



## Minnesota Department of Natural Resources

### OPERATIONAL ORDER # 59

**SUBJECT:** Pesticides and Pest Control

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**DATE:** October 5, 2004

**SUPERSEDES:** Operational Order #59 dated April, 1989

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#### Purpose

#### General Responsibilities

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- Pesticide Use

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Approved by:

/s/ Gene Merriam, Commissioner

October 5, 2004

## PURPOSE

This operational order sets forth policy and procedures for pest\*<sup>1</sup> control, pesticide\* procurement, handling, storage, use, disposal and record keeping. This applies to all pest control\*, pesticide use and pesticide management by employees and outside groups\* on Department of Natural Resources (DNR) administered lands or in public waters. Personal use pesticides such as insect repellants are exempt from this operational order.

The DNR protects and manages the diverse natural resources of Minnesota. Resource management commonly requires the management of pests which can adversely affect, retard the development of, preclude the use of, or destroy these resources. Applications of pest control in resource management include methods such as using biological controls, burning and mowing to prevent seed production, managing competitive species, and pesticide use.

Pest control practices on DNR administered lands and in public waters will employ integrated pest management\* techniques. Managers making pest management decisions will base all decisions on the safety of employees and the public, statutes, rules and regulations, ecological impacts, impacts to natural resources, economics and DNR management goals.

## GENERAL RESPONSIBILITIES

**Assistant Commissioner for Operations** reviews and monitors the DNR's overall pesticide program.

**Division Director/Bureau Administrator** directs implementation of appropriate policies and procedures; and directs the development and implementation of the discipline guidelines.

**Facilities and Operations Support (FOS)** coordinates pesticide storage and handling, disposal of excess pesticides and hazardous wastes\* ; manages health and safety issues; and submits reports of storage.

**Discipline Pesticide Coordinator** accumulates and archives pesticide use records from the field on an annual basis, and coordinates the updating of discipline guidelines.

**Discipline Manager or Supervisor**<sup>2</sup> is responsible to insure that all personnel that he or she supervises use pesticides consistent with this operational order.

**Project Supervisor** originates the project requiring pesticide use or pest control, determines control needs, selects the appropriate control option and pesticide if a pesticide is appropriate,

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<sup>1</sup>Words followed by an asterisk are defined in the Glossary, Appendix A. They are asterisked the first time they appear in the text.

<sup>2</sup>For the purposes of this Operational Order, the term "Discipline Manager or Supervisor" applies to regional managers or supervisors for Forestry, Wildlife and Fisheries, Parks, Trails, and FOS; and to State Program Supervisors for Ecological Services.

secures the necessary approval, monitors the control operation, and submits appropriate reports. For example, project supervisors may be area wildlife managers and program foresters.

**Application Supervisor\*** directly oversees the application of pesticides by DNR personnel or contractors. The application supervisor is the on-site person who is responsible for insuring that pesticides are applied according to label, the discipline guidelines, and contract specifications. The application supervisor is also responsible for ceasing operations when conditions warrant.

**Facility Manager\*** ensures the compliance with storage requirements of pesticides at the field locations for which the facility manager is responsible.

**Pesticide Applicator\*** is the DNR person who handles and applies pesticides.

## POLICIES, RESPONSIBILITIES, and PROCEDURES

### DISCIPLINE GUIDELINES

#### POLICIES

- 1. Disciplines of Fish and Wildlife, Forestry, Parks and Recreation, Trails and Waterways, Ecological Services, and Facility and Operations Support Services are required to develop and maintain discipline guidelines to accompany this operational order. The guidelines contain procedures specific to each discipline that are necessary to implement this operational order. An outline of the information that should be included in discipline guidelines can be found in Appendix D.**
- 2. Discipline guidelines should be reviewed every five years by each discipline.**

### PEST CONTROL

#### POLICY

- 1. Integrated pest management using biological, cultural, mechanical/physical, and chemical practices will be used to control pests, with preference given to non-pesticide management alternatives. A "no-action" alternative must also be considered. The control practices of choice and methods of application will be those that will effectively control the pest species and minimize damage to non-target organisms\* and the environment.**

#### RESPONSIBILITIES

- 1. Project Supervisor.*
  - (a) The project supervisor will determine the need for controlling pests on lands they administer. Needs will be based on safety, statutes, rules and regulations, ecological impact, economics, and natural resource management goals.

(b) When control is determined to be necessary, project supervisors will select the appropriate method(s) after reviewing all alternatives, including biological, cultural, and mechanical/physical, as well as appropriate pesticides and application methodologies. Discipline guidelines will be followed in making the selection among the alternatives. For use of pesticides, follow procedures in the PESTICIDE USE section.

## PESTICIDE USE

### POLICIES

1. **The least persistent effective pesticides available will be used. Pesticides must be registered for the specified use by the Environmental Protection Agency (EPA) and the Minnesota Department of Agriculture (MDA). The safety of employees, the public, non-target organisms, and the environment\* will be given full consideration in the selection and use of any pesticide.**
2. **All applications of pesticides will be made in compliance with the pesticide label and labeling, this operational order, discipline guidelines, the site level forest management guidelines, and approved project proposals. Discipline guidelines may set more restrictive standards than this operational order. The most restrictive language or provisions will apply. Disciplines must insure that employees are trained to meet the standards of both the operational order and their discipline guidelines.**
3. **Contract vendors should be used whenever practical and appropriate for pesticide applications. Contract vendors must have a current Minnesota Commercial Applicators License issued by the Minnesota Department of Agriculture.**
4. **Use, storage, handling, or disposal of a pesticide, rinsate\*, pesticide container, or pesticide application equipment must be done in a manner (M.S. 18B.07 subd.2<sup>1</sup>):**
  - a) **consistent with labeling**
  - b) **that doesn't endanger humans, and damage agricultural products, food, livestock, fish, wildlife or beneficial insects**
  - c) **that will not cause unreasonable adverse effects on the environment.**
5. **Public notice will be given 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.**
6. **All treatment sites\* will be posted as specified by the pesticide label\*, and as required by discipline guidelines.**
7. **All pesticide projects must undergo a heritage database\* review prior to application to**

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<sup>1</sup> Statute citations are from Minnesota Statutes, 2003 Chapter 18B, Pesticide Control.

insure that they will not harm endangered or threatened species, or significant native plant communities. The review should be done by checking a current version of the heritage database 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 discipline to conduct this review. Discipline-specific guidelines and policies will be developed by the disciplines and the Natural Heritage program to determine appropriate review and response to protect rare and endangered features.

8. **"Structural pest control\*" must follow discipline guidelines and be reported on the Pesticide Application Summary, NA-00080-XX. See Pesticide Use Policy 11.**
9. **Projects proposed by one discipline involving land areas administered by another discipline will be subject to the pesticide use guidelines of the land-administering discipline. The land-administering discipline can approve or disapprove proposed projects. Conflicts among disciplines will be addressed in established Department conflict resolution procedures. The discipline using the pesticide will be responsible for reporting the pesticides used to the discipline manager that is the land administrator. The land-administering discipline manager will be responsible for reporting pesticides used.**
10. **Records of pesticide application must be maintained according to discipline guidelines unless exempted by the discipline guidelines. Use the Pesticide Application Report NA-0081-XX which complies with MN Department of Agriculture (MDA) requirements for DNR employees licensed/certified as noncommercial applicators (MN Statutes 18B, as amended), or a form that captures the same information as NA-0081-XX.**
11. **A summary of previous calendar year's applications recorded on the Pesticide Application Report NA-00081 (or equivalent form) and any contract or outside group applications must be recorded on the Pesticide Application Summary NA-00080 (or equivalent form), and then submitted to discipline managers or supervisors by January 15.**

**Discipline managers or supervisors must summarize these reports and send a copy to discipline pesticide coordinator by February 1. Discipline reports will be archived by the coordinators to be made available to address department-wide pesticide use questions and issues.**

#### RESPONSIBILITIES

1. *Project Supervisor.* When it is necessary to use pesticides, the project supervisor will document the need for pesticide use.

#### PROCEDURES

1. *Natural Areas Registry Program\*.* Sites in this program are managed by various public agencies with management recommendations provided by the Scientific and Natural Areas program. Discipline managers of DNR sites in the registry will comply with guidelines developed for the site in cooperation with the SNA program for any application of

pesticides. DNR managers who may cooperate on projects in the registry program on non-DNR sites will use pesticides in accordance with the registry agreement and this operational order.

2. *Pesticide Application: Weather Guidelines.* All weather guidelines specified in the product label will be followed for pesticide applications. Application supervisor and applicators are responsible for pesticide coverage, placement, and efficacy. Refer to discipline guidelines for additional weather information and specifications.
3. *Pesticide Application: Water Use.* Water use shall follow provisions stated in M. S. 18B.07 subd.5 and 6 as follows:
  - (a) Pesticide application equipment shall not be filled directly from a public water supply, as defined in section 144.382, unless the outlet from the public water supply is equipped with a backflow prevention device that complies with the Minnesota Plumbing Code under Minnesota Rules, parts 4715.2000 to 4715.2280. (Subd.5)
  - (b) Pesticide application equipment shall not be filled directly from public or other waters of the state, as defined in section 103G.005, subdivision 15 unless the equipment contains proper and functioning anti-backsiphoning mechanisms. Employees may not introduce pesticides into the application equipment until after filling the equipment from the public waters. (Subd. 6a) This constraint does not apply to permitted applications of aquatic pesticides to public waters. (Subd. 6b)
  - (c) An air gap between the discharge outlet or filling hose and rim of the tank or container constitutes a backflow prevention and anti-backsiphoning device. The physical distance from the opening of the application equipment to the end of the water line must be (according to code) twice the diameter of the effective opening of the water line. The air gap distances must be maintained under all circumstances.
4. *Records.* Commercial applicators are required to provide to DNR customers a record of the pesticides they apply on each treatment site. For an example of a form that can be used, see Appendix C, Purple Loosestrife Treatment Report, NA-01313.
5. *Commercial Applicator's Records.* Commercial applicator records should be retained by the Discipline, and archived by the discipline pesticide coordinator as part of the annual pesticide use records.
6. *Evaluation of Effectiveness of Pesticide Application.* Pesticide applications will be evaluated to determine the effectiveness on target organisms, the damage and/or benefit to non-target organisms, the suitability to project goals, and the economy of use. Post-treatment evaluations will be conducted according to discipline guidelines.
7. *Pesticide Applicator Training.* All DNR employees and volunteers applying pesticides will receive pesticide training. Applicators must be 18 years of age or 17 years of age with a high school diploma. Discipline managers or supervisors will ensure that appropriate pesticide training for DNR employees and volunteers is provided.

8. *Pesticide Applicator Training Curriculum.* Training programs will be developed by the disciplines and should include the following elements:
  - (a) General standards of pest control and pesticide application including, but not limited to, user safety, equipment maintenance and use, chemical handling and disposal, label information, record-keeping and Employee Right to Know (ERTKA\*) training.
  - (b) Environmental standards for protection of non-target organisms including recognition of pests and non-target organisms, application techniques, optimum weather conditions, chemical persistence and movement, and potential risks to the environment.
  - (c) Training elements for applicators and on-site project supervisors using restricted use pesticides will be designed to meet or exceed MDA training requirements for licensing.
9. *Pesticide Applicator Training Materials.* Program materials can be obtained from such sources as the DNR Safety Administrator, the University of Minnesota Extension Service, the Minnesota Department of Agriculture, and pesticide suppliers.
10. *Pesticide Applicator Training Costs.* The cost of all pesticide licenses and associated training for DNR employees and volunteers required by the disciplines and this operational order will be borne by the individual disciplines.

## RESTRICTED USE PESTICIDES

### POLICY

1. **All employees who use restricted use pesticides on DNR administered lands or in public waters must have a noncommercial applicator license/certificate from the Minnesota Department of Agriculture for the appropriate use category. (M. S. 18B.34 subd. 1.a.)**

## PESTICIDE PROCUREMENT

### POLICIES

1. **Purchase pesticides in amounts necessary to meet defined natural resource management, facility management, and public health goals. Pesticide management will be accomplished in a manner which minimizes the generation of hazardous waste.**
2. **Purchasing bulk pesticides\* for the purpose of repackaging is not allowed.**
3. **Gift or sales samples of pesticides will be accepted only if they are registered by the US Environmental protection Agency (EPA) and the Minnesota Department of Agriculture, and there is a specific use for the product and if a Specimen Label\* and a Material Safety Data Sheet (MSDS\*) are provided for the product.**

## PROCEDURES

1. *General Procedures*
  - (a) Purchasing pesticides in returnable or recyclable containers is encouraged.
  - (b) Container size must be appropriate to the project size to reduce handling, storage, and carryover of surplus pesticide\*.
  - (c) Soliciting one contract for both purchase and application of a pesticide is encouraged.
  - (d) Pesticides damaged during shipment will not be accepted.
2. *Pesticide Inventory.* Check existing site, discipline, and FOS 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 discipline guidelines. See Appendix C for examples of Pesticide Use Proposal/Approval Forms.
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.*
  - (a) All bids for services that require vendor procurement application of pesticides must be in accordance with DNR Administrative Procedures NR-04-60.
  - (b) Prior approval for pesticide procurement and use must be authorized by using a Pesticide Use Proposal/Approval Form approved by the discipline and patterned after the example in Appendix C.
6. *Gifts or Sales Samples.* No gift or sales sample for evaluating pesticides shall be accepted if the DNR has no specific use for that pesticide. Prior approval via a Pesticide Use Proposal/Approval Form must be obtained before acceptance of a gift or sales sample. The appropriate pesticide labels, labeling, and MSDS must be provided. The receiver must follow procedures found in the DNR Administrative Manual, Section 06:05, Gift Acceptance.

## PESTICIDE HANDLING

### POLICY

1. **Employee safety to reduce potential of exposure to pesticides will be the first priority in handling pesticides. Managers who procure, distribute, use, or store pesticides will utilize direct delivery contract language, container size designations, reduced volumes, or any other appropriate mechanism to minimize handling requirements. Handling and storage needs associated with applications by contract vendors should be the responsibility of the vendor, whenever possible. Leaking pesticide containers will be repackaged. See Pesticide Storage Procedure 10.**



## RESPONSIBILITIES

1. *Discipline Managers or Supervisors* are responsible for the safety of their employees who handle pesticides. They must provide safety equipment for employees involved in handling pesticides and must require compliance with handling procedures. They must insure that appropriate safeguards\* exist to prevent escape or movement of the pesticide from the place it is stored or kept.
2. *Regional FOS* will provide information on placarding and MSDS's for pesticides, as requested.
3. *Employees Handling Pesticides:* Prior to application, employees handling pesticides must familiarize themselves thoroughly with the appropriate pesticide labels, labeling, and MSDS's. They should note safety precautions and spill cleanup procedures as outlined in PESTICIDE HANDLING Procedure 4, Spills.
4. *Immediate Supervisors of Employees Handling Pesticides:* Must provide adequate training for employees involved in handling pesticides and shall ensure that required personal protection equipment is worn by their employees. Immediate supervisors must also provide Employee Right-To-Know (ERTKA) training for the particular pesticides that their employees will be working with. Telephone numbers for the hazard hotline and for notification of spills will be provided.

## PROCEDURES

1. *General Handling Safety Procedures.* Required safety equipment will 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 MSDS's of pesticides will be on the treatment site and available for reference while handling pesticides in storage, transportation or use.
3. *Transporting Pesticides.*
  - (a) A Material Safety Data Sheet (MSDS) for each pesticide must accompany the pesticides being transported.
  - (b) A spill kit must accompany the pesticides being transported regardless of the volume being transported. Consult with regional FOS for obtaining or constructing a spill kit.
  - (c) Pesticides may not be transported in the passenger compartment of vehicles.
  - (d) Pesticide containers being transported must be secured within the carrier to prevent spills and puncturing of containers.
  - (e) Leaking or unsealable containers may not be transported unless they are placed in a larger container which 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.

(f) Department vehicles transporting 1,001 pounds or more of formulated pesticides must be placarded for transportation of hazardous substances as per 49CFR 172.504c. Regional FOS can be contacted to provide information on placarding requirements.

4. *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 MSDS for product information.

(a) Any and all spills should first be contained and then reported immediately. Call the Minnesota Duty Officer (651-649-5451 or 1-800-422-0798) and then call regional FOS.

(b) Phone 911 or the local emergency telephone number if there is a threat to life or property.

(c) Decontaminate or replace spill kit items after use so they are available in the event of another spill.

## PESTICIDE STORAGE

### POLICIES

1. **Long-term storage\* of pesticides is not encouraged. However, if long-term storage is necessary it is permitted only in an approved storage area\* or building\*.**
2. **Storage methods and areas will be selected with safety as the primary consideration.**
3. **Storage will be in compliance with all directions listed on the manufacturer's label and labeling, and in compliance with all pertinent laws, rules, regulations, and local ordinances.**
4. **All pesticides will be stored in a secure manner that does not allow the pesticides to escape packaging or storage areas and endanger human health, contaminate other pesticides, or harm the environment.**
5. **Storage buildings will have equipment to effectively and safely handle any emergencies that might be reasonably expected to occur.**
6. **Incompatible hazardous substances and pesticides, as noted on the pesticide label or the MSDS, will not be stored in the same area.**
7. **A Pesticide Inventory Form, NA-00092 (or equivalent), must be updated and maintained by the facility manager before a pesticide is stored for either long-term or short-term.**

### RESPONSIBILITIES

1. *Discipline Managers or Supervisors* are responsible for facility manager's compliance with

storage requirements in field stations.

2. *DNR Safety Administrator* has primary responsibility to be knowledgeable of federal and state storage requirements for pesticides and for communicating those requirements to disciplines in a timely manner.
3. *Regional FOS* is responsible for annual approval of both long-term and short-term storage\* buildings and areas.
4. *Facility Manager* maintains all labels, supplemental labels, specimen labels, and MSDS's for all pesticides stored. If a product arrives without one or more of these items, the facility manager must obtain the missing documentation from web site, vendor, or manufacturer to request missing information. If labels become illegible, the facility managers must attach a legible copy of the specimen label to the container. Examples of facility managers include area foresters and area wildlife managers.

## PROCEDURES

1. *Labels and Labeling\**. Instructions on the label and the MSDS will 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. *Long-Term Storage or 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 FOS 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.
  - (e) Constructed to facilitate cleanup of spills.
  - (f) 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.

(g) Used for pesticide storage only.

(h) Ventilated to prevent buildup of toxic or flammable vapors and dust.

4. *Short-Term Storage or 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.

7. *Inventory Control: Long-Term and Short-Term Storage.*

(a) *Immediate Inventory.* Upon receipt of a shipment of pesticides, the facility manager must indicate the date of receipt on the side of the container, without obscuring the product label.

(b) *Ongoing Inventory.* A perpetual (ongoing) inventory of pesticides on hand must be kept at each 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 facility 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 will complete the appropriate inventory form (see example of a Pesticide Inventory Form in Appendix C), maintain one copy for the file, and send one copy to the regional FOS and the discipline manager or supervisor by November 30 of each year. The inventory should be maintained through the FOS online program where available. Each regional FOS will send the information to the Safety Administrator by December 15 of each year.

8. *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 either 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. (See also Procedure 10. *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 MSDS's, 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 MSDS.)

(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 Health and Safety Information phone number (1-888-673-7466) conspicuously, near the storage area. Self-adhesive labels with Health and Safety Information can be obtained from FOS.)

9. *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.
10. *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 pesticide is a liquid and the container is leaking, the container should be positioned to stop the leak if possible, then proceed with 1) or 2) below.
    - (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 Pesticide Disposal section.
    - (2) If the container is leaking and the contents cannot be transferred to another container, place it in a larger container which 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.

## SURPLUS PESTICIDES

### POLICY

1. **Minimize the accumulation of surplus pesticide and long-term storage. Transfer of materials between disciplines, agencies, or governments; returns to manufacturers; or other appropriate means should be used to minimize the occurrence and maximize the use of surplus pesticides.**

### RESPONSIBILITIES

1. *Project Supervisor or Application Supervisor* determines that there is no further use for a pesticide within their discipline and submits an Equipment Transaction Record, (NA-00048-03) to regional FOS to advise of the occurrence of a surplus product.

2. *Regional FOS*: Will arrange for the surplus pesticide to be properly stored and will then implement the procedures to locate a user for the surplus product or dispose of the pesticide.

## PESTICIDE DISPOSAL

### POLICIES

1. **Disposal\* of pesticides and pesticide containers, will be done in accordance with the label instructions and applicable state and federal laws and regulations.**
2. **The costs of disposing of pesticides will be borne by the originating discipline.**

### PROCEDURES

1. *Disposal of Residual Pesticides.*
  - (a) Pesticide containers that held liquids and other rinsable containers must be pressure rinsed or triple rinsed when they are emptied and the rinsate\* applied to the target area as part of the control program.
  - (b) Boxes and bags that held powders or granules will be shaken at the treatment site to remove as much product as possible and then disposed of with other solid waste or as otherwise specified on the label.
  - (c) Employees shall not clean pesticide application equipment in the surface waters of the state except for approved aquatic applications and according to label directions.
2. *Disposal of Empty Pesticide Containers.*
  - (a) Non-recyclable empty 5-gallon jugs and smaller containers should be triple rinsed; punctured, crushed or broken (as appropriate); and disposed as specified on the label.
  - (b) Empty 30- and 55- gallon drums and other containers should be triple rinsed, and they should be recycled whenever possible.
  - (c) On sites treated by DNR personnel, the application supervisor is responsible for triple rinsing or otherwise emptying pesticide containers and properly disposing of them.
3. *Disposal of Unusable Pesticides.*
  - (a) FOS is responsible for the disposal of unusable pesticides. The MDA Waste Pesticide Disposal Program will be used when necessary.
  - (b) Regional FOS is responsible for the determination of when a pesticide will be considered a hazardous waste.
  - (c) When a pesticide is thought to be no longer usable and may constitute a hazardous waste, contact regional FOS.
  - (d) Procedures for the disposal of hazardous wastes are defined in Pollution Control Agency

(PCA) Rules and must be adhered to for the disposal of unusable pesticides.

4. *Suspected Pesticide Disposal Sites.*

(a) If disposal sites contain pesticides, cleanup is governed by MDA and PCA rules.

(b) Sites must be reported to the Minnesota Duty Officer (651-649-5451 or 1-800-422-0798) and regional FOS. The MDA Incidence Response Program will provide guidance for cleanup and disposal.

## PESTICIDE USE BY OUTSIDE GROUPS ON DNR-ADMINISTERED LANDS

### POLICY

1. **Pesticide applications on DNR-administered lands or public waters by non-DNR persons or companies may be permitted under a DNR Agreement\*.**
2. **All DNR Agreements made after the adoption of this operational order should insure that applications of pesticides and the annual reporting of pesticides applied to DNR lands are consistent with this Operational Order.**

### RESPONSIBILITIES

1. *Land-Administering Discipline* is responsible for:
  - (a) Granting permission to use pesticides on lands and waters under a DNR agreement, and
  - (b) Monitoring and reporting the pesticide used on state lands and public waters that are under DNR Agreement.

### PROCEDURES

1. *Terms of DNR Agreement.* Terms should be determined by the discipline and must require that pesticides used on DNR-administered lands and public waters must have prior approval by the DNR, and the DNR retains the right to refuse the use of specific pesticides.
2. *DNR Contact.* The appropriate DNR contact should be included on the DNR agreement cover letter.
3. *Report of Pesticides Used.* Records of pesticide applications will be submitted to the Discipline within 30 days of the final annual application or before expiration of the agreement whichever comes first.

## PESTICIDE PROGRAM EVALUATION AND MONITORING

### POLICY

1. **The Agriculture Policy Director and the Safety Administrator will jointly be responsible for coordinating the review and monitoring of the pesticide program on**



**DNR administered lands and in public waters, and be responsible for updating the operational order as appropriate.**

**RESPONSIBILITIES**

1. Review statutory or regulatory changes related to pesticides and recommend Department positions.
2. Convene a department-wide interdisciplinary task group as needed to review and monitor the Department's pesticide use.
3. Review discipline programs and guidelines to ensure conformity with department policy. (See Discipline Guidelines Policy.)

## Appendix A: Glossary

Application Supervisor - That person on the treatment site who directs the on-site activities associated with the specific pesticide application to ensure that the work is conducted in a safe manner, consistent with project goals, product labels, department procedure and discipline guidelines. The application supervisor will be the responsible party\* at the treatment site\*.

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. (M.S. 18B.01, subd. 4.)

Contaminated container - Any container with a pesticide on the outside of the container.

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. (M.S. 18B.01, subd. 7.)

Discipline Guidelines – Pest management guidelines developed by each discipline to implement this operational order. The discipline guidelines do not supplant the operational order, but they include additional policies, procedures, and assign responsibilities that address pest control needs unique to each discipline. Suggested content of the guidelines can be found in Appendix D.

Discipline Pesticide Coordinator - Archives pesticide use records for the disciplines and responds as needed to pesticide issues as requested by the commissioner's office.

Disposal - Elimination of an unusable pesticide from DNR's inventory.

DNR Agreement - A term used to indicate the range of legal relationships between DNR and non-DNR entities. This would include such things as licenses, leases, easements, contracts, interagency agreements, joint powers agreements, and cooperative farming agreements.

Employee Right to Know (ERKT) - This standard mandates employers establish a written hazard substance communication plan for employees, and to 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. (M.S. 18B.01, subd. 9.)

Facility Manager - The person who is responsible for the use and maintenance of an administrative site.

Hazardous Waste - Any substance identified or listed as hazardous waste in the rules adopted under section 116.07, subd. 4. (M.S. 18B.01, subd. 11.) A pesticide becomes a hazardous waste when declared as such by regional FOS according to procedures cooperatively developed with the MN Pollution Control Agency and Minnesota Department of Agriculture.

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. (M.S. 18B.01, subd. 12.)

Heritage database - 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 Services at 651/296-7863 for information about how to access the database.

Integrated Pest Management - An ecological approach in which a combination of effective techniques is consolidated into a unified program so that pest populations can be reduced and adverse side effects can be minimized. Practices may include:

- a) biological, such as using the pest's natural enemies or selecting resistant varieties for planting;
- b) cultural, such as planting at optimum conditions for the desired species, or cutting weeds;
- c) mechanical/physical, such as trapping animals, or burning plants to prevent seed production;
- d) chemical, such as disrupting growth to prevent flowering, or controlling competitive species;
- e) or a "no action" alternative.

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

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

- 1) accompanying the pesticide or device;
- 2) referred to by the label or literature accompanying the pesticide or device; or
- 3) 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. (M.S. 18B.01, subd. 14)

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

Material Safety Data Sheet (MSDS) - 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.

Natural Areas Registry Program – The Natural Areas Registry Program, administered by the Scientific and Natural Areas (SNA) Program, recognizes tracts of public land that contain natural features or statewide ecological significance and honors those agencies and individuals that manage these lands to protect and perpetuate the features of interest. The intent of the program is to promote voluntary cooperation between other divisions, other units of government, and the SNA Program.

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

Outside group - Any individual, organization or other entity that has a DNR agreement for use of DNR-administered lands and public waters.

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. (M.S. 18B.01, subd. 17.)

Pest control - Any system, method or practice employed to repel, control, or destroy a pest, to preclude a pest's presence, or to mitigate the effects of a pest.

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. (M.S. 18B.01, subd. 18.)

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

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. (M.S. 18B.01, subd. 23.)

Restricted use pesticide - Any pesticide formulation designated as a restricted use pesticide under FIFRA or by the Minnesota Commissioner of Agriculture under Minnesota law. (M.S. 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. (M.S. 18B.01, subd. 25.)

Safeguards - A facility, device, or system, or a combination of these, designed to prevent an incident (M.S. 18B.01, subd. 26.) A safeguard prevents the escape or movement of a pesticide from the place it is stored or kept under conditions that might otherwise result in contamination of the environment.

Short-term storage - Storage of a pesticide for less than one year in a field station.

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.

Structural pest control - The control of any structural pest through the use of a device\*, as procedure, or application of pesticides in or around a building or other structures, including trucks, boxcars, ships, aircraft, docks, and fumigation vaults, and the business activity related to use of a device, a procedure, or application of a pesticide. (M.S. 18B.01, subd. 29.) This would apply to pest control efforts that occur in buildings such as field offices or sanitation buildings in recreation areas.

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

Treatment site - A bounded geographic area in which pesticides will be 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. (M.S. 18B.01, subd. 31.)

## Appendix B: List of Acronyms

EPA - Environmental Protection Agency

ERTKA - Employee Right-To-Know Act

FIFRA – Federal Insecticide, Fungicide, Rodenticide Act

FOS - Facilities and Operations Support

MSDS - Material Safety Data Sheet

MDA - Minnesota Department of Agriculture

OSHA – Occupational Safety and Health Administration

PCA - Pollution Control Agency

SNA - Scientific and Natural Area

## Appendix C: Forms

### Forms referenced:

NA-00048-03 - Equipment Transaction Record (Surplus Pesticide, Responsibility 1)  
NA-00080-XX - Pesticide Application Summary (Pesticide Use, Policy 8, 11)  
NA-00081-XX - Pesticide Application Report (Pesticide Use, Policy 10, 11)  
NA-00092-XX - Pesticide Use Proposal/Approval (Pesticide Procurement, Procedure 3, 5b, 6)  
NA-00092-XX - Pesticide Inventory (Pesticide Storage, Policy 7)  
NA-038180-02 - Herbicide Use Proposal/Approval (Forestry) Pesticide Procurement, Procedure 3, 5b)  
NA-01313-XX - Purple Loosestrife Treatment Report (Pesticide Use, Procedure 4)  
No Number - Pesticide Inventory (Pesticide Storage, Procedure 7c)

## Appendix D: Discipline Guidelines

Guidelines should be developed to address pest control activities when pesticides are used. The guidelines should include:

The discipline's pest control goals and objectives;

The responsibilities of each administrative level within the discipline by specifically describing the duties for each position in the discipline involved in pest control and by providing the name of the discipline pesticide coordinator;

Treatment alternatives;

Treatment timing;

Standards for applying particular application methodologies;

Procedures for posting treatment sites;

Standards for post treatment evaluations;

Guidelines for buffer strips separating treatment sites from non-treatment sites;

Acceptable weather parameters for safe applications;

Procedures for administering DNR agreements where pesticides are used; and

Specific forms tailored to meet the needs of the discipline.

Guidelines should be developed for managers using control methods for structural pest control.

Guidelines should provide a process for the review and approval of non-pesticide control

practices on lands and public waters administered by the discipline. Disciplines are encouraged to develop a project proposal format for non-pesticide control projects which includes at a minimum the following information in order to parallel pesticide control data:

- (1) Target (named species)
- (2) Location (legal description and map or aerial photo)
- (3) Cause for concern (needs)
- (4) Previous control(s) applied
- (5) Proposed controls
- (6) Method of control
- (7) Control method limitations and difficulties (including "sensitive area")
- (8) Cost of control method
- (9) Date of proposed control
- (10) Date of expiration of project
- (11) Operator(s) identification and equipment
- (12) Target area baseline data (for later project evaluation)

Guidelines must include procedures for a heritage database review when employing either pesticide or non-pesticide control methodologies. Specifically, the guidelines should specify at what point in planning the application review will be done, who will be responsible for the review, what standards will be used to determine whether consultation with Ecological Services is needed, and how the results of the review will be documented. See Pesticide Use, Policy 7.

Discipline guidelines may be more restrictive than required by this operational order.