clutter.
 - b) Located on the ground floor of a building to minimize damage in the event of leaking containers or a spill and have sufficient holding capacity to handle leaking or spilled pesticides.
 - c) Secured from unauthorized entry and locked when not in use. Doors and windows to the area should be posted with signs, e.g., "Danger--Pesticides! Keep Out!" or other signs as needed to inform DNR and emergency employees of the nature of the material stored in the area.
 - d) Isolated and separate from all employee use areas. Pesticides should never be stored near eating facilities, restrooms, food or feed, seed, fertilizer, equipment, supplies, materials, or any other items that may be contaminated or adversely affected by fumes, evaporation, or possible leakage of the pesticide.

5. *Storing Small Quantities of Pesticides.* If quantities are not sufficient to warrant a storage building or a storage area, pesticides should be stored in a locked chemical storage cabinet or chest in an isolated area. Access should be limited to authorized employees.
6. *Inventory Control: Long-Term and Short-Term Storage.*
 - a) *Immediate Inventory.* Upon receipt of a shipment of pesticides, the site manager must indicate the date of receipt on the side of the container, without obscuring the product label.
 - b) *Storage Inventory.* An inventory of pesticides on hand must be kept at each primary location where pesticides are stored. The inventory must include: name of pesticide, date of addition or removal of pesticide, amount added or removed, balance of pesticide remaining, and name of person adding to or removing from the amount stored.
 - c) *Annual Inventory.* The site manager in charge of the storage building or area where the pesticides are stored must conduct an annual on-site inventory of pesticides in storage. The manager must complete the appropriate Pesticide Inventory Form, maintain one copy for the file, and send one copy to the regional MR supervisor and the regional division manager or supervisor by December 31 of each year.
7. *General Storage Safety Procedures.*
 - a) Pesticide products cannot be stored near an open drain. If an open drain is present in a pesticide storage area, pesticides should be moved to a different location, secured in a nonflammable containment area, or the drain should be permanently closed.
 - b) Pesticide products cannot be stored within 150 feet of a well.
 - c) Store water-permeable and metal containers on wooden pallets or wooden shelves.
 - d) Store heavy containers and glass containers at or near the ground level.
 - e) Cluster and store herbicides, insecticides, rodenticides, and other categories of pesticides in groups separated from each other. Very toxic pesticides should be stored separately. Pesticide treated baits should be stored separately so they will not absorb odors and become useless. Corrosive, flammable, and volatile pesticides should be kept separate and secure.
 - f) Store pesticides only in original containers with visible and secure labels. (*Contaminated or Leaking Containers* below.) Storage of a pesticide in a food or beverage container is prohibited.
 - g) Rotate stock. Use opened containers first.
 - h) Locate SDSs, a map or floor plan where pesticides are stored, and an inventory list near the entry to the storage area. Place them where they will not be contaminated or unavailable if there is a leak or a spill.
 - i) Maintain clear working aisles. Pesticide containers should not extend beyond shelving or cabinets.
 - j) Store safety equipment away from pesticide storage areas. Pesticide storage in human use areas is prohibited.
 - k) Inspect the stock of pesticides regularly for leaks, corrosion, loose caps, or bulges.
 - l) Maintain a clean-up kit for spills.
 - m) Maintain required personal protection equipment. (See pesticide labeling and SDS.)
 - n) Provide a map and floor plan of the storage area to the local fire department. Arrange for the fire department to inspect the storage building or area annually or semi-annually.
 - o) Post the Minnesota Duty Officer phone number (1-800-422-0798) conspicuously, near the storage area.

8. *Security for Pesticide Storage Facilities.* Those storing pesticides should be vigilant for suspicious activity and be proactive in preventing problems before they occur. The goal should be to prevent theft and vandalism. Consider the following recommendations:
 - a) Keep chemical storage areas secure and locked.
 - b) Lock and/or secure all application equipment when not in use.
 - c) Restrict access of non-employees (deliveries, maintenance, etc.) to the facility.
 - d) Invite the local law enforcement agency to review storage site security measures.
 - e) Immediately report any suspicious activity or threat to your local law enforcement agency and to the Minnesota Duty Officer at 1-800-422-0798.

9. *Contaminated or Leaking Containers.* If a container has any product on its outside, it is considered contaminated.
 - a) A contaminated container should be moved away from uncontaminated containers.
 - b) If the pesticide is granular or powder and the container is leaking, the container should be placed in a clear plastic bag.
 - c) If the pesticide is a liquid and the container is leaking, the container should be positioned to stop the leak if possible, then proceed with step 1) or 2):
 - 1) Transfer the contents of the container to another container with exactly the same product and an intact label. The leaky container should then be disposed of in accordance with procedures in the label and/or SDS.
 - 2) If the container is leaking and the contents cannot be transferred to another container, place it in a larger container to contain the product. If the label of the original container is then no longer visible, a specimen label for the product must be attached to the protective container in a readily accessible and visible location.

SPILLS AND SPILL MANAGEMENT

1. *Spills.* The safety of the employees working with or around the spill is the first concern during any pesticide spill. A spill kit must be available whenever pesticides are handled and used. Refer to the SDS for product information.
 - a) Phone 911 or the local emergency telephone number if there is a threat to life or property.
 - b) All spills should first be controlled, contained, and then reported immediately. Call the Minnesota Duty Officer (651-649-5451 or 1-800-422-0798) and then call regional MR supervisor.
 - c) Decontaminate or replace spill kit items after use so they are available in the event of another spill.

REPORTING

1. The applicator shall complete a detailed pesticide use report for each project. This report serves as official documentation of the application. Each pesticide use report must include the following data:
 - Location of the pesticide treatment (Township, Range, Section);
 - Principle use category (such structural, forestry, invasive control, ROW, turf, etc.);
 - Date pesticide application was completed;
 - Pesticide product name as identified on the label or safety data sheet (SDS). Include the brand or trade name and type of formulation if it is indicated on the label or SDS, e.g. Pestkill 30W or NoGro 6E;
 - EPA registration number (the number from the label on the container);

- Total amount of formulated (packaged) product used for each application. Do not report the total mixture after dilution. Also include a unit of measure (ounces, pounds, pints, quarts, gallons, or other);
 - Total acres treated. A treatment area is the total area within the boundaries of a property where a single treatment is carried out;
 - Temperature;
 - Relative humidity; and
 - Wind speed and direction.
2. The Division Pesticide Coordinator shall complete a Pesticide Use Summary Report at the end of each calendar year. Summary data should include the following:
 - Number of acres treated per year.
 - Total amounts of pesticides applied per year, by product name for each principle use category.
 3. Division Pesticide Use Summary Reports shall be forwarded to the Division of Operations Services, Management Resources (Policy owner), by March 31 of each year.

COMPLAINTS

1. All complaints related to pesticide applications on DNR administered lands shall be directed to the Pesticide Coordinator of the land administrator relative to the complaint. The Pesticide Coordinator shall investigate the complaint in a timely manner and using divisional chain of command determine if operations should be suspended or can be satisfactorily corrected to alleviate the concerns reported. Any other complaints related to pesticide use by the department shall be directed to the Pesticide Use Committee.
2. The Pesticide Use Committee shall review complaint-based after-action reviews and assist divisions as requested.

Roles and Responsibilities

Commissioner provides overall direction and support to ensure the department effectively manages pest species in a manner that ensures the safety of employees and the public and minimizes impacts to non-target natural resources.

Division Directors and Regional Directors are responsible for departmental programs and staffing to ensure the department effectively manages pest species in a manner that ensures the safety of employees and the public and minimizes impacts to non-target natural resources. Directors shall designate a Division Pesticide Coordinator, and are responsible for approving division guidelines

Operations Managers provide department-wide leadership, support, and guidance through the various regional and program leaders who are responsible for technical and professional support to divisions and regions; direct implementation of appropriate policies and procedures; and direct the development and implementation of the division guidelines.

Management Resources (MR)/Operations Services Division coordinates pesticide storage and handling, and disposal of excess pesticides and hazardous wastes; manages health and safety issues; and submits reports of

storage. The MR Regional Supervisor assists with information on placarding and SDSs for pesticides, as requested. The MR Regional Supervisor is responsible for annual approval of both long-term and short-term storage buildings and areas. A list of current Regional MR Supervisors can be found on the DNR Intranet [Operations Section page](#).

Division Pesticide Coordinators each represent a division on the department's Pesticide Use Committee and advise that division on pesticide issues. They ensure collection and archival of pesticide use records from the field on an annual basis, and coordinate the updating of division guidelines. Every Division Pesticide Coordinator is required to obtain and maintain Minnesota Department of Agriculture Non-Commercial Pesticide Applicator Certification.

Managers and Supervisors ensure that all personnel that they supervise use pesticides consistent with this operational order, including use of required personal protective equipment; and provide all appropriate training, including Employee Right-To-Know (ERTKA).

Pesticide Use Committee is responsible for advising the department on pesticide use, recommending response protocol to complaints, reviewing division guidelines that support this Operational Order and for reviewing and approving division pesticide use training programs.

Project Coordinator originates the project requiring pesticide use or pest control, determines control needs, selects the appropriate control option and pesticide if a pesticide is appropriate, secures the necessary approval, monitors the control operation, and submits appropriate reports.

Application Coordinator directly oversees the application of pesticides by DNR personnel or contractors. The application coordinator is the on-site person who is responsible for ensuring that pesticides are applied according to label, the division guidelines, and contract specifications. The application coordinator is also responsible for ceasing operations when conditions warrant.

Site Manager ensures the compliance with storage requirements of pesticides at the field locations for which the site manager is responsible; maintains pesticide inventory; and maintains all labels, supplemental labels, specimen labels, and SDS's for all pesticides stored.

Pesticide Applicator handles and applies pesticides in accordance with the pesticide label, operational order, and division guidelines. Applicator should note safety precautions and spill cleanup procedures as outlined in SPILLS. Applicator is responsible for completion of a daily use report.

Safety Manager has primary responsibility to be knowledgeable of federal and state use and storage requirements for pesticides and to communicate those requirements to divisions in a timely manner.

Employees Handling Pesticides must familiarize themselves thoroughly with the appropriate pesticide labels, labeling, and SDSs. They should note safety precautions and spill cleanup procedures as outlined in SPILLS.

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Definitions

Bulk pesticide - A pesticide that is held in an individual container with a pesticide content of 56 United States gallons or more, or 100 pounds or greater net dry weight (Minnesota Statutes, section 18B.01, subd. 4).

Device - An instrument or contrivance, other than a firearm, that is intended or used to destroy, repel, or mitigate a pest, a form of plant or animal life other than humans, or a bacterium, virus, other microorganism on or in living animals including humans. A device does not include equipment used for the application of pesticides if the equipment is sold separately from the instrument or contrivance (Minnesota Statutes, section 18B.01, subd. 7).

Division Guidelines – Pest management guidelines developed by each division to implement this operational order. The division guidelines do not supplant the operational order, but they include additional policies and procedures, and assign responsibilities that address pest control needs unique to each division.

Employee Right to Know (ERTK) - This standard mandates employers establish a written hazard substance communication plan for employees, and evaluate worksites to identify and inventory hazardous substances in order to provide those employees routinely exposed to these hazards with the training, information and personal protection equipment to prevent work-related injuries and illness caused by chemicals. This is in compliance with OSHA 1910.1200, Hazard Communication Regulation, and Minnesota Department of Labor and Industry Standards, chapter 5206, Employee Right-to-Know Standard.

Environment - Surface water, ground water, air, land, plants, humans, and animals and their interrelationships (Minnesota Statutes, section 18B.01, subd. 9).

Hazardous Waste - Any substance identified or listed as hazardous waste in the rules adopted under section 116.07, subd. 4 (Minnesota Statutes, section 18B.01, subd. 11). A pesticide becomes a hazardous waste when declared as such by regional MR according to procedures cooperatively developed with the MN Pollution Control Agency and MDA. See also DNR Operational Order 90.

Incident - A flood, fire, tornado, transportation accident, storage container rupture, leak, spill, emission discharge, escape, disposal, or other event that releases or threatens to release a pesticide accidentally or otherwise, and may cause unreasonable adverse effects on the environment. "Incident" does not include the lawful use or intentional release of a pesticide in accordance with its approved labeling (Minnesota Statutes, section 18B.01, subd. 12).

Natural Heritage Information System - A database of known locations in Minnesota of endangered, threatened, special concern, or otherwise rare or sensitive plant and animal species and plant communities. This database is maintained by the Natural Heritage and Nongame Research Program in the Division of Ecological Services. Contact the Division of Ecological and Water Resources for information about how to access the database.

Label - The written, printed or graphic matter on, or attached to, the pesticide or device or their containers or wrappers (Minnesota Statutes, section 18B.01, subd. 13).

Labeling - All labels and other written, printed, or graphic matter:

- a) accompanying the pesticide or device;
- b) referred to by the label or literature accompanying the pesticide or device; or
- c) that relates or refers to the pesticide or to induce the sale of the pesticide or device.

"Labeling" does not include current official publications of the United States Environmental Protection Agency, United States Department of Agriculture, United States Department of Interior, United States Department of Health, Education and Welfare, state agricultural experiment stations, state agricultural colleges, and other similar federal or state institutions or agencies authorized by law to conduct research in the field of pesticides (Minnesota Statutes, section 18B.01, subd. 14).

Long-term storage - Storage of a pesticide for longer than one year in an approved storage building or area.

Safety Data Sheet (SDS) - Written information concerning pesticides including the ingredients, physical properties, health and safety hazards, spill procedures, and any other pertinent information relating to the product for employee use.

Non-target - Any organism that may be directly or indirectly affected by the pesticide treatment, other than the pest being controlled.

Pest - An insect, rodent, nematode, fungus, weed, terrestrial or aquatic plant, animal life, virus, bacteria, or other organism designated by rule as a pest, except a virus, bacteria or other microorganisms on or in living humans or other living animals (Minnesota Statutes, section 18B.01, subd. 17).

Pesticide - A substance or mixture of substances intended to prevent, destroy, repel, or mitigate a pest, and a substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant (Minnesota Statutes, section 18B.01, subd. 18).

Pesticide Applicator – DNR personnel, commercial applicator, or volunteer directly applying pesticides.

Policy Owner is responsible for maintaining an Intranet page with resources to help DNR employees implement this operational order. An Intranet resource page enables us to keep such details out of the policy document and in a location where employees can easily access the materials for reference and the policy owner can manage and update the information and links directly.

Responsible party - A person who at the time of an incident has custody of, control of, or responsibility for a pesticide, pesticide container, or pesticide rinsate (Minnesota Statutes, section 18B.01, subd. 23).

Restricted use pesticide - Any pesticide formulation designated as a restricted use pesticide under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) or by the Commissioner of Agriculture under Minnesota law (Minnesota Statutes, section 18B.01, subd. 24).

Rinsate - A dilute mixture of pesticide or pesticide with water, solvents, oils, commercial rinsing agents, or other substances, that is produced or results from the cleaning of pesticide application equipment or pesticide containers (Minnesota Statutes, section 18B.01, subd. 25).

Specimen label - A non-attached pesticide label that includes the information on the container label and often contains additional information.

Storage area - A place within a building designated and approved for long-term or short-term storage of pesticides.

Storage building - A separate building designated and approved for short-term or long-term storage of pesticides.

Surplus pesticide - A pesticide that is no longer needed by a division.

Treatment site - A bounded geographic area in which pesticides are applied.

Unreasonable adverse effects on the environment - Any unreasonable risks to humans or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide (Minnesota Statutes, section 18B.01, subd. 31).

Related Policies and Procedures

A "Resource" page is under construction for the DNR intranet for additional information and related policies and procedures.

Forms and Instructions

Pesticide Application Report (NA-00081-01)

Pesticide Application Summary (NA-00080-01)

Pesticide Inventory Annual Report

Pesticide Use Approval (NA-00092-04)

All forms are available on the DNR Intranet at: <http://intranet.dnr.state.mn.us/safety/forms/index.html>

History

Supersedes: Operational Order 59 dated 10/05/2004

Maintenance: MM/DD/YYYY

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