Pesticide Safety

Date: August, 1999
Application: All forested lands managed under the direction of the Forest Resources Division where herbicides are applied and to all personnel handling herbicides or traversing herbicide treated areas.

DISCUSSION

This task deals with the safe handling and use of pesticides with an emphasis on herbicide use. The department judiciously applies herbicides to meet its responsibility to keep ecosystems productive and healthy on the land we manage. However, there are occasions when it is necessary to use herbicides to control overly abundant vegetation that slows the development of a desired forested stage, or to control a noxious or exotic species. On rare occasions, DNR may use pesticides other than herbicides (i.e., insecticides).

Federal Worker Protection Standards (WPS) (CFR 40.170) define extensive employer obligations concerning pesticide safety for employees. These standards apply to forestry, greenhouse, and agricultural pesticide users. The WPS do not affect right-of-way, roadside, aquatic, or range herbicide applications or address Right-To-Know hazard communication.

The Worker Protection Standards exist to protect employees from potential health hazards associated with pesticides (which include herbicides) from just prior to, during, and after a pesticide application. Personnel having any possibility of being near a treated location, including equipment maintenance personnel, must comply with the WPS.

Definitions

Workers — all field personnel and others who may be working in the general vicinity of a treated area. Workers include persons passing through a parcel on foot and personnel performing vehicle maintenance. However, this does not include a person traveling through the same area in a vehicle.

Handler — an employee who is on site during, and immediately after, a herbicide has been applied or an employee who enters an area while a restricted entry interval is in effect.

Personal Protective Equipment (PPE) — refers to clothing, garments, or protective items prescribed by the label or regulations, which protect an individual from the pesticide concentrate during mixing, loading, or application.

Restricted Entry Interval (REI) — the time period specified on the pesticide label that restrains access by unprotected personnel to a pesticide treated area. The time period is specified in hours. Entry is not allowed unless the employee is trained and wearing PPE.

The protective measures in this task were taken from the WPS and are included here for easy access. Refer to CFR 40.170 for the complete standards. Department personnel must comply with WPS by adhering to this task.

Action

(1) Post the "Keep Out" sign and the "Information" sign as indicated below. See attachments 1 and 2 to this task for an example of these signs. Full size signs can be ordered from the warehouse. See Attachment 3 for a sign posting diagram.

- Keep Out — A warning sign with a stern face, raised hand, and stop sign border that informs employees that an area is being treated. The sign lists the REI, date of application, and product applied. Post this sign when application begins and remove the sign within 48 hours after the REI expires.

- Information— An informational sign that identifies that an herbicide application activity is planned, is in progress, or has been applied. Information on the sign includes unit name, product name, Environmental Protection Agency (EPA) product registration number, active ingredient, REI, and contact person. This sign is posted for five days prior to an aerial application or just prior to a ground application and remains posted for 30 days past the last application date.

Post signs at:

- common entry points, and
- along private property lines at a maximum of 600-foot intervals or within the line-of-sight.

(2) Ensure Information concerning herbicides, safety, and treatment locations is available to all employees. Some of the required information is for general reference and some is for emergency support. Information shall be available at region offices and field work centers.

(a) Post an EPA pesticide safety poster at all region offices and all work centers expected to have pesticide applications within their operating zone.

(b) Post a list of treatment locations five days prior to applying the treatment or five days prior to an REI going into effect. Maintain the list for 30 days after applying the treatment or 30 days after an REI has been in effect. Include the following information with the list:

- product label(s),
- Material Safety Data Sheet,
- map of the unit, and
- name, address, and telephone number of the nearest emergency medical facility.

(3) Ensure the following safety precautions are strictly followed:

(a) All DNR employees that are not involved in a pesticide application should avoid working near locations treated with pesticides for 30 days after the REI has expired.

(b) Contract compliance personnel and other personnel with field assignments will:

i. be provided with, and encouraged to use, disposable garments when working in a unit that has been treated with an herbicide or has a REI in effect.

ii. be trained about herbicide hazards when:

- working in a unit during application,
- entering a unit during the time an REI is in effect,
- entering a unit after an REI has expired, and
- before the 30 day interval has elapsed.

(c) Train all personnel who may come in contact with a treated area. Personnel with a pesticide license are considered adequately trained in regard to WPS and may train others.

(d) Ensure contract compliance personnel, herbicide handlers, and workers entering a unit that is being treated, or has an REI in effect have the following available:

- a vehicle and mobile radio for emergency transportation or assistance.

- the name, address, and phone number of the nearest medical facility. The information should be in written form for each treatment unit they are involved with.

- a copy of both the herbicide label and the Material Safety Data Sheet for the products.

(4) Adhere to the following decontamination measures:

(a) Contract compliance personnel, pesticide handlers, and workers entering a unit that is being treated or has an REI in effect shall have a decontamination kit available. The vehicle being used by the compliance person can be used as the decontamination site. The decontamination site shall include:

- an emergency eyewash capable of delivering at least 0.4 gallons of water per minute for 15 minutes (i.e., a six gallon minimum),

- an emergency change of clothing,

- enough potable water for routine washing and for washing the entire body in an emergency (a minimum 10 gallons for one person and 20 gallons for two or more people), and

- soap and single-use towels.

(5) Provide contract compliance personnel, herbicide handlers, and workers entering a unit that is being treated or has an REI in effect with:

- PPE, as prescribed by the label, that is clean and in serviceable condition, and

- a receptacle for disposing PPE and /or laundry items. Personal protective equipment items should be laundered in a prescribed manner unless they are disposable. Contact a pesticide specialist, safety officer or hygienist about proper laundering procedures.

(6) Maintain clean, serviceable garments and equipment as follows:

(a) Store PPE and personal hygiene supplies in a clean, sealable container.

(b) Inspect PPE for serviceability prior to use.

(c) Dispose of soiled or unusable PPE in a sealed, clearly marked container and discard in the appropriate manner. (See herbicide label.)

(d) Ensure that personnel who clean or launder PPE know:

- that the PPE may be contaminated with pesticides and that there may be potentially hazardous effects from exposure that may occur during handling.

- how to protect themselves when handling PPE, and how to properly clean contaminated PPE.

(e) Keep contaminated garments in a well marked bag.

(f) Secure PPE. Personal protective equipment is considered secure if it is properly contained and remains in a DNR field vehicle.

(7) General application information:

(a) Contract compliance personnel must read and understand all herbicide label requirements, human health information, and environmental facts.

(b) Personnel with field assignments must be informed of treatment locations, and have access to herbicide safety information.

(8) Additional information:

- Safety information can be found on the product label or the Material Safety Data Sheet, which can be obtained from either the regional silviculturist, chemical distributor, or the product manufacturer.

- Human health information can be obtained from a variety of publications, industrial hygienists (contact through the manufacturer), and the Washington State Department of Health, Office of Toxic Substances in Olympia (see RCW 70.104).

- Environmental facts can be found in the Weed Science Society of America Herbicide Handbook, company literature, and research publications.

- Supplies to meet these WPS requirements are available from the DNR warehouse or safety equipment companies.

- Laundry service for contaminated PPE are available under contract from business.

APPROVED BY: Michael Perez Gibson, Manager
Forest Resources Division
August, 1999

SEE ALSO:

CFR 40.170	FEDERAL WORKER PROTECTION STANDARDS
PO14-033	CONTROL OF COMPETING VEGETATION
RCW 70.104	PESTICIDE INCIDENT REPORTING AND TRACKING

Attachment 1

KEEP OUT SIGN

Post no sooner than 24 hours before scheduled application and remove within 3 days after the Restricted Entry interval has expired.	Pesticide Used _____ Application Date/Time _____ Re-Entry Date/Time _____

Attachment 2

INFORMATION SIGN

STOP

NOTICE: HERBICIDE TREATMENT

The forest management unit behind this sign is scheduled for herbicide treatment.

The unit name is _____
and it is located _____ feet beyond this sign.
Treatment will take place as soon as _____ a.m.

Product to be used in treatment:
Name _____
EPA Registration No. _____
Active Ingredient _____
Restricted Entry Interval _____ Hours

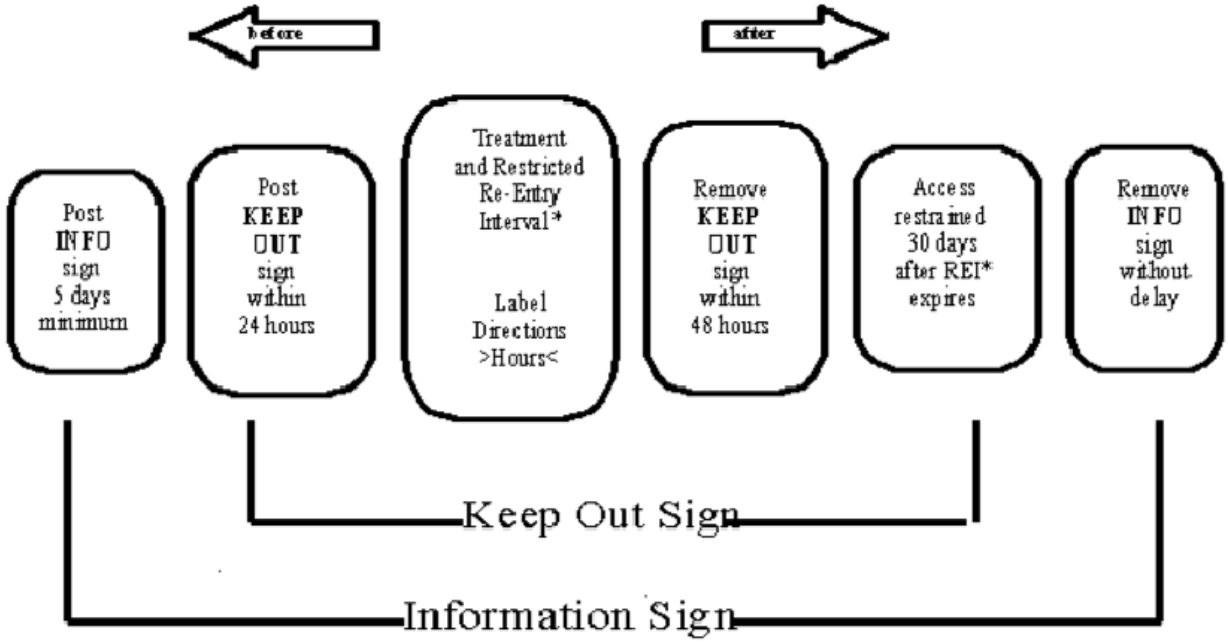
For further information concerning this treatment or your use of the forest management unit, contact:

Department of Natural Resources, _____ Region
Attention _____

1-800-527-3305 or

_____

WASHINGTON STATE DEPARTMENT OF
Natural Resources

Attachment 3

Posting Intervals for Worker Protection Standards