

FOREST PRACTICE NOTES

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"STEWARDSHIP IN FORESTRY"

This *Forest Practices Note* explains the Oregon Board of Forestry's regulations for using pest control chemicals and other petroleum products on forestlands. The Oregon Department of Forestry administers these regulations under the authority of the Oregon Forest Practices Act.

In using chemicals and petroleum products, forest landowners and operators need to know about other agencies' rules, in addition to the forest practice rules. Forest operations using chemicals and petroleum products on forestland may also be subject to:

- The pesticide control laws administered by the Oregon Department of Agriculture
- The hazardous waste laws administered by the Oregon Department of Environmental Quality
- The hazard communication rules administered by the Oregon Occupational Safety and Health Division
- The water use laws administered by the Oregon Water Resources Department

For example, using water from streams, lakes, or other surface water bodies to mix pest control chemicals requires prior notice to the Oregon Water Resources Department and the Oregon Department of Fish and Wildlife. Notifying the Department of Forestry of the planned operation does not satisfy this requirement. The forest operator must send copies of the original notification to the other agencies' local offices at least 15 days before beginning the operation.



CHEMICALS AND OTHER PETROLEUM PRODUCTS

Questions answered in this Forest Practices Note...

What types of "chemicals" and "other petroleum products" are subject to the forest practice rules?	2
What is the purpose of the forest practice rules regulating the use of chemicals and other petroleum products?.....	2
What is required in a Written Plan?.....	2
What additional information is required on a notification of operation when a forest operation involves a chemical application?	3
What actions must be taken to prevent, control, and report leaks and spills of chemicals and other petroleum products?	3
What special precautions must be taken to protect water quality when mixing chemicals on forestland?..	3
What actions must be taken to protect water quality when locating mixing, transfer, and staging areas for chemicals and other petroleum products?.....	4
When chemicals are applied on forestlands, how will water quality and other resources be protected?.....	5
What information must be recorded and maintained on forest chemical application?	5
..... See the <i>Daily Application Record Form</i> on page 7.	
What special actions must be taken when applying chemicals near streams used by community water systems?.....	5
Where can information on chemicals used on forestland be obtained?	6
How can citizens learn about forest chemical operations in their local area?	6

What types of "chemicals" and "other petroleum products" are subject to the forest practice rules?

In the rules, the term "chemicals" refers to all classes of pesticides and more, including:

- Herbicides
- Insecticides
- Rodenticides
- Fungicides
- Petroleum products used as carriers for pesticides
- Additives called adjuvants used in pesticide solutions, such as surfactants, drift control additives, anti-foam agents, wetting agents, and spreading agents
- Fertilizers

"Other petroleum products" that may be present on any forest operation and subject to the forest practice rules include engine fuels, hydraulic fluid, lubricating oils, and greases.

The forest practice rules distinguish between "chemicals" and "other petroleum products" and only certain rules apply to the "other petroleum products."



What is the purpose of the forest practice rules regulating the use of chemicals and other petroleum products?

The Board of Forestry encourages voluntary use of integrated pest management. This is a process that reduces the effects of forest pests (including vegetation competing with young trees) in an environmentally and economically sound manner to meet the landowner's site-specific objectives. Using pesticides is one of a variety of integrated pest management strategies forest landowners may use. When properly used, pesticides and other chemicals can be effective tools in freeing forest trees from damaging competitive vegetation, insects, and diseases.

What is required in a Written Plan?

A written plan must be submitted for any chemical operation located within 100 feet of a type F or D stream, or within 300 feet of a specified resource site. Written plans must be clear, concise, and capable of standing alone as complete documents.

Three basic elements are essential to such plans:

1. An adequate description of the planned operation
2. An adequate description of the protected resources
3. A description of how the resources will be protected during the operation

The operation's specific conditions will determine the information needed to fulfill these elements of the written plan.

Some information items are needed in every written plan, while some are not. The following list is a good reference. For more detail, contact your local department office for assistance.

Items for every chemical application written plan:

- Names of the operator and landowner
- Legal description or clear association with a particular notification and unit number
- A complete map showing the operation, the protected resources, section lines, access roads, etc.
- The common name(s) and, if known, the product brand name(s) of the chemical(s) to be used
- The type of application method (aerial/ground, pressurized backpack/hack and squirt, etc.)
- The type of vegetation to be controlled
- An adequate description of the protected resource (stream type & size, nesting site, etc.)
- A description of the resource site's associated components (alternate nest trees, perch trees, etc.)
- The measures that will be taken to protect the resource site during the operation (using a single boom system to minimize drift, using a target-specific chemical, using the wind to carry drift in a safe direction, etc.)
- The signatures of the operator and/or landowner

Additional items which may be required in the written plan:

- The heliport location
- The chemical mixing location
- Plans for meeting any unique requirements on the product label
- Plans for finding and marking the locations of streams prior to spraying

The purpose of the forest practice chemical and other petroleum product rules is to establish requirements that will ensure:

1. Chemicals and other petroleum products used on forestland do not occur in the soil, air, or waters of the state in quantities that would be injurious to water quality or to the overall maintenance of terrestrial wildlife or aquatic life; and
2. Vegetation near the waters of the state and other sensitive resource sites receives protection on herbicide operations consistent with the requirements of other forest practice rules dealing with the protection of these important forest resources.

What additional information is required on a notification of operation when a forest operation involves a chemical application?

A notification must be submitted to the Department of Forestry at least 15 days before conducting a chemical application or other operation on forestland. When chemicals will be used, notifications must include:

- a) the common name of the chemical(s) to be used
- b) the product brand name, if known at the time of notification
- c) the application method
- d) for fertilizers, the intended application rate per acre



What actions must be taken to prevent, control, and report leaks and spills of chemicals and other petroleum products?

Operators must maintain chemical handling equipment in a leakproof condition. Operators include landowners, loggers, and pesticide applicators. The equipment may include whatever is

used for transportation, on-site storage, or application of chemicals. If there is evidence of chemical leakage, the equipment must not be used any more until it is repaired. Operators must also take adequate precautions to prevent leaks or spills of chemicals and other petroleum products from entering streams, ponds, lakes, wetlands or other waters.

When a spill or leak does occur, operators must immediately stop the leak and contain the spread of the spill. If the spill enters, or may enter streams, lakes, wetlands, or other waters of the state, operators must also immediately report it to the nearest Department of Forestry office. Reporting to the department will not exempt the operator from any requirements of other local, state, and federal agencies to report chemical or other petroleum product spills.

Persons responsible for spills of reportable quantities of chemicals or petroleum products must contact the Oregon Emergency Response System (OERS) at 1-800-452-0311 (503-378-6377 if near Salem). OERS serves as a central contact to notify state agencies of spills.

What special precautions must be taken to protect water quality when mixing chemicals on forestland?

Whenever water is taken from any stream or water impoundment for use in mixing chemicals, the operator must prevent chemicals from entering the water by taking at least the following precautions:

- Providing an air gap or reservoir between the water source and the mixing tank; and
- Using pumps, suction hoses, feed hoses, and check valves that are used only for water, never carrying chemical mix.

What actions must be taken to protect water quality when locating mixing, transfer, and staging areas for chemicals and other petroleum products?

When forest operations involve:

- Mixing chemicals;
- Transferring chemicals or other petroleum products between equipment or containers;
- Cleaning tanks or equipment used during chemical applications; or
- Landing and staging aircraft.

operators must conduct those activities only in locations where the site does not provide a route for any chemical or petroleum spill to run off into streams, lakes, wetlands, or other water bodies. The

minimum precaution is to avoid locating chemical mixing and staging areas within 100 feet of fish bearing streams or streams from which water is withdrawn for domestic use.

Table 1 summarizes the buffer requirements for different types of water bodies when chemicals are applied on forestland under the forest practice rules.

Chemical Application Buffers Required for the Water of the State by the Chemical and Other Petroleum Product Rules (<u>Also see notes below table</u>)	Herbicides, Rodenticides, Biological Insecticides, and All Other Chemicals Except Fungicides, Non-Biological Insecticides, and Fertilizers		Fungicides and Non-Biological Insecticides		Fertilizers	
	Aerial Applications	Ground Applications	Aerial Applications	Ground Applications	Aerial Applications	Ground Applications
Aquatic Areas of Fish Bearing Streams with no Domestic Use (Most Type F streams)	60 feet	10 feet	300 feet	10 feet	No direct application	No direct application
Aquatic Areas of Domestic Use Streams (All Type D and some Type F streams)	60 feet	10 feet	300 feet	10 feet	100 feet	100 feet
Aquatic Areas of Other Streams (Type N streams)	No buffer specified	No buffer specified	60 feet if flowing at time of application	No buffer specified	No direct application to large and medium streams	No direct application to large and medium streams
Significant Wetlands	60 feet	10 feet	300 feet	10 feet	No direct application	No direct application
Aquatic Areas of Lakes larger than 8 acres	60 feet	10 feet	300 feet	10 feet	No direct application	No direct application
Aquatic Areas of Other lakes with fish use	60 feet	10 feet	300 feet	10 feet	No direct application	No direct application
Other standing water larger than 1/4-acre at the time of application	60 feet	10 feet	300 feet	10 feet	No direct application	No direct application
All other waters	No buffer specified	No buffer specified	No buffer specified	No buffer specified	No buffer specified	No buffer specified

Notes for Table 1:

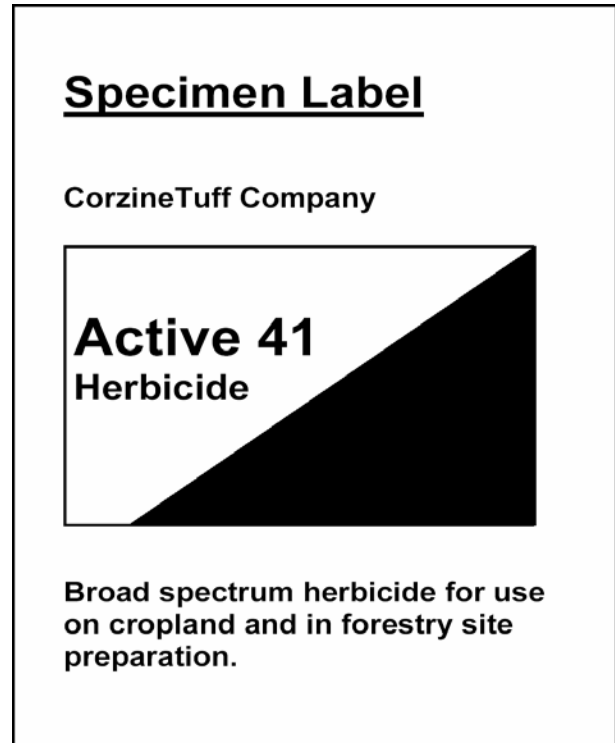
- All distances listed are measured horizontally.
- Direct application of chemicals is not allowed within the listed distances.
- In all cases when pesticides are used, applicators must also comply with all requirements of the label for the applied product. **Label requirements may require wider buffers than specified in the chemical and other petroleum product rules.**
- For herbicide applications, applicators must protect the vegetation required to be retained near the waters of the state by the general forest practice water protection rules. **These other rules may require wider buffers than specified in the chemical and other petroleum product rules and apply to all types of forest operations.**
- In certain situations, the Department of Forestry may approve plans for alternate practices that involve reducing the widths of buffers for aerial fungicides and non-biological insecticide applications.

When chemicals are applied on forestlands, how must water quality and other resources be protected?

Each forest pesticide has a federally approved label which describes how it must be applied. The label is a legal document and failing to follow the label requirements is a violation of both federal and state law. **In addition**, the forest practice rules require the following further actions by operators, because of the unique blend of resource issues, rugged terrain, and operational constraints that exist on forestland. These actions are related to weather conditions, aerial application parallel to streams, and buffering water bodies (see Table 1 on page 4).

Weather conditions such as temperature, relative humidity, wind speed, wind direction, atmospheric temperature inversions, and precipitation may strongly affect the deposition and drift of chemicals, especially during aerial and pressurized, ground-based chemical applications. Pesticide product labels may include specific requirements for weather conditions during applications. The forest practice rules do not contain weather limitations, but do require the weather during the application to be closely monitored and evaluated to ensure chemicals do not drift outside the target area.

Aerial chemical applications must be made parallel to the edges of streams and other waters to reduce the potential for chemicals to enter the water.



What information must be recorded and maintained on forest chemical applications?

Table 2 lists the information that operators must collect and retain on file for three years after a forest chemical application. This information must be made available to the Department of Forestry upon request.

Table 2

	Aerial pesticide applications and pressurized, ground-based broadcast pesticide applications with potential for drift, such as right-of-way and backpack sprayer applications	Other ground-based pesticide applications (stem injection, "hack and squirt", granular, etc.)	Fertilizer
Legal description	✓	✓	✓
Acres treated	✓	✓	✓
Chemical brand name or EPA registration number & application rate	✓	✓	
Date and time of application	✓	✓	✓
Air temperature	✓		
Relative humidity	✓		
Wind speed and direction	✓		
Applicator's name	✓	✓	✓

Note: Air temperature, relative humidity, wind speed and wind direction must be measured at least hourly for aerial applications and at least at the beginning and ending of each day's work for ground-based applications.

A standardized form is offered on page 7 of this note as one method of keeping the required records.

What special actions must be taken when applying chemicals near streams used by community water systems?

It is important that community water system managers are informed about planned chemical operations so they can coordinate their water quality monitoring activities with such operations. These requirements apply when chemicals will be aerially applied within 100 feet, or applied from the ground within 50 feet of domestic



use portions of Type F or Type D streams used by a community water system. The operator must notify the water system manager about the planned chemical operation at least 15 days before the operation begins. Notifying the Department of Forestry does not satisfy this requirement. This requirement generally only applies to community watersheds 100 square miles (64,000 acres) in size or smaller. Department field offices have a list of water systems requiring notification. This list is periodically updated.

If requested by the community water system manager, the operator must provide the following additional information before commencing the operation:

- The application technology that will be used
- Practices that will be followed to minimize drift toward the stream
- Any monitoring efforts that will be conducted by the landowner
- The planned time schedule for the application

Where can information on chemicals used on forestland be obtained?

Technical information on individual pesticides is available from a variety of sources, including the following:

- The Forest Chemical page at <http://egov.oregon.gov/ODE/> (look under “chemical use”). Concerned individuals or groups may use this site to view specimen pesticide and additive labels for allowable application rates and other information. The labels may also be useful for operators, but **applicators must always follow the instructions on the label that comes with the pesticide product.** Forest pesticide fact sheets are also available at this site.

- The National Pesticide Information Center (NPIC) at 1-800-858-7378, or <http://npic.orst.edu/>.
- The Extension Toxicology Network (EXTOXNET) at <http://extoxnet.orst.edu/>.

To learn about the potential human health effects of pesticide exposures and what to do if someone may have been exposed to pesticides, contact:

The Oregon Pesticide Analytical
and Response Center
at (503) 986-6470
or
Oregon Poison Center
at 1-800-222-1222

How can citizens learn about forest chemical operations in their local area?

Persons living in and near managed forestlands are encouraged to communicate directly with their neighboring forest landowners. Most industrial and non-industrial forest landowners are willing to explain the management plans for their property and listen to public comments and concerns.

Citizens may also receive information about forest operations, including chemical applications, by annually subscribing to copies of notifications of operations received by the Department of Forestry. Subscriptions apply to a geographic area of interest, and there is a fee to cover the cost of this service. Persons with a surface water right may request to receive copies of forest chemical application notifications within ten miles upstream of their property at no cost. Such requests must be made in writing to the department. A mandatory 15-day waiting period for all aerial chemical applications, and some ground-based applications, on forestlands allows interested parties the opportunity to comment to the Department of Forestry and to the operator about the planned activity.

For more information about the Oregon Forest Practices Act or the forest practice rules, please contact one of the Oregon Department of Forestry offices shown on the back page of this publication.



Daily Chemical Application Record Form

O D F	O D A	U S D A	<p>This form outlines daily pesticide application information an applicator must record to meet requirements of the Oregon Departments of Forestry (ODF) ¹ and Agriculture (ODA), ² and the U.S. Department of Agriculture (USDA) ³. An applicator may use a different form if the required information is included. <i>The applicator must retain the ODA and ODF-required records for 3 years, and the USDA-required records for 2 years.</i></p>						
			Landowner and Location						
	✓		Name, address, and telephone of person or business who owns or controls the property:						
✓	✓	✓	Legal Description of Application Area:						
			Applicator						
✓	✓	✓	Applicator (Name of Person Applying Chemical):						
		✓	Applicator Certification Number:						
✓			Applicator Contractor:						
			Application Information						
	✓		Supplier of Chemical Product:						
✓	✓	✓	EPA Registration Number and Product Brand Name:						
✓	✓	✓	Number of Acres Treated:						
✓	✓		Per Acre Application Rate:						
		✓	Total Amount of Pesticide Product Applied:						
✓			Carrier Used, including Rate/Acre:						
	✓		Application Equipment Used (Aerial, Backpack, Etc.): If Aerial F.A.A. Aircraft Number:						
	✓	✓	Crop (enter "forest" for forestry applications):						
✓	✓	✓	Date of Application: Beginning Time: _____ Ending Time: _____						
<p><u>ODF Only: Weather Information (For Aerial Applications Measure and Record Information Hourly; For Ground-Based Pressurized Broadcast Application Measure and Record Information at the Beginning and End of Each Day's Application):</u></p>									
			Time:						
			Air Temperature						
			Relative Humidity						
			Wind Speed						
			Direction wind coming from (e.g., N or NNW)						
Applicator Signature: _____									

¹ Oregon Department of Forestry requirements for all pesticide applicators

² Oregon Department of Agriculture requirements for commercial and public applicators. Applicators must also report to the Pesticide Use Reporting System at http://oregon.gov/ODA/PEST/purs_index.shtml.

³ U.S. Department of Agriculture requirements for private pesticide applicators using restricted use products.

ODF Field Offices Directory

Northwest Oregon Area

Astoria District

92219 Hwy 202
Astoria, OR 97103
(503) 325-5451

Forest Grove District/Forest Grove Unit

801 Gales Cr. Rd
Forest Grove, OR 97116
(503) 357-2191

Columbia City Unit

405 E Street
Columbia City, OR 97018
(503) 397-2636

North Cascade District/Santiam Unit

22965 North Fork Rd SE
Lyons, OR 97358
(503) 859-2151

Molalla Unit

14995 S. Hwy 211
Molalla, OR 97038
(503) 829-2216

Tillamook District

5005 East 3rd
Tillamook, OR 97141
(503) 842-2545

West Oregon District/W. Oregon Unit

24533 Alsea Hwy
Philomath, OR 97370
(541) 929-3266

Dallas Unit

825 Oak Villa Rd
Dallas, OR 97338
(503) 623-8146

Toledo Unit

763 NW Forestry Rd
Toledo, OR 97391
(541) 336-2273

Southern Oregon Area

Coos District

63612 Fifth Road
Coos Bay, OR 97420
(541) 267-3161

Douglas District

1758 NE Airport Road
Roseburg, OR 97470
(541) 440-3412

South Cascades District/

East Lane Unit

3150 Main Street
Springfield, OR 97478
(541) 726-3588

Sweet Home Unit

4690 Hwy 20
Sweet Home, OR 97386
(541) 367-6108

Western Lane District

P.O. Box 157
Veneta, OR 97487
(541) 935-2283

Southwest Oregon District/

Medford Unit (Central Point)

5286 Table Rock Rd
Central Point, OR 97502
(541) 664-3328

Grants Pass Unit

5375 Monument Drive
Grants Pass, OR 97526
(541) 474-3152

Eastern Oregon Area

Central Oregon District/ Prineville Unit

3501 E. 3rd Street
Prineville, OR 97754
(541) 447-5658

The Dalles Unit

3701 W. 13th St
The Dalles, OR 97058
(541) 296-4626

John Day Unit

P.O. Box 546
John Day, OR 97845
(541) 575-1139

Klamath-Lake District/

Klamath Falls Unit

3200 DeLap Road
Klamath Falls, OR 97601
(541) 883-5681

Lake Unit

2290 North 4th Street
Lakeview, OR 97630
(541) 947-3311

Northeast Oregon District/

La Grande Unit

611 20th Street
La Grande, OR 97850
(541) 963-3168

Pendleton Unit

1055 Airport Road
Pendleton, OR 97801
(541) 276-3491

Wallowa Unit

802 W. Hwy 82
Wallowa, OR 97885
(541) 886-2881

ODF on the Internet

Current Oregon forest practice rule information is available on the Internet at:

<http://egov.oregon.gov/ODF>
(click on "Private Forests")



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