Managing Waste Pesticides and Empty Pesticide Containers: A "How to" Guide for

RESIDENTIAL, COMMERCIAL, INDUSTRIAL, RECREATIONAL & GOVERNMENTAL PEST-CONTROL OPERATIONS

Oregon State University
Extension Service

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Environmentally sound management of waste pesticides and empty pesticide containers is in everyone's best interest. This publication describes techniques that can insure proper management. It was written for people who use pesticides in a variety of pest control operations such as: residential and commercial (termite control and application equipment rental businesses), industrial (weed control at tank farms and rail yards); recreational (turf maintenance at golf courses) and governmental (right-of-ways, vector, and predator control). The techniques described comply with Oregon Administrative Rules, 340-63-125, 340-63-130, and 340-63-135.

What is a waste pesticide?

Pesticides are materials that control weeds, insects, plant diseases, and such diverse animal life as nematodes, slugs, rodents, and predatory vertebrates. *Waste* pesticides are unwanted:

- Pesticide formulations or products.
- Surplus spray mixture, ultralow-volume (ULV) spray concentrate, dusts, granules, or baits remaining in the application equipment (such as tanks, hoppers, booms, hoses) after use.
- Pesticide-contaminated water produced by cleaning the interior surfaces of the pesticide application equipment and empty pesticide containers.
- Pesticide-contaminated water produced by cleaning the exterior surfaces of the application equipment.
- Pesticide-contaminated absorbents, water, or other materials generated from cleaning up spilled material.

Why is waste pesticide management so important?

Indiscriminate discharge of waste pesticide into the environment can harm people and contaminate surface or ground waters. Pesticide-contaminated water can also pose a hazard to nontarget organisms such as plants, beneficial insects, fish, and other aquatic life.

How can the amount of waste pesticide be minimized?

- Measure, mix, and load only enough pesticide to do the job. Apply all the pesticide onto the target area. If there is, by error or miscalculation, some leftover pesticide, collect it in a container (labeled as to its contents) and hold it for use in the next application.
- Completely remove dry or liquid pesticide formulations from the containers. Drain containers holding liquids until dripping stops.
- Using water (or another specified diluting agent), rinse empty containers at least three times or as often as required to make the rinse solution clear. Add the collected rinse fluid to the spray mixture.
- Collect pesticide-contaminated water produced by cleaning the interior surfaces of the pesticide application equipment (such as the spray or mixing tanks, booms, hoses, or spray guns). Spray the collected mixture onto the previously treated area or use it for makeup water in a new batch.

How should waste pesticide be managed?

- Wash exterior of application equipment at the site where it is used or on your own property in such a way that wastewater will not enter wells, storm drains, drainage ditches, streams, creeks, lakes, or rivers.
- Dispose of small quantities of waste pesticide (up to 1 gallon or 10 pounds per month) at any landfill. Obtain the landfill operator's permission.
- Dispose of any quantity of waste pesticide, including pesticide formulation or product, at an *authorized* chemical waste collection or disposal site. Contact the nearest Department of Environmental quality (DEQ) regional office for locations. (See pages 6-7 for addresses.)
- Construct a waste pesticide containment and treatment system or develop other equivalent waste pesticide management methods. Contact the Department of Entomology at Oregon State University or the DEQ for design consideration. (See pages 6-7 for addresses.)

How should empty pesticide containers be managed?

- At the time of emptying, *decontaminate* rigid containers (such as cans, buckets, pails, or drums made of plastic, metal, glass, or fiber) *by* (1) jet or multiple rinsing; (2) visually verifying that the residues have been removed; and (3) crushing. If possible, also jet or multiple rinse nonrigid containers such as paper containers lined with plastic or foil.
- Decontaminated metal containers can be recycled. Take them to the nearest scrap metal collection, metal-remelting, pesticide-manufacturing, distributing, or retailing facility that will accept them for recycling. Contact the facility for terms of acceptance.
- Dispose of any decontaminated *"danger—poison"* (rigid and nonrigid containers and contaminated paper containers) at a DEQ *authorized* landfill. Obtain the landfill operator's permission. Contact the DEQ for a list of *authorized* landfills in your area. (See pages 6-7 for addresses.)
- Dispose of decontaminated containers labelled *"warning—caution"* (rigid and non-rigid) at *any* landfill. Obtain the landfill operator's permission.

Oregon Department of Environmental Quality

Solid Waste Division

1 Northwest Region Office
522 SW 5th Avenue
P.O. Box 1760-
Portland, OR 97207
229-5263

2 Astoria Branch Office
P.O. Box 869
Astoria, OR 97103
325-8660

3 Willamette Valley Region
895 Summer Street, NE
Salem, OR 97310
378-8240

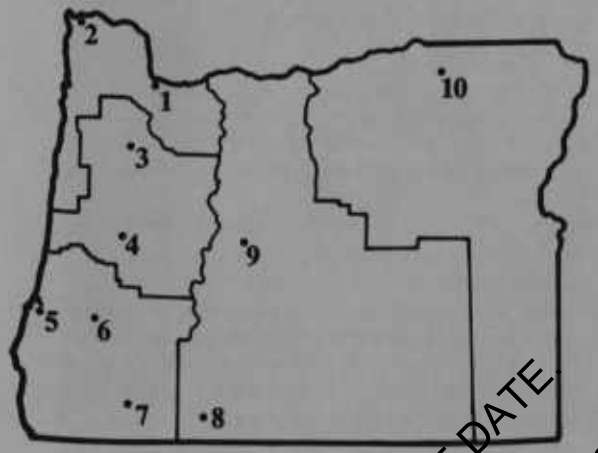
4 Field Burning Office
1244 Walnut
Eugene, OR 97401
856-7837

5 Coos Bay Branch Office
490 N Second Street
Coos Bay, OR 97420
269-2721

6 Roseburg Branch Office
1937 W Harvard Boulevard
Roseburg, OR 97470
440-3338

7 Southwest Region Office
201 W Main Street, Room 202
Medford, OR 97501
776-6010

8 Klamath Falls Branch Office
403 Pine Street
Klamath Falls, OR 97601
883-5603



9 Central Region Office
2150 NE Studio Road
Bend, OR 97701
382-6446

10 Eastern Region Office
700 SE Emigrant, Suite 330
Pendleton, OR 97801
276-4063

Note these addresses, too . . .

Oregon Dept. of Agriculture
Plant Division
Agriculture Building
635 Capital Street, NE
Salem, OR 97310
378-3776

Oregon State University
Extension Entomology
2055 Cordley Hall
Corvallis, OR 97331
754-3151

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This publication was prepared by Joseph Capizzi, Extension entomology specialist, Oregon State University, in support of the ad hoc committee on waste-pesticide management convened by the State of Oregon Department of Environmental Quality. The committee included representatives of the State of Oregon Department of Agriculture, Oregon State University's Entomology Department, the International Pesticide Applicators Association, the Oregon State Association of Vector Agencies, and the Pest Control Operators of Oregon.

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