Coordinating Oregon's Response to Pesticide Incidents



Oregon Department of Agriculture
Oregon Department of Consumer and Business Services
Oregon Department of Environmental Quality
Oregon Department of Fish and Wildlife
Oregon Department of Forestry
Oregon Department of Transportation
Oregon Poison Center
Oregon Health Authority
Oregon Office of the State Fire Marshal

Prepared by the Pesticide Analytical and Response Center Board



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Acronyms

DEQ Oregon Department of Environmental Quality

FIFRA Federal Insecticide, Fungicide, and Rodenticide Act

FY Fiscal year: e.g. 7/1/2009 to 6/30/2010

NIOSH National Institute of Occupational Safety and Health

OAR Oregon Administrative Rules ODA Oregon Department of Agriculture

ODF Oregon Department of Forestry

ODFW Oregon Department of Fish and Wildlife ODOT Oregon Department of Transportation **OERS** Oregon Emergency Response System

OHA Oregon Health Authority

OHSU Oregon Health and Science University

OPC Oregon Poison Center

OR-OSHA Oregon Occupational Safety and Health Division, Oregon Department of Consumer and

Business Services

ORS Oregon Revised Statutes

OSFM Oregon Office of State Fire Marshal

OSU Oregon State University

PARC Pesticide Analytical and Response Center

PEST Pesticide Exposure, Safety and Tracking Program, Oregon Health Authority

US EPA United States Environmental Protection Agency

USFWS United States Fish and Wildlife Service

Executive Summary

In the 1970s, the increasing use of pesticides elevated citizens' concerns regarding the possible adverse effects of these chemicals on people, animals, and the environment. In response to these concerns, the Oregon State Legislature established in 1979 the Pesticide Analytical and Response Center (PARC) (Per Oregon Revised Statute 634.550). In addition to acting as a centralized location to receive information relating to actual or alleged health and environmental incidents involving pesticides, PARC also functions to assist with interagency communication and coordination when investigating pesticide incidents (See Figure 1 next page). Coordination and communication are primarily between PARC member agency Board Members (See Appendix 1 for PARC Board contacts.)

PARC does not conduct investigations. However, PARC member agencies may either investigate or conduct activities in support of an investigation, depending upon each individual agency's regulatory authority. The PARC member agencies that may conduct pesticide investigations are:

- Oregon Department of Agriculture (ODA)
- Oregon Department of Forestry (ODF)
- Oregon Department of Environmental Quality (DEQ)
- Oregon Occupational Safety and Health Administration (OR-OSHA)
- Oregon Department of Fish and Wildlife) (ODFW)

The PARC member agencies that may conduct activities in support of an agency's investigations are:

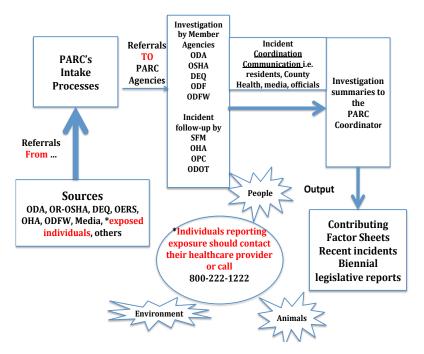
- Oregon Health Authority (OHA)
- Oregon Poison Center (OPC)
- Oregon Department of Transportation (ODOT)
- Oregon Office of the State Fire Marshal (OSFM)

To help Oregonians understand how state agencies coordinate investigating pesticide incidents, the PARC Board created this document titled *Coordinating Oregon's Response to Pesticide Incidents*. The purpose of this document is to describe to the citizens of Oregon how PARC functions, how PARC member agencies conduct pesticide investigations (See Appendix 2 – Incident Coordination Matrix), and what affected people may expect during and after a pesticide investigation is completed.

Following the report of a pesticide incident to PARC, affected individuals can expect to hear from PARC or a PARC member agency within one business day. At that time, a main contact person for communication is established and contact information is provided or exchanged. Affected individuals can expect state lead agencies to share investigation results during and after the investigation.

At the conclusion of the investigation, affected individuals may request investigation summaries. Details governing these procedures are provided within this document.

Figure 1: PARC acts as a centralized location to receive pesticide-related incident information and to assist with interagency communication and coordination when investigating pesticide incidents.



This diagram illustrates Oregon's response to pesticide-related incidents. PARC receives pesticide-related incident information from a variety of sources, including state agencies. Based on the information received, PARC makes referrals to the appropriate PARC member agency or agencies based upon each member agency's referral criteria. Each agency that receives a referral from PARC responds to the incident based upon their agency SOP. PARC continues to assist with communication and coordination during an investigation. At the conclusion of each agency's investigation, summary reports are submitted to PARC. PARC then prepares summary reports for all incidents that occur in a particular fiscal year. The PARC Board examines these reports for trends that are featured in the biennial legislative report. This report may make recommendations to a specific state agency or to the State Legislature about how to reduce pesticide-related incidents.

Introduction

Oregon Revised Statutes 634.550 established the Pesticide Analytical and Response Center (PARC) in 1979. PARC is open Monday through Friday, 8 a.m. to 5 p.m. to receive pesticide incident information and is staffed by the PARC Coordinator and a Citizen Advocate and Liaison. PARC staff are responsible for receiving pesticide-related incident information and making the appropriate referrals to PARC member agencies.

If a PARC member agency investigates, the summary reports are submitted to PARC. PARC, along with the Oregon Health Authority's (OHA's) Pesticide Exposure Safety and Tracking (PEST) Coordinator, assign contributing factors (See Appendix 3) to PARC incidents. For occupational incidents, the assigning of contributing factors is performed in conjunction with the Oregon Occupational Safety and Health Administration's (OSHA) Pesticide Coordinator. Select draft CF sheets are presented to the Board who then reaches a consensus on the factors that contribute to the PARC incident. The PARC Coordinator drafts a biennial legislative report and distributes it to the Board for review before it is finalized.

The standard operating procedures that follow govern the daily operations of PARC.

I. Receiving Pesticide Incident Information by PARC (updated May 2019)

- a. Telephone calls
 - i. Occasionally, PARC staff receive telephone inquiries directly.
 - PARC also receives pesticide-related incident information via 211info. A separate SOP governs how 211info specialist collect pesticide-related information. At the conclusion of a pesticide-related telephone inquiry to 211info, PARC receives an email containing the information collected.
 - iii. Whether a telephone inquiry is made directly to PARC or to 211info, information collected includes, but is not limited to:
 - 1. Name
 - 2. Telephone number
 - 3. Address, including zip code
 - Incident details, including time, date, and location of exposure, product information, and type of incident. Types of incidents may include occupational; forestry-related; affecting soil, water, or air; affecting fish/wildlife or their habitat.
 - 5. Details concerning animals exposed (e.g. number, type, and if seen by a veterinarian, the veterinarian's contact information.)
 - Following the receipt of pesticide incident information, PARC staff may contact the complainant and inform them of PARC's role and the role of the agency in which their complaint is being referred.
 - When the PARC Coordinator is unavailable, the primary designee will serve as PARC Coordinator.
- a. Email PARC also receives pesticide-related incident information via email. ALL email referrals to PARC should use the following email address: <u>PARC@ODA.state.or.us</u>. This email address is routed to other ODA staff in addition to the PARC Coordinator so that appropriate actions may be taken in the event that the PARC Coordinator is unavailable. (e.g. referrals to PARC member agencies).

II. Sources of Pesticide Incident Information

- a. PARC uploads all incident-related information into PARC's database and PARC receives information regarding pesticide-related incidents affecting people, animals, or the environment through a variety of sources including:
 - i. ODA pesticide investigators,
 - ii. ODA's online pesticide complaint form,
 - iii. DEQ's complaint line/online complaint form,
 - iv. Oregon Emergency Response System (OERS).
 - OERS The PARC Coordinator receives daily reports from the Oregon Emergency Response System (OERS) via email, which is responsible for coordinating and managing state resources in response to natural and technological emergencies and civil unrest involving multi-jurisdictional cooperation between all levels of government and the private sector. http://www.oregon.gov/omd/oem/pages/tech_resp/oers.aspx
 - Often, OERS reports do not contain specific information, i.e. EPA registration numbers. PARC follows up with those listed as contacts for more information.
 - OERS identifies chemicals using 'UN' numbers; these are four-digit numbers
 that identify hazardous substances, including pesticides. UN numbers and the
 substances that they identify can be found at Wikipedia's page titled "List of UN
 numbers."
 - Additionally, the specific identify of the product may be obtained by contacting the main contact person listed on the OERS report.
 - 5. When a referral is made to a PARC member agency based upon the OERS report, PARC provides the specific OERS report to the agency receiving the referral if a PARC member agency is not listed on the report.
 - DEQ follows up on pesticide spills reported to OERS. PARC requests that DEQ provide these reports to PARC via email, referring to the OERS report number in the subject line.
 - 7. When a DEQ report is received, PARC uploads a copy into PARC's database under the appropriate PARC incident number.
 - PARC tracks pesticide spills, and PARC staff receive OERS reports. When the
 OERS report details a spill, PARC staff will assign a unique incident number and
 upload the pdf of the OERS report into PARC's database.
 - v. OHA's Pesticide Exposure Safety and Tracking (PEST) Program
 - vi. OR-OSHA
 - vii. ODF
 - viii. ODFW
 - ix. USFW
 - x. 211info
 - xi. Newspaper/television
 - xii. EPA Region 10
 - 1. Request for health care providers

III. Making PARC Referrals to PARC Member Agencies

- a. Referral criteria PARC uses the criteria below to determine which PARC member agency will receive a referral following PARC receiving pesticide-related information. Each PARC board member or their designee are cc'd on PARC referrals within one business day of receipt of information.
 - ODA ODA Pesticide program shall be notified whenever a violation of Oregon's Pesticide Control Law (ORS 634 and OAR 603) is suspected. This

- would include any suspected misuse, drift, or otherwise faulty, careless, or negligent acts related to pesticide use, storage, distribution, or disposal.
- ii. ODF ODF is notified any time there is a report or allegation of damage to natural resources, human health, or human property as a result of a forest pesticide application, spill, or other related activity. If the application is ongoing, immediate notification is requested. If it is finished, ODF requests notification as soon as is practical.
- OR-OSHA Oregon OSHA is notified any time a pesticide-related incident or unreasonable exposure risk is occupational in nature.
- iv. DEQ DEQ is notified when there is a possible violation of the general pesticide permit (2300 permit), a possible misuse of a pesticide that has impacted a drinking water source or ground water, or improper disposal of solid waste containing pesticides. DEQ is notified through the agency complaint hotline (888-997-7888) or the online complaint form at http://www.deq.state.or.us/complaints/ when state agencies conduct a non-urgent pesticide use investigation that involves potential impact to surface water, source water for public drinking water systems, or other environmental impact. Referrals to DEQ are sent to complaintintake@deq.state.or.us
- V. OHA The Pesticide Exposure Safety and Tracking (PEST) program the Oregon Health Authority (Public Health Division), is notified of reports of suspected pesticide-related human health symptoms.
- ODFW ODFW is notified of any suspected pesticide-related poisoning of fish, wildlife, or impact to habitat.
- OSFM OSFM is notified via email regarding pesticide-related incidents at fixed locations where pesticides are stored.
- viii. OPC OPC is notified immediately at 800-222-1222 of any pesticide-exposure for which assistance is needed in acute clinical management of the patient. PARC will provide OPC's number to individuals who require immediate attention associated with pesticide exposure. A name and number will be requested if convenient.
- a. ODOT ODOT is notified of any pesticide-related incident that involves Oregon's state highway system.
- b. Following the receipt of pesticide-related information, PARC makes a referral to the appropriate PARC member agency within one business day of receipt. All referrals to PARC member agencies are made in a similar manner via email, based upon the PARC Member Agency Referral Criteria described above with the exception of ODA. The Lead Pesticide Investigator and PARC staff receive the same email notification when complaints come in via PARC's email, ODA's online Pesticide Complaint form, or the OERS report. PARC staff coordinates with ODA's Pesticide program staff on handling these complaints. Each PARC member agency conducts its own investigation according to each member agency's policies and procedures (See SOPs in Appendix). The referral contains all the information necessary to follow-up on the referral. (See the information collected via telephone above.)
- c. If the pesticide-related incident information is from the OHA's PEST program and includes part A of an Exposure Pathway (EP), PARC furnishes the EP to all agencies receiving the PARC referral.

IV. PARC Board Meetings

The PARC Board meets every other month, beginning in January and meeting locations rotate between Salem (ODA) and Portland (OHA).

- a. Agenda The PARC Coordinator schedules agenda planning meetings with both PARC Co-Chairs and the PARC Administrator at least three weeks in advance of the PARC Board meeting. This gives the Coordinator time to publish the draft meeting agenda to PARC's website. http://www.oregon.gov/ODA/programs/Pesticides/Pages/PARC.aspx
 - According to the Oregon Attorney General's Public Records and Meeting Manual, agendas are posted two weeks in advance of the meeting.
- b. Meeting minutes The PARC Coordinator is responsible for producing PARC meeting minutes following every PARC Board meeting. Draft meeting minutes of the prior meeting are provided to Board members at every PARC Board meeting for approval.
 - The draft meeting minutes are published on PARC's website within two weeks of the meeting.
 - ii. Following the approval of the prior meeting minutes, the PARC Coordinator makes corrections, removes the 'draft' watermark, and reposts minutes as 'final.'
- PARC Board meeting audio recordings PARC Board meetings are also recorded and the recordings are posted on PARC's website.
- d. Recent incidents PARC is responsible for providing PARC's recent incident to Board members at every PARC Board meeting. Incidents include those that occurred since the last PARC Board meeting.
- e. Contributing factor sheets
 - i. At the conclusion of an agency's investigation, investigation summaries and reports are emailed to PARC. Each PARC incident is assigned "contributing factors (CF)." These are factors that may have contributed to the incident (See Appendix 3). The Board reaches a consensus on the CF's for select PARC incidents as time allows. Due to the high volume, not all CFs for each incident can be reviewed at the Board meetings.
 - OR-OSHA's Pesticide Coordinator, OHA's PEST Coordinator, and the PARC Coordinator will initially assign CFs for each PARC pesticide incident, using PARC member agencies' investigation summaries and report information.
 - At PARC Board meetings, PARC Board members will reach a consensus on the contributing factors associated with select PARC incidents.
 - CF sheets for the PARC incidents that will be discussed at PARC Board meetings are provided to PARC Board meetings in advance of the meeting.
- f. Biennial legislative report
 - The PARC Coordinator prepares the PARC biennial legislative reports and submits to the Board for review before it is finalized. These reports provide a summary and analysis of all PARC incidents that occurred in the two most recent fiscal years (FYs).
 - Per ORS 634.550, the pesticide-related incidents will be examined to "...identify trends and patterns of problems," both in the reporting period but also as they may occur over multiple report periods.
- g. Miscellaneous documents
 - i. Presentation handouts, others
- h. The PARC Coordinator provides meeting materials to PARC Board members. PARC attempts to provide meeting materials to PARC Board members approximately two weeks in advance of the next regularly scheduled PARC Board meeting. Meeting materials usually consist of:
 - i. Agenda (see above)
 - ii. Minutes from previous PARC Board meeting (see above)
 - iii. CF sheets (see above)
 - iv. Miscellaneous documents (see above)

V. Coordinating Pesticide Incident Investigations

- a. PARC assists in the coordination of pesticide investigations by initiating conference calls between PARC member agencies (and others) when an investigation involves three or more PARC agencies. The PARC Coordinator determines when to initiate a conference call with assistance from ODA's Pesticide Program Manager, following the guidance provided in the Incident Coordination Matrix. (See Appendix 2 for Incident Coordination Matrix)
- b. Pesticide use data requests may be necessary to assist OHA in conducting Public Health Assessments (PHA) or Exposure Investigations (EI). The Pesticide Use Data Requests: ODA and ODF document guides how to provide the information. (See Appendix 12, Attachment 5)

VI. Responding to Requests from Health Care Providers

- a. Requests from a health care provider (HCP) for pesticide use information to treat people or animals should be directed to PARC via email at PARC HCP@oda.state.or.us, using the HCP Request Form (available on PARC's website; url above). The PARC Coordinator, ODA's Pesticide Program Manager, ODA's Pesticide Program Office Manager, ODA's Lead Pesticide Investigator, and Citizen Advocate and Liaison all receive the email. Pesticide use information to be provided to HCPs:
 - i. Active ingredients, by percent,
 - ii. EPA registration number,
 - iii. Manufacturer's contact information,
 - iv. Amount of product applied with dilution rate,
 - v. Identity of additional tank components.
- b. Following the receipt of the request form, the PARC Coordinator contacts the HCP within one business day of receipt, informing the HCP that his or her request has been received. The PARC Coordinator will cc: OHA's PEST Program for human incidents.
- c. Following the receipt of the HCP request form by PARC, the coordinator contacts ODA's Pesticide Program Manager for assistance (on the same day that the request was received or within one business day). The PARC Coordinator provides to the Pesticides Program Manager a copy of the HCP request form. ODA's Pesticide Program Manager enlists the assistance of ODF's Field Support, Policy and Monitoring Manager, or ODA's Lead Pesticide Investigator, when needed, to identify the applicator.
- d. When the request form is received on a weekend day (Saturday or Sunday) or during a holiday, the PARC Coordinator will contact ODA's Pesticides Program Manager the next regularly scheduled work day.
- e. ODA's Pesticide Program Manager provides the requested pesticide use information to the PARC Coordinator within one business day following receipt of the request form if available.
- f. The PARC Coordinator provides the completed request form to the HCP. The PARC Coordinator also provides the pesticide manufacturer's contact information. In case of animal pesticide exposures, the PARC Coordinator makes a professional referral to Dr. Fred Berman (PARC Board Consultant), providing to Dr. Berman the contact information of the treating veterinarian(s).

VII. Continuity of Operations Plan (COOP)

a. In the event that 211info cannot provide services to PARC due to a catastrophic event and ODA/PARC are still open for business, follow the instructions below to stop calls from being forwarded to 211info and initiate pesticide-related telephone inquiries being received by another telephone number. Commented [MOU1]: Is this supposed to be ODA's?

- b. When PARC's telephone number (503-986-6470) is dialed, the caller has the option to hear the message in English or Spanish. At the end of the message, callers are automatically transferred to 211info.
 - i. To disable the call-forwarding feature to 211info and set up another telephone number to receive telephone calls:
 - Dial 1-971-673-5099 (remote call forward activation number) when the voice asks for home number dial 11031710007 (this is the number that is normally forwarding the callers to the 211 Center).
 - 2. When it asks for pin, dial 123.
 - 3. Then when it asks for call forward activation/deactivation code dial *40.
 - 4. Then when it asks for the number that you want your calls forwarded to enter the 11 digit number ex: 1-503-986-4562 (Ted's desk phone).
 - ii. Once 211 info is able to return to providing services to PARC:
 - 1. Dial 971-673-5099 when the voice asks for home number dial 11031710007.
 - 2. When it asks for pin dial 123.
 - 3. When it asks for call forward activation/deactivation code dial *40.
 - 4. When it asks for the number that you want your calls forwarded to enter the 11 digit number 1-503-416-2706 (this is the 211 Center direct call number).

PARC SOP Appendix 1 - PARC Board Contacts List

Oregon Department of Agriculture (ODA)

Contact:

Stephanie Page, PARC Board Administrator, Director of Natural Resources Programs 503-986-4713

spage@oda.state.or.us

Oregon Department of Agriculture 635 Capitol Street NE, Suite #100 Salem, OR 97301-2532

Pesticide Analytical and Response Center (PARC)

Contact:

Theodore Bunch Jr., Team Lead, PARC Board Co-Chair 503-986-4562

tbunch@oda.state.or.us

Oregon Department of Agriculture 635 Capitol Street NE Salem, OR 97301-2532

Oregon Health Authority, Public Health Division (OHA)

Contact

Curtis Cude, Environmental Public Health Surveillance Program Manager, PARC Board Co-Chair 971-673-0975

curtis.g.cude@state.or.us

Oregon Health Authority 800 NE Oregon Street, No. 640 Portland, OR 97232-2162

Oregon Occupational Safety and Health Administration (OR-OSHA)

Contact:

Garnet Cooke, Pesticide Coordinator 503-378-3274

garnet.r.cooke@oregon.gov

OR-OSHA Salem Field Office PO Box 14513 1340 Tandem Avenue NE, Suite 160 Salem, OR 97309-0417

Oregon Department of Forestry (ODF)

Contact:

Jay Walters, Forest Practices Field Coordinator 503-945-7387

jay.k.walters@oregon.gov

Salem, OR 97310-1336

Oregon Department of Environmental Quality (DEQ)

Contact:

Brian Boling, Interim Laboratory Division Administrator

Coordinating Oregon's Response to Pesticide Incidents

503-693-5745

boling.brian@deq.state.or.us

Department of Environmental Quality 3150 NW 229th Avenue, Suite 150 Hillsboro, OR 97124-6166

Oregon Department of Fish and Wildlife (ODFW)

Contact:

Danette Faucera, Water Policy Coordinator 503-947-6092

danette.l.faucera@state.or.us

Oregon Department of Fish and Wildlife 4034 Fairview Industrial Drive SE Salem, OR 97302-1142

Oregon Poison Center (OPC)

Contact:

Sandy Giffin, Director, Oregon Poison Center 503-494-8600

giffin@ohsu.edu

Oregon Poison Control Center 3181 SW Sam Jackson Park Road Mail Code: CSB

Portland, OR 97201-3098

Oregon Department of Transportation (ODOT)

Contact:

Will Lackey, Vegetation Management Coordinator 503-986-3010

william.lackey@odot.state.or.us

Oregon Department of Transportation 355 Capitol Street NE, MS11 Salem, OR 97301-3871

Oregon Office of State Fire Marshal (OSFM)

Contact:

Michael Heffner, Assistant Chief Deputy 503-934-8030

michael.heffner@state.or.us

Office of State Fire Marshal

3565 Trelstad Ave SE

Salem, OR 97317-9614

Oregon Health and Science University, Oregon Institute of Occupational Health Sciences (OHSU)

Contact:

Fred Berman, Director, Toxicology Information Center 503-494-7366

bermanf@ohsu.edu

Oregon Health and Science University, Oregon Institute of Occupational Health Sciences 3181 SW Sam Jackson Park Road

Portland, OR 97201-3098

Coordinating Oregon's Response to Pesticide Incidents

Oregon State University (OSU)

Contact:

Jeff Jenkins, Professor, Environmental and Molecular Toxicology 541-737-5993

jenkinsj@ace.orst.edu
Oregon State University
333 Weniger Hall
Corvallis, OR 97331-7301

Citizen At Large

Contact:

Jennifer Gervais, PhD Oregon Wildlife Institute

PO Box 1061

Corvallis, OR 97339-1061

Appendix 2 – Pesticide Analytical and Response Center (PARC) Incident Coordination Matrix

This incident coordination matrix assists the PARC Coordinator in determining the proper member agencies to notify when pesticide-related incidents occur. When three or more member agencies are involved in an investigation, the PARC Coordinator will initiate a conference call to brief member agencies and to coordinate communication and incident responses to the event.

Functions of PARC member agencies:

- Oregon Department of Agriculture (ODA) Regulate the sale, use, and distribution of
 pesticides in Oregon.
- Oregon Department of Environmental Quality (DEQ) Protect the quality of Oregon's environment, including Oregon's air, land, and water.
- Oregon Occupational Safety and Health Administration (OR-OSHA) Improve workplace safety and health in Oregon.
- Oregon Department of Forestry (ODF) Protect, manage, and promote stewardship of Oregon's forests.
- Oregon Department of Fish and Wildlife (ODFW) Protect and enhance Oregon's fish and wildlife and their habitats.
- Oregon Health Authority (OHA) Improve the lifelong health of Oregonians.
- Oregon Office of State Fire Marshal (OSFM) Protect citizens, their property, and the
 environment from fire and hazardous materials.
- Oregon Poison Center (OPC) Provide emergency treatment information for patients experiencing a poisoning or toxic exposure in Oregon, Alaska, and Guam.

Additional Agencies:

- Oregon Health Science University (OHSU) Consultant
- United State Fish and Wildlife Service (USFW) Threatened and endangered species and anadromous fish
- United State Environmental Protection Agency Region 10 (EPA) Endangered species and anadromous fish
- Oregon State Police (OSP) ODFW enforcement
- National Oceanic and Atmospheric Administration (NOAA) Anadromous fish

Agencies listed below in **bold** will take/share the lead in the investigation:

Human:

Circumstance	Agencies to Contact	
Individual(s) report adverse health as a result of pesticide exposure?	ODA, OHA	
Occurring on forested lands?	Add ODF	
Individual(s) report occupational exposure to pesticides?	OR-OSHA, ODA	
On forested lands?	Add ODF	
Drinking water impacted by pesticides?	DEQ, OHA, ODA	

If criminal activity suspected, EPA Region 10 will take the lead. Exposure to five or more individuals must be reported to EPA Region 10, and any exposures resulting in hospitalization, must also be reported to EPA Region 10.

Animal:

Circumstance	Agencies to Contact	
Domestic pet(s) affected by pesticides?	ODA , OHSU	
Aquatic organisms or wildlife negatively affected by pesticides?	ODA, ODFW	
Migratory birds?	Add Region 10 EPA, USFW	
Anadromous fish?	Add NOAA	
Threatened or endangered species?	Add Region 10 EPA, USFW	
Forestry?	Add ODF	
Water quality concern?	Add DEQ	
Fish or wildlife habitat affected by pesticides?	ODA, ODFW	

If criminal activity suspected, EPA Region 10 will take the lead. If sampling will be done by DEQ, coordinate with as well.

Environmental:

Circumstances	Agencies to Contact	
Pesticide spill?	DEQ	
On an Oregon highway?	Add ODOT	
Fire involving pesticides?	Local fire department	
Air quality concern?	DEQ, ODFW	
Soil quality concern?	DEQ , ODFW	
Drinking water concern?	OHA, DEQ, ODFW	
Water quality concern?	DEQ, ODFW	
Environmental sampling required?	DEQ	
Forestry?	ODF	

If criminal activity is suspected, EPA Region 10 will take the lead. If sampling will be done by DEQ, coordinate with as well.

Appendix 3 - PARC Contributing Factors and Definitions

(Updated December, 2018)

A) Incident and Exposure Cites – this category is mutually exclusive; only one site may be coded.

1) Private residence

- Single family home private, detached residence usually with front/backyards, driveway, and attached carport or garage.
- Multi-unit housing (apartment) housing structure containing more than one living unit for families or persons.
- c. Mobile home/trailer a larger trailer, fitted with parts for connection to utilities that can be installed on a relatively permanent site and that is used as a residence.
- d. Housing authority building a housing development that is publicly funded and administered for low-income persons or families.
- 2) School the buildings, other structures, playgrounds, athletic fields, and parking lots of a school and any other areas on the school property that are accessed by students on a regular basis.

3) Institution

- a. Nursing home/care facility a structure that serves as living quarters/care for the elderly or the chronically ill and which is staffed and equipped to care for them.
- b. Hospital a structure where medical, surgical, or psychiatric care and treatment for the sick or the injured takes place; this includes outpatient facilities.
- Homeless shelter a structure that serves as a temporary residence for homeless people
 or emergency shelter for those in need.
- 4) Hotel/motel a structure where the provision of paid lodging on a short-term basis takes place.
- 5) Vehicle
- 6) Forestry a site where the harvesting of trees and/or growing and tending of trees (silviculture) occurs as a commercial activity.
- 7) Agriculture (e.g. farm, nursery) a site where the growing of plants (excluding forestry) or raising of livestock for foodstuffs or other products takes place. This includes, but is not limited to: Christmas trees, fruit, grains, vegetables, dairy, poultry and egg, horses, cattle, game, fur production, worm, pet breeding, apiaries, and aquaculture facilities. Included are nurseries and greenhouses.
- 8) Commercial (e.g. office park, retail) a site where activity is focused on but not limited to mercantile exchange, including: retail settings, office parks, and service stations.
- 9) Road, right-of-way, trail, Non-Ag a strip of land that is public land, private land, or has been granted through an easement or other mechanism, use for transportation purposes, such as a trail, driveway, rail line, or highway.

10) Public/municipal park

Commented [MOU2]: Is tis supposed to be Sites?

- 11) Industrial (e.g. manufacturing) a site where the main activity is the production or repair of tangible economic goods. This includes but is not limited to: factories, chemical processing facilities, and machine shops.
- 12) Golf course an outdoor series of linked grass fields, each consisting of a teeing ground, fairway, rough and other hazards, and a green with a flagstick (pin) and cup, all designed for the game of golf.
- 13) Construction a site where structures are in the process of being made, including but not limited to: houses, office parks, schools, etc.
- 14) Other used when a site doesn't fit into any of the above categories.
- B) Data Source for Incidents this category is NOT mutually exclusive; there may be more than one source.
 - 1) OPC Fax a report from a Poison Control Center, usually Oregon Poison Control, which details the conversation between clinical staff and callers seeking advice (as recorded by the PCC staffer) on the medical management of an incident reported as pesticide poisoning.
 - 2) Reporter interview with PEST a standardized report on the exposure pathway of a reported pesticide exposure, as described by the person (or guardian) reporting exposure, to OHA's PEST Program staff.
 - 3) Official reports from PARC member agencies that pertain to the incident in question.
 - a. ODA Report
 - b. OR OSHA Report
 - c. ODF Report
 - d. ODFW Report
 - e. SFM Report
 - f. DEQ Reportg. OHSU/Dr. Berman
 - h. Other
 - 4) Medical Report an electronic or paper compendium of a single patient's medical history and care across time.
 - a. Human
 - b. Animal, from a veterinarian
 - 5) Insufficient environmental data an agency did not conduct environmental sampling of application/exposure site.
 - **6)** Environmental data sufficient for regulatory decision the results of an agency-conducted environmental sampling was sufficient for agency decision-making.
 - OERS Report a standardized report issued by the Oregon Emergency Response System regarding a reported pesticide release and/or exposure.
 - 8) News media online, newspapers, magazines, etc.
 - 9) No return call to PEST.

- 10) ODOT Oregon Department of Transportation
- 11) USFW United States Fish and Wildlife
- 12) EPA Region 10
- C) Intended Targets this category is mutually exclusive; there may be only one target.
 - Bed bugs used when the intended target of the pesticide application in question is the insect Cimex lectularius linnaeus.
 - 2) Other indoor household insect/arachnid pest used when the intended target of the pesticide application in question are insects (besides bed bugs) or spiders.
 - 3) Other indoor pest used when the intended target of the pesticide application in question is an indoor pest other than an insect or spider e.g. mold, bacteria, mice, rats.
 - 4) **Vegetation/weed control** used when the intended target of the pesticide application in question is a weed or other undesired plant.
 - 5) **Human** used when a pesticide product is applied to humans e.g. DEET mosquito repellent.
 - **6) Outdoor pest control** used when the intended target of the pesticide application in question is an outdoor pest e.g. moss/mold/insect/rodent/disease/etc.
 - 7) Forestry used when the intended target of the pesticide application in question is a tree(s) for silviculture/forestry purposes.
 - 8) Agriculture used when the intended target of the pesticide application in question is a site where the growing of plants (excluding forestry) or raising livestock for foodstuffs or other products takes place. This includes but is not limited to: Christmas trees, fruit, grains, vegetables, dairy, poultry and egg, horses, cattle, game, fur production, worm, pet breeding, apiaries and aquaculture facilities. Included are nurseries and greenhouses.
 - 9) Roadside/Right-of-Way used when the intended target of the pesticide application in question is unwanted vegetation in and around a strip of land that is used for transportation purposes, such as a trail, driveway, rail line, or highway.
 - 10) Community Application (Japanese beetle, gypsy moth, etc.) used when the intended target of the pesticide application in question is government-mandated eradication of invasive species or for public health purposes.
 - 11) Irrigation ditch used when the intended target of a pesticide application is either the water in an irrigation ditch or the vegetation in an irrigation ditch.
 - 12) Non-native/invasive fish used when the intended target of the pesticide application in question may transmit a pathogen to a host.
 - 13) **Vector e.g. mosquito/rodent** used when the intended target of the pesticide application in question may transmit a pathogen to a host.

14) Other

- D) Application Factors this category is NOT mutually exclusive; there may be more than one application factor. Application factors are agency-verified.
 - 1) Spill/splash of liquid or dust (not involving application equipment failure) the unintentional leak or spill of pesticide material from its container from any cause. The leak or spill could have occurred at the time of exposure or prior to the exposure.
 - 2) Application equipment failure improper preparation, assembly, maintenance, or failure of application equipment. This code is appropriate for nozzles plugging, valves not tightened properly, spray lines splitting, O-ring failure, leading backpack sprayers, or malfunctions such as fogger spraying to the side or aerosol can nozzle malfunctioning.
 - 3) Mixing of incompatible chemicals or incompatible products e.g. bleach and ammonia.
 - 4) Improper storage leading to release pesticide stored contrary to label, leading either to spontaneous release or to environmental conditions causing release (e.g. storage of aerosols in heated vehicle).
 - 5) Label reportedly not read.
 - **6) Excessive application of pesticide** pesticide applied above the label rate and/or if an excessive number of products were used.
 - 7) Drift commercial-agriculture-forestry-vector control movement of pesticides that were applied by an individual functioning in one of these occupational capacities, away from the treatment site. Pesticide spray, mist, or fumes are carried from the target site by air.
 - 8) Drift originating from application by resident movement of pesticides that were applied by private resident, away from the treatment site. Pesticide spray, mist, or fumes are carried from the target site by air.
 - 9) Misapplication by homeowner, indoors.
 - **10) Repeated incident/violation by applicator** factor attached to two or more incidents involving applications by the same individual.
 - 11) Misapplication by homeowner, outdoors.
 - 12) Misapplication vector control operator.
 - 13) Misapplication use of a cancelled product.
 - 14) Misapplication pest control operator, indoors.
 - 15) Intentional harm.
 - 16) Misapplication pest control operator, outdoors.
 - 17) Misapplication forestry operator.

- 18) Misapplication agricultural operator.
- **19**) **Misapplication by Right-of-Way/non-agriculture** an application of a pesticide by an individual functioning in one of the specified capacities in a manner that contradicts either the label language for that pesticide or current agency regulations.
- 20) Application by minor.
- 21) Improper storage within reach of a child pesticide left in such a way that a reasonable adult concludes that a child was able to access it.
- 22) Gaseous release (from fumigant use) individual reporting exposure to gas because:
 - Of entry into treated area (no placarding; temperatures slowed; incorrectly gauged fumigation time; individual thought enough time had passed);
 - The gas had moved through application structure (raceways, piping) or through tunnels and caused exposure; or
 - c. Failure to use prescribed PPE.
- 23) Unlicensed applicator (when required) used when the applicator in question is neither licensed (as required) nor working under the supervision of a currently licensed applicator as determined under current ODA regulations.
- 24) Licensed applicator not properly trained/supervised in accordance with current agency regulations.
- 25) Industrial accident used when the main purpose of the site is the commercial production of goods.
- **26) Impaired applicator** used when the incident in question reportedly took place because the applicator was under the chemical influence of the pesticide(s) in question.
- 27) Gaseous release (from fumigant deactivation) individuals reporting fumigant exposure from:
 - a. Unused fumigant remaining at site (not activated by application), and/or;
 - b. Improper disposal of materials/equipment, which resulted in explosion.
- 28) Illegal pesticide used/illegal dumping of pesticide used for incidents where the pesticide(s) in question was either used when not registered with ODA (and therefore, illegal for use in Oregon), or disposal of in a manner contrary to its label or ODA/ODF/DEQ regulations.
- 29) Total release fogger used sometimes called "bug bombs;" these are pesticide products designed to fill an area with insecticide and often are used in homes and workplaces to kill cockroaches, fleas, and flying insects.
- E) Exposure Factors this category is NOT mutually exclusive; there may be more than one exposure factor. Exposure factors may or may not be agency verified.
 - Required notification/posting lacking or ineffective application for which verbal or written (and posted in conspicuous area) notification is required by label language for that pesticide or current agency regulations.

- 2) **People were in the treated area during application** attached to incidents where people were present in an area under application likely led to the incident.
- 3) Inadequate ventilation of treated area before re-entry attached to incidents where inadequate ventilation of treated area is likely to have led to the symptoms reported by people who entered that area.
- 4) Early re-entry attached to incidents where people entered a treated area (without required PPE) before the passage of the Restricted Entry Interval (REI) stated on the label for the pesticide used.
- 5) Contact with treated article for incidents reportedly involving physical contact with a treated item e.g. mosquito net treated with permethrin.
- 6) Mixing and loading antecedents attached to incidents where actions/activities done to prepare a pesticide for application or to load it into application equipment likely led to the incident.
- 7) Occupational exposure used when the person reporting exposure in question was engaged in an on-the-job activity for which either she/he was earning a wage/salary or for a job that she/he was voluntarily performing.
- 8) PPE eye (required eye protection not worn or inadequate) used when the PPE specified is either not used (or not used correctly) as directed by the formulation's label or current PARC agency regulation.
- 9) PPE gloves required gloves not worn or inadequate.
- 10) PPE respirator required respirator not worn or inadequate.
- 11) Performing an unauthorized activity on-the-job activity by worker, neither authorized nor directed by supervisor, leading to pesticide release.
- 12) PPE other other PPE not worn or inadequate.
- 13) Decontamination not adequate or timely used when the exposure in question may have occurred because either the decontamination was not as specified on the label or because too much time elapsed between exposure and when appropriate decontamination occurred.
- 14) Exposure/symptoms when a person or the treating health care provider reports signs and/or symptoms that they attribute to the pesticide release in question.
- **15**) Label insufficient to protect health or non-target health used for situations where the label may be inadequate. This includes:
 - The label required PPE, REI, or notification was followed, but did not prevent exposure/illness;
 - PPE, REI, or notification not required, but might have prevented exposure/illness, and;
 - $c. \quad Information \ on \ individual \ sensitivity \ (e.g. \ MCS, ACI, pre-existing \ asthma \ dx).$
- 16) Chemical sensitivity incident where person reporting exposure stated that they or their children are chemically sensitive.

- 17) Inadvertent animal exposure used when the animal exposure in question occurred to domestic pets (often dogs) or wildlife (often geese) that were NOT the intended target of the application.
- **18**) **Veterinary product exposure** used when a person reports exposure to a pesticide formulation intended for use on animals (often imidacloprid used in anti-flea treatments for domestic animals).
- **19**) **Vegetation symptom consistent with the formulation** used when ODA/ODF personnel report plant damage that is consistent with the effects of the pesticide in question.
- 20) Off-site movement/odor reported incident where person reporting exposure reported pesticide odor or movement of pesticide from application site (to their location).
- 21) Pediatric exposure of children <6.
- F) Other Factors this category is NOT mutually exclusive; there may be more than one "other" factor.
 - Neighbor-to-neighbor conflict incident between two or more residential addresses involving (but not limited to) report of off-site movement of pesticide.
 - 2) **Residential agricultural interface** incident reportedly occurring where one party is an agricultural interest and the other a residential interest.
 - 3) **Group exposure ≥3 or more people** used when three or more people report symptoms that they (or a health care provider) attribute to the same pesticide release or application.
 - 4) Residential forestry interface incident reportedly occurring where one party is a forestry interest and the other party is a residential interest.
 - Site with repeated reports of exposure/symptoms address or geographic location where two
 or more PARC incidents have been reported.
 - 6) No public health department access to other ingredients, because of confidential business information attached to incidents where the manufacturer of the pesticide formulation in question, citing confidential business information, refuses to provide the chemical make-up of that formulation's "other ingredients" to the Oregon Health Authority.
 - 7) Medical treatment sought used when a person reporting exposure is treated by (or reports seeking treatment from) a health care provider who is licensed by the State of Oregon to perform medical care.
 - Pesticide poisoning diagnosed or suspected by HCP, but not reported, per OAR 333-018-0015 (mandatory reporting).
- G) Remedial Actions remedial actions are those taken by individual state agencies at the conclusion of their investigation. There may be more than one remedial action; they are NOT mutually exclusive.

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- Referral to community-based mediation source used when a PARC member agency has suggested that a party(ies) involved in the incident in question contact a dispute resolution center supported by the Oregon Office for Community Dispute Resolution at University of Oregon School of Law.
- ODF Citation used when a PARC member agency has issued this official regulatory action regarding the incident in question.
- 3) ODA Citation
- 4) Agency Letter Ordering
- 5) OR-OSHA Citation
- 6) OR-OSHA Hazard Letter
- 7) ODA Letter of Advisement
- 8) No violations documented used for incidents where no PARC agency has found violations of either the pesticide label or the agency's regulations.
 - Used when a PARC agency has issued this official regulatory action regarding the incident in question.

H) Referrals to:

- 1) ODA
- 2) PEST
- 3) OR-OSHA
- 4) ODFW
- 5) DEQ
- 6) ODF
- 7) SFM
- 8) OPC
- 9) ODOT 10) Other

Incident notable because?

- 1) Bumble bee death
- 2) Honey bee death
- 3) Multi-unit housing and notification (not required)
- 4) WPS-related
- 5) Unaware of ______PARC member agency regulations
- 6) Aerial application
- 7) Transportation-related spill/accident
- 8) Other

Appendix 4 – Oregon Occupational Safety and Health Division Policies and Procedures (Reviewed and updated February 2019)

	PATIONAL SAFETY AND HEALTH POLICIES & PROCEDURES	Number 58	Page 1 of 9	
Subject:		Effective	Effective Date:	
Oregon OSHA Pesticide Incident Referral Procedures to the Pesticide		2/1/2015		
Analytical and Response Center (PARC)		e Center (PARC) 2/28/2019		
Prepared by:	Approved by:	Supersedes:		
Garnet Cooke	Renee Stapleton, Policy Manager	3/1/2013		
		2/1/2017		

Purpose: To establish uniform procedures to make pesticide related incident referrals to the Pesticide Analytical and Response Center (PARC) and to guide Oregon OSHA's actions following the receipt of a PARC investigation referral, in accordance with the Oregon OSHA's Compliance Officer's Guide.

This SOP also establishes uniform procedures for coordinating and communicating with other PARC member agencies during PARC incident investigations.

Scope: Oregon OSHA's investigation of work-related pesticide exposures.

Pesticides include defoliants, desiccants, fungicides, herbicides, insecticides, nematocides, plant regulators, disinfectants, antimicrobials and any substance, or mixture of substances intended to be used for defoliating plants or for preventing, destroying, repelling or mitigating all insects, plant fungi, weeds, rodents, predatory animals or any other form of plant or animal life which is, or which the Department of Agriculture may declare to be a pest, which may infest or be detrimental to vegetation, humans, animals, or be present in any environment thereof. [See: ORS 634.006(8)].

Background: PARC does not have regulatory authority; however, PARC is mandated to perform the following functions when pesticide-related incidents adversely affect humans, animals or the environment:

- Collect incident information,
- Mobilize expertise for investigations,
- Identify trends and patterns of problems,
- Make policy or other recommendations for action,
- · Report results of investigations,
- Prepare activity reports for each legislative session.

PARC's primary function is to collect and analyze information about reported incidents and to coordinate necessary investigations. Member agencies conduct most of the investigations and take any necessary enforcement action(s). Member agencies are listed in Attachment #1.

Oregon OSHA is a binding member of PARC and is represented on the PARC Board by Oregon OSHA's Pesticide Coordinator.

Staff will receive training on the procedures outlined in this SOP, and an annual review of the procedures will occur to ensure effectiveness.

Action #1: When Oregon OSHA is notified of a work-related death, catastrophe or a hospitalization due to a pesticide exposure, the following procedures apply:

Procedures:

- The Oregon OSHA employee receiving the pesticide-related notification will immediately forward that information to Oregon OSHA's Pesticide Coordinator or, in his/her absence, a representative delegated these duties.
- Oregon OSHA's Pesticide Coordinator or representative will collect the information and notify PARC within 24 hours via telephone and also by e-mail. Contact information is included in Attachment #1.
- 3. Oregon OSHA will prioritize response to these pesticide exposure events based on the following criteria:
 - Imminent danger: Investigation initiated within 24 hours. Imminent danger is a
 condition, practice or act which exists in any place of employment and could
 reasonably be expected to cause death or serious physical harm immediately.
 - Serious: Investigation initiated within 5 days. A serious condition, practice or act is one
 which exists in any place of employment and could reasonably be expected to cause
 serious physical harm.
- 4. When an Oregon OSHA investigation reveals issues related to potential violations of the rules of other enforcement agencies, Oregon OSHA's Pesticide Coordinator will establish communication with those agencies and maintain appropriate communication throughout the course of the investigation. The other enforcement agencies are: Oregon Department of Agriculture, Oregon Department of Forestry, and Oregon Department of Environmental Quality. Oregon OSHA's Pesticide Coordinator will also coordinate communications between Oregon OSHA field staff and the Oregon Health Authority's PEST Program including any necessary clarifications regarding exposure pathways and pesticide identities if they were misidentified or unknown at the time of the original intake.

Action #2: When Oregon OSHA receives an investigation referral from PARC, the following procedures apply:

Procedures:

- Oregon OSHA's Pesticide Coordinator or representative will take all investigation referrals from PARC and initiate Oregon OSHA's response.
- Referrals from PARC will be investigated in accordance with the Oregon OSHA's Compliance Officer's Guide. (Use Occupational Pesticide Exposure Incident Report Form.) Oregon OSHA will prioritize response to these referrals based on the following criteria and respond within the indicated time limits:
 - Imminent danger: Imminent danger is a condition, practice, or act which exists in
 any place of employment and could reasonably be expected to cause death or serious
 physical harm immediately. Investigation initiated within 24 hours.
 - Serious: A serious condition, practice or act is one which exists in any place of
 employment and could reasonably be expected to cause serious physical harm.
 Investigation initiated within 5 days.
- 3. When the investigation is completed, the compliance officer will e-mail a copy of the narrative and inspection number to the Pesticide Coordinator. The Pesticide Coordinator will report the findings of the investigation to PARC when the enforcement action is issued.

Action #3: These procedures apply when Oregon OSHA discovers or is notified of an incident or accident involving pesticides. (This type of accident or incident does not include pesticide-related death, catastrophe, or hospitalization covered in Action #1.) Information may be obtained from:

- A complaint alleging health or safety hazards involving pesticides,
- A referral from another section of Oregon OSHA or another agency or department,
- A reported accident where an individual has experienced an adverse health effects due to a pesticide exposure,
- · A media referral,
- Inspection-related interviews or the inspected employer's OSHA 300 log.

Procedures:

- The Oregon OSHA employee who discovers or receives the pesticide-related notification will
 forward that information to Oregon OSHA's Pesticide Coordinator -- or, in his/her absence, a
 representative delegated these duties -- within one business day.
- 2. The referral information should always include:
 - Contact information for any persons exposed,
 - Location where exposure occurred,
 - Time and date of exposure,
 - Nature of the pesticide incident (potential misuse, threats to humans, fish/wildlife habitat or the environment),
 - Name of or type of pesticide involved.
- Oregon OSHA's Pesticide Coordinator or representative will use that information to notify PARC via telephone and also by e-mail within 24 hours. Contact information is included in Attachment #1.
- 4. This type of occupational pesticide exposure incident will be investigated in accordance with Oregon OSHA's Compliance Officer's Guide, using Attachment #2: Occupational Pesticide Exposure Incident Report Form, or equivalent.
- 5. PARC cases will be coded in two locations on the OTIS system:
 - a) S-22 PARC in the optional report information, and
 - b) In the Emphasis section under local: "Pesticide handling."

Oregon OSHA's Applicable Pesticide-Related Rules

- OAR 437 Division 1, General Administrative Rules
- OAR 437 Division 2, General Industry, including:
 - o 2/ I, Personal Protective Equipment
 - o 2/Z, 437-002-0171 (40 CFR 170), Worker Protection Standard
 - o 2/Z, 437-002-0382 Oregon Rules for Air Contaminants
 - o 2/Z, 437-002-1910.1200, Hazard Communication Standard
 - o 2/Z, 437-002-0373 Oregon Rules for Thiram
- OAR 437 Division 3, Construction, including:
 - o 2/Z, 437-003-1000 Oregon Rules for Air Contaminants
- OAR 437 Division 4, Agriculture, including:
 - o 4/I, Protective Equipment

- o 4/N, 437-004-1680 Storage of Hazardous Chemicals
- o 4/W, 437-004-6000 (40 CFR 170) Worker Protection Standard
- o 4/Z, 437-004-9000 Oregon Rules for Air Contaminants.
- o 4/Z, 437-004-9010 Fumigated Areas.
- o 4/Z, 437-004-9720 Thiram
- $\circ \quad \text{4/Z}, 437\text{-}004\text{-}9800 \text{ Hazard Communication Standard for Agricultural Employers}$
- OAR Division 7, Forest Activities, including:
 - o 7/A, 437-007-0010 Worker Protection Standard
 - o 7/D, Personal Protective Equipment and Programs

Attachments:

- #1. PARC and Member Agency contact information.
- #2. Oregon OSHA's Occupational Pesticide Exposure Incident Report Form (For use by OSHA personnel to document contributing factors.)

Attachment #1 - Oregon OSHA's Occupational Pesticide Exposure Incident Report Form (For use by OSHA personnel to document contributing factors) PARC Case #_____ OPT Report #_____ Received from/Referral to PARC on:___ Employer Name:____ Address: Employees Involved:_____ Single:____ Group Exposure:_____ Pesticides Involved & EPA Reg #s:____ Description of Event: Symptoms: Symptoms Associated with Pesticide: Yes No Medical Treatment Sought: Yes No Hospitalized: Yes No Type of Facility: Ag General Farm / Orchard / Nursery / Forestry / Structural Landscaping / Transportation / School / Right of Way / Other: Application Factors: Hand Labor / Mix/Load / Applying / Spill / Splash / Equip Malfunction / Drift / Bystander Structure (office / Warehouse) / Handling Treated Product / Other: Type of Exposure: Direct (using product) Indirect (exposed to product) Structural Exposure: Yes No Informed of Application Prior: Yes No SDS: Yes No PPE Worn: All / According to Label / Some / None / PPE Worn, but Incorrect (List Issues)_ No PPE Worn: Not Required for Task Being Done Decontamination: Occurred / Present but did not Occur / Not Present (no supplies) Training: WPS Handler / WPS Worker / Hazard Com / Health Haz Control / Other Ventilation: Outside

Label Insufficient: Referred to ODA/EPA: Yes No

Contact Info:

Hazard Letter: Yes (attached)

No Referral to other PARC Agency: Oregon OSHA

Structure: # Hours Ventilated:

Violations: Yes (attached) No

No Ventilation Occurred

Appendix 5 – Oregon Department of Forestry Standard Operating Procedures for Pesticide-Related Incidents

Introduction/Purpose



Oregon Department of Forestry Standard Operating Procedures for Pesticide-Related Incidents

Effective Date: January 1, 2015

Last Revision

Date:

The Oregon Department of Forestry (ODF) administers the regulations of the Oregon Forest Practices Act (FPA), including rules for natural resources protection when pesticides are used on forestland.

The purposes of this document are to outline the following:

- ODF responses to complaints or reports from the public of problems related to forest pesticide
 use.
- ODF responses to referrals of information from the Pesticide Analytical and Response Center (PARC), based on ODF's referral criteria.
- ODF's role in supporting uniform procedures for coordinating and communicating with and among PARC member agencies during all pesticide-related incidents.

This document is an extract from ODF policy, procedure, and guidance documents related to investigation and reporting for all reported incidents (not just those related to pesticides).¹

Scope

The Oregon Forest Practices Act regulates forest pesticide use and other commercial forestry activities. The FPA establishes the policy of the State of Oregon as encouraging the growing and harvesting of forest trees, consistent with sound management of soil, air, water, and fish and wildlife resources. The FPA focuses on natural resource protection, recognizing that other federal and state regulations protect human health and property, as well as the environment. The Oregon Department of Forestry administers the FPA.

The Oregon Board of Forestry (Board) has adopted forest practice rules requiring operators to notify ODF before starting pesticide applications or other forestry activities. Notifications to ODF must contain a description of the planned activity, including a list of pesticides the operator plans to use. Notification data is available to public upon request.

The Board has also adopted rules regulating forest pesticide use. Those rules focus on natural resource protection, recognizing that other federal and state regulations protect human health and property, as well as the environment. When operators apply pesticides, they must record weather conditions and pesticides

¹ For a list of these ODF documents, see "Oregon Department of Forestry Complaint Investigation and Reporting Procedures" in Attachment 1.

² See Attachment 1 for a more detailed list of information required in the notification of operations.

that were used.³ Operators must provide the records to ODF upon request. ODF requests the records as needed for ODF investigations or at the request of PARC.

ODF investigates reports of concerns over forest pesticide applications, and takes enforcement action for violations of the FPA. ODF works with PARC and member agencies in investigating pesticide-related incidents.

Standard Operating Procedures

- Upon receiving reports (from PARC, the public, or other sources) of concerns related to pesticide applications on forestland, ODF will:
 - a. Designate an ODF employee as investigator for the report.
 - b. Designate an ODF employee as the local contact for the reporting party.
 - If a call back is needed, contact the reporting party within one business day⁴ of receipt of the report.
 - d. During the first conversation with the reporting party, gather the following information:
 - i. Name and contact information of the reporting party, if willing to provide.
 - ii. The nature of the reported problem.
 - iii. The location of the reported problem.
 - iv. Names of operators or landowners involved, if known.
 - e. Provide information to the reporting party as indicated in this document, including the contact information for the ODF contact.
 - f. Advise reporting parties as following:
 - For a health or safety emergency, contact 911 or the Oregon Poison Center. Clarify that PARC is not an emergency service.
 - ii. For a non-emergency health problem, contact a health care provider.
 - iii. If reporting personal health information, report it to PARC and not to ODF; PARC will be able to withhold the information from public disclosure, while ODF may not be able to do so.
 - Provide contact information for PARC to reporting parties, who may contact PARC directly. PARC will advise other agencies that need to be involved.
 - g. Inform reporting parties of ODF's planned next steps, including timelines.
 - Hold any personal medical information received from PARC as exempt from public exposure. ODF rarely receives such information from PARC, typically, only for PARC Board-related business (not for ODF investigations).
 - i. Treat all reporting parties with respect. Avoid downplaying concerns over pesticide use.
 - j. Describe the coordinated federal-state scheme of pesticide regulations and refer concerned persons to sources of pesticide-related information such as the Oregon Poison Center and the National Pesticide Information Center.
 - k. Forward reported information to PARC within one business day of ODF receipt when the information involves reports of adverse effects from pesticides on human health or property (including pests or other domestic animals), or the environment. ODF will forward complaints or reports related to the following:
 - i. Ongoing or completed pesticide applications or activities;
 - Reports regarding specific pesticide applications or activities that have not yet occurred. This does not include reports of concerns about pesticide use in general.
 - 1. Determine if a reported situation is related to activities subject to the FPA.

³ See OAR 629-620-0600 in Attachment 1 for a list of information that must be recorded.

⁴ ODF will strive to achieve this and other response times in all instances, but fire emergencies or other circumstances may unavoidably lengthen ODF's response times in some situations.

- If it is, ODF will open an investigation in coordination with other involved agencies.
- If it is not, ODF will refer the report to the appropriate agency or entity, including PARC.
- II. If a reported situation is related to activities subject to the FPA, ODF will investigate to evaluate compliance with the regulations in that law.
 - a. If a report involves an ongoing operation, ODF will visit the activity site within one business day of receiving the report.
 - b. If an ongoing operation is not involved, ODF will visit the site as soon as is feasible, but typically within three business days of receiving a report.
 - c. Upon discovery of a violation of the regulations of the FPA, ODF may take enforcement action, including an order to stop any ongoing violations, and to repair natural resource damage.
 - d. ODF will document investigation results using a Complaint Report Form, shown in Attachment 2.
 - e. ODF will communicate ODF investigation results to reporting parties and to PARC and member agencies. Typically, ODF investigations will be complete within 120 calendar days of receiving a complaint or report about a pesticide application or activity that was in progress or had already occurred at the time of the report.
- III. If PARC notifies ODF that a member agency investigation of a forest pesticide application has been opened, ODF will open an investigation of the application for compliance with FPA standards and will coordinate the investigation with PARC and member agencies.
- IV. In consultation with PARC and member agencies, ODF will provide PARC with information from the ODF notification of operation database or ODF files.
- V. ODF will obtain application information from an operator under the following conditions:
 - a. Upon request from PARC, based on the data requested, ODF may need to obtain the daily chemical application records from the operator. In that case, ODF will forward the records to PARC. Where the request is for an Oregon Health Authority (OHA) Public Health Assessment or Exposure Investigation, ODF will follow the procedures outlined in the ODA/ODF document titled "Pesticide Data Use Request"
 - b. When ODF opens an investigation related to compliance with the FPA, ODF will obtain the daily chemical application records from the operator.
- VI. When ODF receives daily chemical application records from operators under the authority of OAR 629-620-0600, ODF will:
 - a. Review the records for compliance with FPA standards.
 - b. Forward the records to the Oregon Department of Agriculture (ODA) through PARC to allow ODA to review the application data for compliance with standards in pesticide product labels and/or Oregon's Pesticide Control Law.
- VII. Where ODF or other agency investigation involve large amounts of notification or application record data, ODF will provide GIS-related services to manage the data, in coordination with PARC and member agencies.
- VIII. ODF will respond as followings to public requests for information on pesticides that have been applied:
 - a. If an interested party requests information on forest pesticide applications, ODF will provide an information currently in its notification of operation database⁵ or other files, including any information it has received on what was actually applied.
 - b. ODF does not have the resources to respond to public requests to obtain daily application records when there is not an ODF or PARC member agency-need to obtain the records. If

⁵ Additionally, ODF has a fee-based, automated subscription system that allows interested parties to receive copies of notifications before the listed activities begin. Notification information is also available via standard public records requests.

- ODF has already obtained the records or plans to obtain them, ODF will provide the records to the requesting party. ODF will encourage concerned citizens to contact the landowner and/or operator for information on what was applied.
- c. Health care providers may request information on pesticides that were applied at a specific place and time. Within one business day of receiving such a request, ODF will refer the request to PARC for follow up based on PARC standard operating procedures.
- IX. Any notification or application information ODF holds is public record. ODF will provide such information to requesting parties as soon as feasible, based on state public records law.
- X. ODF will receive available information to determine of there may be violations of pesticide product label standards or Oregon's Pesticide Control Law. ODF will forward any indications of potential violations to PARC for referral to ODA.
 - a. The ODF review will be a relatively coarse review of available information, designed to determine of referral to ODA is needed. ODA has the needed authority, knowledge, and expertise to evaluate compliance with pesticide product label standards and Oregon's Pesticide Control Law.
 - b. ODF will inform reporting parties and persons named on any related notifications of operations of potential noncompliance and/or referral to ODA under item X. a. above.
- XI. ODF will continually coordinate with and provide information to PARC and/or member agencies during investigations conducted by ODF or other agencies.
 - a. ODF will share information, including interim investigation reports, with PARC and member agencies on an ongoing basis.
 - b. ODF will provide PARC and member agencies a final report within five business days of completion of an ODF investigation. If enforcement action is needed, there may be an extended timeline for completion of the final report. In that instance, ODF will continue to provide interim reports.
- XII. Information to Reporting Parties
 - a. As appropriate for each situation, ODF will provide interim reports back to reporting parties. One example might be reporting back on a question of whether a person applying pesticides on forestland had filed a notification of operations with ODF.
 - b. ODF will provide reporting parties with a final investigation report within five business days of completion of an ODF investigation. Reports ay be verbal (in person or telephone) for relatively simple incidents, and in writing (including email or similar media) for more complex investigations.
 - c. At any point in an investigation, upon request, ODF will provide reporting parties or other interested parties with information it holds.
- XIII. ODF will coordinate with and assist ODA when sample collection may be needed. ODF has neither the resources nor the expertise to collect and/or analyze samples, so this work will be in support of ODA, which would be the lead agency.
- XIV. In coordination with PARC and member agencies, ODF will provide public information support for working with the media and for responding to public information requests.

ODF Attachment #1 - Statutes and Rules Related to Forest Pesticide Regulation

- Oregon Forest Practices Act. ORS 527.610 to 527.770, 527.990(1) and 527.992.
- ORS 527.630. Describes the policy of the State of Oregon regarding regulation of forest practices.
- Oregon Forest Practice Rules. OAR chapter 629, divisions 600 through 680. http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_629/629_tofc.html (use this link to access Oregon Administrative Rules cited below)
- Requirements for Notifications of Operations to ODF
 - o Information required in a notification of operations to ODF is described in the following:
 - Name and contact information of the operator and landowner.
 - Description of the nature, location, method, and general timing for any planned activities
 - For pesticide application, the notification must include specific active ingredients of
 pesticides to be used (and the product brand name if known at the time of
 notification), and any other products that will be added to spray mixes. The
 notification must also describe whether the application will be by aerial or groundbased methods.
 - o More detail on notification of operations requirements are available in:
 - ORS 527.670(6), (7), and (8).
 - OAR 629-605-0140 and 629-605-0150
- OAR 629-674. Outlines the fee-based system for interested parties to receive copies of notifications.
- OAR 629-620. Chemical and Other Petroleum Product Rules. Outlines the specific resource protection requirement for forest pesticide application.
- OAR 629-620-0600. Outlines daily application record requirements as follows:

629-620-600 Daily Records of Chemical Applications

- 1. Whenever pesticides are aerially applied or applied using a pressurized, ground-based, broadcast application system on forestland, the operator shall maintain a daily record of application operations which includes:
 - a. The legal description of the location of the operation area actually treated with chemicals;
 - b. The acreage actually treated with chemicals;
 - c. Brand name or EPA registration number of the chemicals used, the carrier used, and the application rate;
 - d. Date and time of application;
 - e. Air temperature, to be measured within the operation area and recorded at least hourly for aerial applications and at least at the beginning and end of each day's application for ground applications:
 - f. Relative humidity, to be measured within the operation area and recorded at least hourly for aerial applications and at least at the beginning and end of each day's application for ground applications;
 - g. Wind velocity and direction, to be measured within the operation area and recorded at least hourly for aerial applications and at least at the beginning and end of each day's application for ground applications;
 - h. The name of the person making the application, including the contractor's name and pilot's name when applied aerially, or the contractor's name and/or employee's name for ground application
- 2. Whenever pesticides are applied on forestland using methods other than those described in section 1) of this rule, the operator shall maintain a daily record of all information listed in subsections a), b), c), d), and h) of section 1).

- 3. Whenever fertilizers are applied on forestland, the operator shall maintain a record of all information listed in subsections a), b), d), and h) of section 1) of this rule and shall also record the application rate and the formulation used.
- 4. The records required in sections 1), 2) and 3) of this rule shall be maintained by the operator for three years from the date of application and be made available at the request of the State Forester.
- 1. Oregon Department of Forestry Forest Practices Note Number 3: Chemical and Other Petroleum Product Rules, at http://www.oregon.gov/odf/privateforests/docs/fpnote3chemv6.pdf.
- Oregon Department of Forestry Complaint Investigation and Reporting Procedures (available upon request)
 - a. ODF Complaint Investigation and Reporting Policy
 - b. ODF Complaint Investigation and Reporting Procedures
 - c. ODF Complaint Investigation and Reporting Guidance
- 3. Oregon Department of Agriculture/Oregon Board of Forestry Memorandum of Agreement: Regulation of Forest Pesticide Use (available upon request)

ODF Attachment #2 - Oregon Department of Forestry Oregon Forest Practices Act Complaint Investigation Form

OREGON DEPARTMENT OF FORESTRY

FORM 6-4-1-100

OREGON FOREST PRACTICES ACT COMPLAINT INVESTIGATION FORM

COMPLAINT FROM: (Name)
(Organization)
(Address)
(Phone)
COMPLAINT RECEIVED BY: (Name)(Title)
(Office)
(Date)(Time)
COMPLAINT RECEIVED VIA: () Phone () Mail () In Person () Other
COMPLAINT INVESTIGATED BY: (Name) (Title)
(Office)
(Date)(Time)
LOCATION OF COMPLAINT: (Legal)(Landowner)
(Stream Name)
DESCRIPTION OF COMPLAINT:
INVESTIGATION RESULTS:
General

INIVESTIGATION D	есін те	Domaga					
INVESTIGATION R							
	gation find	dings and follow-up action to complainant					
() Citation issues		() Court appearance required					
() Repair order issued Date repair to be completed:							
() Referred to another	er agency	for investigation					
Remarks							
DISTRIBUTION	()	ODF Area Office					
	()	ODF Private Forests Field Support Unit					
	()	Department of Agriculture Department of Environmental Quality					
	()	Department of Environmental Quality Department of Fish & Wildlife					
	$\ddot{0}$	Department of Geology & Mineral Industries					
	ŏ	Division of State Lands					
	Ó	Pesticide Analytical and Response Center					
	()						
Signature		Date					

Appendix 6 – Oregon Department of Environmental Quality, Standard Operating Procedures Relating to Pesticide Complaint Intake, Response and Referral Process

Introduction/Purpose

The Oregon Department of Environmental Quality (ODEQ) administers the regulations of the Clean Water Act (CWA), the Clean Air Act (CAA), Resource Conservation and Recovery Act (RCRA) and Oregon's Groundwater Quality Protection Act. The purpose of this Standard Operating Procedure (SOP) is to outline policy and procedure for management of pesticide related complaints in cooperation with the Oregon Department of Agriculture (ODA). This SOP documents procedures for complaint intake, notification of the Pesticide Analytical and Response Center (PARC) managed by ODA, and procedures to be followed by DEQ staff, in cooperation with ODA staff, when responding to and investigating pesticide complaints.

Scope

ODEQ has two distinctly different processes for responding to pesticide related incidents. First, in the event of a spill, chemical release, or emergency response, notifications are made through the Oregon Emergency Response System (OERS). Additional information about Emergency Response can be found at: http://www.ODEQ.state.or.us/lq/cu/emergency.

The second process is intake of non-emergency complaints, which are received by the ODEQ complaint intake system. The scope of this SOP is limited to these non-emergency pesticide complaints. ODEQ's objective when responding to a complaint is to work cooperatively with ODA and other agencies to determine if ODEQ interests may be affected that require ODEQ involvement. These interests include the potential for a violation of the general pesticide permit (2300 permit), potential impacts to a drinking water source or ground water, and improper handling or disposal of a solid and/or hazardous waste containing pesticides.

Standard Operating Procedures

I. DEQ Complaint intake Procedure

When an ODEQ Complaint Intake Specialist (CIS) receives a call involving a pesticide issue that requires an emergency response, the CIS will follow the procedures established in CIS SOP #1. Callers reporting health problems should be advised to seek medical advice as necessary. Emergency calls are not logged as an ODEQ complaint.

ODEQ receives complaints by telephone, email, and by web form. Complaint information entered into the complaint database is a verbatim account of information that is provided over the telephone or that is transcribed, word-for-word, from an email or web form. Upon approval of this SOP, all complaints received by ODEQ that are related to a pesticide issue will be logged as a complaint.

Following the SOPs developed for the Agency Complaint System, the CIS is responsible for entering complaint information into the complaint database. The complaint database data entry form guides the CIS in documentation of all the complaint information provided. When a complaint is received via telephone, the CIS walks the caller through the data entry form and records all the information that is provided. When complaint information is received via email or web form, written information is entered into the database as received. If an email or web form contains contact information, the CIS may contact the complainant to obtain critical complaint information.

When complaint information relates to a pesticide issue the CIS will select "pesticide" in the "Incident Material" field and select "Yes" in the "PARC Notification" field.

Pesticide Complaint Assignment

Based on complaint location information, pesticide complaints will be assigned to the appropriate Regional ODEQ Pesticide Complaint Coordinator as identified by this SOP and included in the Agency Complaint System- Complaint Assignment Guide. The Agency Complaint System SOP #12, for Timely Action, establishes that complaint information will be logged within two hours of receipt.

Notifications

Once data entry has been completed, the CIS "saves" or "logs" the complaint into the database. When the "PARC Notification" field is marked "Yes" an automated email notification to is sent to the ODEQ PARC Representative and ODA PARC Coordinator using the contact information below.

ODEO PARC Representative

Brian Boling
Boling.brian@ODEQ.state.or.us
503-693-5745

ODA PARC Coordinator

Oregon Department of Agriculture Pesticide Analytical and Response Center (PARC) 503-986-6470 and parc@oda.state.or.us

Responding to a Pesticide Complaint

Pesticide Complaint Coordinators (PCCs) will receive an automated email notification when assigned a pesticide complaint. The PCC will follow the written instructions in the email, open the complaint and provide electronic confirmation of complaint assignment. It is a statewide goal to acknowledge complaint assignment upon receipt. It is also a statewide goal to contact the complainant within 2 working-days of receipt of complaint assignment.

Pesticide Complaint Triage Checklist

As part of the investigation, the ODEQ PCC will call the ODA Lead Pesticide Investigator or Pesticides Program Manager to exchange information about the incident. The PCC does an initial review of the complaint following the Pesticide Complaint Triage Checklist (Appendix A) using information from ODA and the complaint. This will assist the PCC in making the necessary determinations. The referral from PARC may contain contact information for the ODA Lead Pesticide Investigator. Call the following to get contact information for the ODA Lead Pesticide Investigator when it is not supplied with the complaint.

ODA Pesticide Compliance Program Manager

Oregon Department of Agriculture Dale Mitchell 503-986-4646 and dmitchel@oda.state.or.us

A Regional Complaint Responder may be assigned by the PCC and can quickly respond to the need for a site inspection to assist the PCC in determining the appropriate level of DEQ involvement and in completing the Pesticide Incident Worksheet.

Pesticide Incident Worksheet

The PCC will perform the initial investigation by completing the Pesticide Incident Worksheet through discussions with the ODA investigator and make a determination whether one for the following six ODEQ interests is involved:

- 1) Potential violation of a 2300 pesticide general permit,
- 2) Potential for groundwater impacts,
- 3) Potential drinking water source impacts,
- 4) Potential improper solid waste disposal, or
- 5) Potential improper hazardous waste storage or disposal.
- 6) Pollution of waters of the state

If one of the five ODEQ interests is potentially involved, the PCC will notify and consult with the appropriate ODEQ technical specialist from the relevant ODEQ program to assess the significance of the potential impact. The PCC will also contact the appropriate DEQ Basin Coordinator as identified in this procedure and/or as identified in the Agency Complaint System-Complaint Assignment Guide.

Complaint Documentation and Internal Communication

After completion of the initial investigation, the PCC will attach the completed worksheet, any documents, photographs or other information to the complaints database. Finally, the PCC will update their manager and the ODEQ PARC representative with details of the incident and any recommendations for next steps. These next steps may include, but are not limited to, sampling, follow- up interviews or enforcement. The ODEQ regional manager will have the final decision on what additional response to the incident, if any, that ODEQ may have. The regional manager will work with the Laboratory Program Manager if additional laboratory work is requested.

Complaint Closure

Once the complaint and follow-up investigation are completed, including any involvement from any technical specialist, the PCC will close the complaint in the database. The statewide goal is to complete and close all complaint investigations within 90 days.

ODEQ PARC Representative

The ODEQ PARC Representative will keep up to date on ongoing investigation in order to relay information during PARC meetings. In addition will review investigations for consistency in process and continued updating of process documents.

Procedure

ODEQ Technical Specialist

If one of the five ODEQ interests is potentially involved, the PCC will contact and consult with the appropriate ODEQ technical specialist from the relevant ODEQ program to assess the significance of the potential impact. The ODEQ technical specialist is responsible for completion of the applicable evaluation, and for reporting findings and conclusions to the PCC. The PCC will remain responsible for appropriate follow-up, completion of the investigation, and closure of the complaint.

Groundwater

In the case of incident involving potential risk to groundwater, the groundwater specialist will assess the potential risk of groundwater contamination using, but not necessarily limited to, the tools in Appendix C: ODEQ Decision Tool to Be Used To Determine When to Test For

Groundwater Contamination. Groundwater technical specialists will report their findings and conclusions to the PCC.

Drinking Water Source Protection

Technical specialists for the protection of drinking water sources will be contacted to evaluation the potential for impact to drinking water source intakes in the vicinity of the incident. Drinking water protection technical specialists will report their findings and conclusions to the PCC.

2300 General Permit or Solid Waste Disposal Violations

If there is potential for violation of a 2300 general pesticide permit, or for solid waste disposal violations exist, specialists from the relevant ODEQ program areas will consider and assess the significance of these concerns and report their findings to the PCC.

References - Complaint Intake Procedures

SOP #1 Spills / Emergency Response Calls

SOP #2 Sensitive Complaints

SOP #3 Web Form Complaints

SOP #4 Complaint Reassignment

SOP #5 Definition of a DEQ Complaint

SOP #6 Standard Phone Greetings

SOP #7 Holiday Phone Greeting

SOP #8 Absences-Planned & Unplanned

SOP #9 Daily Duty Confirmation & Handoff

SOP #10 Multiple Complaints -Single Incident

SOP #11 Attaching Documents to Complaints

SOP #12 Timely Actions

Regional Pesticide Complaint Coordinators

ER: Tonya Dombrowski	541-278-4615
Duane Smith541-278-4607 (backup)	
NWR: Karen Williams	503-229-6254
Matt Kohlbecker503-229-6371(backup)	
WR: Bill Meyers	541-776-6272
Nancy Gramlich503-378-5073(backup)	
Technical Specialists	
2300 Permit Coordinator: Beth Moore	503-229-6402
Drinking Water Contact: Sheree Stewart	503-229-5413
Groundwater Contact:	
ER- Phil Richerson	541-278-4604
NWR-	
WR- Greg Aitken	541-687-7361
Solid Waste:	
ER- Rich Duval	541-278-4613
NWR- Killian Condon.	
WR- Bob Barrows.	
WK- Boo Burrows	

Hazardous Waste

 ER Rich Duval
 541-278-4613

 NWR Peter Anderson
 503-229-5070

 WR

ODEQ Basin Coordinators

Coos, Curry:

Pam Blake-541-269-2721 x227

Dune City, Siltcoos Lake, Woahink Lake:

David Waltz-541-687-7345

Linn, Benton, Lane (NOT Dune City, Siltcoos Lake, Woahink Lake)

Pamela Wright-541-686-7719

Lincoln:

David Waltz-541-687-7345

Marion, Polk, Yamhill:

Nancy Gramlich-503-378-5073

Jackson, Josephine:

Bill Meyers-541-776-6272

Douglas:

David Waltz-541-687-7345

Washington:

Avis Newell-503-229-6018

Multnomah:

Doug Drake-503-229-5350

Clackamas:

Karen Williams-503-229-6254

Clatsop, Columbia, Tillamook:

York Johnson-503-322-2222 x30

Gilliam, Morrow, Umatilla, Wheeler:

Don Butcher-541-278-4603

Union, Wallowa, Baker, Malheur, Grant:

John Dadoly-541-278-4616

Klamath, Harney, Lake:

Mike Hiatt-541-273-7002

Sherman, Jefferson, Deschutes, Crook, Hood River, Wasco:

Bonnie Lamb-541-633-2027

Acronyms

CAA- Clean Water Air Act

CWA- Clean Water Act

OERS- Oregon Emergency Response System

PCC- Pesticide Complaint Coordinator

ODEQ- Oregon Department of Environmental Quality

OGQPA- Oregon Groundwater Quality Protection Act

PARC- Pesticide Analytical and Response Center

RCRA- Resource Conservation and Recovery Act

History

Draft April 10, 2015-DAS, Draft April 28, 2015-DAS Draft May 6, 2015 – BRB, Final June 10, 2015 – BR

Appendix A: Pesticide Complaint Triage Checklist

1.	Receive complaint.	Go to 2.
2.	Is it regarding a Spill according to CIS SOP #1?	Yes: Check that it was reported to OERS and close complaint No: Go to 3.
3.	Is it Pesticide related?	Yes: Go to 4, No: Change category in complaint and initiate standard complaint procedures,
4.	Are there public or private drinking water supplies within vicinity of the incident? (Groundwater or surface water)	Yes: Have ODA PARC Coordinator contact OHA. Go to 5 No: Go to 5
5.	Was there any apparent loss to wild life or death/distress of non-target organisms observed?	Yes: Have ODA PARC Coordinator contact ODFW. Go to 6 No: Go to 6
6.	Is it related to the Storage of Pesticides?	Yes: Potential improper hazardous waste storage – contact ODEQ Regional Haz Waste program staff. No: Go to 7
7.	Is it related to the Application of a Pesticide?	Yes: Go to <u>15</u> No: Go to <u>8</u>
8.	Is it related to the Disposal of Pesticide, Pesticide waste, or Pesticide Containers	Yes: Go to 9 No: If still considered ODEQ issue, contact Regional Manager and ODEQ PARC representative. If not, inform ODA PARC Coordinator and close complaint,
9.	Disposal of pesticide <u>still in containers</u> (cans, bottles, jars, drums, etc.)	Yes: Potential improper waste disposal. Contact ODEQ Solid Waste program staff. Go to 10
10.	Are containers leaking?	No: Go to 11 Yes: Go to 11 No: Potential improper waste disposal. Contact ODEQ Solid Waste program staff

11.	Disposal /dumping of solid or liquid pesticide or pesticide	Ensure OERS has been contacted
	residue (mixture or waste)	
		Potential improper hazardous waste
		disposal. Contact ODEQ
		Hazardous Waste program staff.
		And Go to 12

12.	Was disposal/dumping directly or indirectly into surface waters?	Yes: Go To <u>13</u> No: Go to <u>14</u>
13.	Are the waters already impaired of pesticides?	Yes: Go To <u>15</u> No: Go to <u>15</u>
14.	Was there a significant amount of material disposed/dumped or was the incident near a ground water well.	Yes: Potential Groundwater impact. Contact GW specialist to work through Groundwater Contamination Decision tool (Appendix)
		And if large amount, ensure OERS has been contacted.
		No: No groundwater impact, If still considered ODEQ issue, contact Regional Manager and ODEQ PARC representative. If not, inform ODA PARC Coordinator and close complaint,
15.	Was the pesticide application over a waterbody or within 3 feet of a waterbody.	Yes: Contact 2300 permit coordinator and fill out General Pesticide 2300 Permit Questions in <i>Part 1 of Appendix</i> . No: Not a 2300 permit, DW Source, or surface water impact
		issue. Go to 16
16.	According to ODA, was the application performed according to the pesticide label instructions?	Yes: If still considered ODEQ issue, contact Regional Manager and ODEQ PARC representative. If not, inform ODA PARC Coordinator and close complaint.

	No: Contact GW specialist to <u>Appendix</u> Groundwater contamination Decision too	
17		

Appendix B - ODEQ Pesticide Incident Worksheet

General Information						
Complaint #		DEQ Staff Name				
Inspection Date		ODA Inspector Name				
OERS Number		ODA Inspector Phone #				

General Pesticide 2300 Pe	ermit Questions	<u> </u>	
Question	Answer		Additional information
Does the application fall under the general pesticide 2300 permit?	Yes If No Skip to no section	No — ext	
Does the responsible party need to register for the Permit?	Yes No	N/A	
Is the responsible party registered if required?	Yes No If yes, fill in Pe information ta		
Did the application meet the requirements of the permit?	Yes No	N/A	
Permittee Information	l		
Name of Permittee			
DEQ Permit No.			
Address of Location			
Operator			
Operator Contact(s)			
Operator Personnel			
Other(s)			

General Environmental Ris	k/impac	ct Que	stions		
Question	Answe			Additional information	
Are there public drinking water supplies within	Yes	No	N/A		
vicinity of the incident?					
Were there any private drinking water sources that	Yes	No	N/A		
may be impacted? (Ground or surface waters)		Ш			
Was there any apparent loss to wildlife or death/	Yes	No	N/A		
distress of non-target organisms observed?					
Was surface water	Yes	No	N/A		
impacted?					
Are surface waters in	Yes	No	N/A		
vicinity already impaired for pesticides on state list.					
Observations					
Observations					
List any findings that would l	e a viol	ation o	r non-comp	pliance to the 2300 permit. Possible reasons may	
include: 2. Records not up to date	ie				
3. Application did not f4. Spill or non-target sp	ollow the				
4. Spin of non-target sp	ceres we	ac mip	acted not re	ported	

Violation	Violations/Non-Compliance to 2300 permit						
DEOI	· DI · T			T D.			
	ection Photo Log			Inspection Date			
Facility							
Name		ID#		Photographer			
Photo #1				Photo #2			

DEQ Inspection Photo Log			Inspection Date	
Facility		"		
Name		ID#	Photographer	
Photo #3			Photo #4	

			Inspection Date	
Facility Name		ID#	Photographer	
Photo #5			Photo #6	

DEQ Inspection Photo Log		Inspection Date			
Facility				Photographer	
Name		ID#			
Photo #7				Photo #8	

Appendix C - ODEQ Decision Tool to be Used to Determine When to Test for Groundwater Contamination

<u>Purpose</u> – The purpose of this document is to describe the process to be used to determine when it is appropriate to test groundwater for contamination resulting from a pesticide-related incident (e.g., suspected spill or inappropriate application). Due to the specific details surrounding a pesticide-related incident, it is not always useful, practical, or possible to test groundwater for pesticide contamination.

<u>Rationale</u> – It is unlikely that groundwater in the vicinity of a pesticide-related incident has been analyzed for pesticides, particularly recently and for the pesticide of concern. Pesticide-related incidents that could result in a recommendation for further investigation include those in which a pesticide is likely to be found in groundwater, as well as incidents where a pesticide is less likely to be found in groundwater but is highly toxic.

Aspects to Consider in Decision Making - The decision to test for a pesticide will be based on an evaluation of the depth to groundwater, soil drainage characteristics, the amount and timing of pesticide used, the physical properties of the pesticide that affect its movement in the environment, and its toxicity and potential health effects. While the decision tool quantifies some aspects of pesticide movement and aquifer vulnerability, the decision to recommend sampling or not will ultimately be made by a professional with experience in groundwater contamination using the information generated by this process and their best professional judgment.

<u>Decision Tool Steps</u> – The following steps are to be followed when using the Decision Tool:

- 1. *Estimate the Depth to Groundwater* A shallow water table (e.g., less than 50 feet) is more vulnerable to contamination than a deep-water table.
- 2. Estimate the soil drainage characteristics Well-drained soils are more likely to leach chemicals than poorly draining soils
- 3. Estimate Amount and Timing of Pesticide Use A higher volume of pesticide used generally equates to a higher potential for contamination.
- 4. Compile and Record Physical Properties The physical properties that affect pesticide movement in the environment (i.e., adsorption coefficient, soil half-life, and solubility) should be identified. A pesticide held strongly to soil particles is less likely to leach. Highly soluble pesticides are likely to be removed from the soil by runoff or by leaching below the root zone. A pesticide that is rapidly broken down by a degradation process is less likely to leach because it may remain in the soil only a short time.

Physical Property	Relevance	Low Risk	Medium Risk	High Risk
Adsorption Coefficient (KOC) unitless of ml/g	A pesticide held strongly to soil particles is less likely to leach.	>1,000	300 to 1,000	< 300
Solubility mg/l	Highly soluble pesticides are likely to be removed from the soil by runoff or by leaching below the root zone.	< 1 mg/l	1 to 30 mg/l	> 30 mg/l
Soil Half-Life Days	A pesticide that is rapidly broken down by a degradation process is less likely to reach because it may remain in the soil only a short time.	< 30 days	30 to 100 days	> 100 days

^{5.} Compile and Record Toxicity Information – The more toxic a chemical is, the greater the importance

- to know its potential impacts.
- Calculate a Pesticide Movement Rating Using the soil half-life and soil adsorption coefficient, a
 "Pesticide Movement Rating" of "extremely low" through "very high" should be calculated.
- 7. Calculate a Physical Property Risk Factor Using the adsorption coefficient, soil half-life, and solubility, a "Physical Property Risk Factor" should be calculated.
- 8. Flag Potential Analyte A pesticide should be flagged as a potential analyte if it exhibits a moderate to very high Pesticide Movement Rating, a Physical Property Risk Factor of 7, 8, or 9, a large quantity used, or a "standard" of < 0.1 mg/l. A pesticide should also be flagged as a potential analyte if the depth to groundwater is less than 50 feet and/or the soil drainage characteristics are well drained to excessively well drained.
- 9. *Refine Potential Analyte List* A pesticide could be eliminated from the Potential Analyte List based on a qualitative evaluation of amount and timing of pesticide used, its physical properties, and its toxicity.
- 10. Identify Analytical Capability Not all potential analytes have a readily available analytical test method. The analytical methodologies capable of quantifying each of the potential analytes should be researched to determine the possibility of analyzing groundwater for the pesticide of interest.
- 11. Determine Appropriate Response Based on the relative risk associated with the pesticide-related incident, the analytical capability to analyze the pesticide, and other site- specific considerations, a decision should be made if, who, and when groundwater sampling should occur. The decision could be that a State Agency (e.g., DEQ) should conduct sampling, the pesticide applicator should conduct sampling, property owners should conduct sampling is warranted.

This information along with any historical environmental data should be used in determining if any additional steps should be taken in the investigation. In addition, the risk information should be passed along to the ground water monitoring group for potential follow-up in site section during statewide ground water monitoring efforts.

Appendix 7 – Oregon Department of Agriculture Standard Operating Procedures (Reviewed with no updates April, 2019)

Oregon Department of Agriculture OREGON DEPARTM	ENT OF AGRICULTURE	Page 1 of 4
Subject: Pesticides Program, Standard Operating Program	Adoption Date: 11/21/2014	
and Referral Process		
Prepared by:	Revision Date:	
Mike Odenthal,	Dale Mitchell,	12/21/18
Pesticide Lead Investigator	Pesticide Program Manager	

I. Introduction

The Pesticides Program seeks to protect people and the environment from adverse effects of pesticide use while maintaining the availability of pesticides for beneficial uses. This includes regulating the formulation, distribution, storage, transportation, application, and use of pesticides. Investigative findings may result in enforcement actions as authorized by statute. The program also provides educational assistance to the public and pesticide users and provides compliance assistance.

This document, in combination with the Investigator Notebook, covers all aspects of an Investigator's activities, including types of investigations and how to conduct them, how to sample, and how to use the Investigator database (data base user guide). Additionally, it establishes uniform procedures to respond to pesticide complaints and referrals; for example, notifications to the Pesticide Analytical and Response Center (PARC).

In addition, this document facilitates the timely transfer of pesticide incident information and coordination between PARC member agencies. Each agency has developed Standard Operating Procedures (SOPs) as a supplement to the statewide document "Coordinating Pesticide Incidents in Oregon." The individual SOPs outline the statutory authority, pesticide-related jurisdiction(s), and/or areas of expertise for each member agency.

II. Scope

Oregon Department of Agriculture (ODA), Pesticides Program, is the state lead agency regulating the formulation, distribution, storage, transportation, application, and use of pesticides in the State of Oregon. In carrying out and enforcing the provisions of ORS 634, ODA may establish limitations and procedures deemed necessary and proper for the protection of persons, pollinating insects, bees, animals, crops, wildlife, land, or environment.

III. Standard Operating Procedure

Following is the process that ODA follows when a pesticide complaint is received from a complainant directly (via phone call, email or other). The PARC Coordinator and other agencies also might provide referrals to the Lead Investigator when a complaint is received. The Lead Investigator assigns the referral to an Investigator. The goal is for cases to be completed or an enforcement action issued within 180 days or less.

Note: If immediate medical attention is needed, individuals are directed to contact the Oregon Poison Center at 800-222-1222.

- When a complaint is received, the complainant is contacted within (1) business day or as staff
 availability allows. Complainant's contact information including name, address, telephone
 number(s), and email address is collected.
- 2. Specific information from complainant regarding the concern, such as the following, is collected:
 - a. Nature of incident,
 - b. Date and time of incident,
 - c. Type of application,
 - d. Name of applicator,
 - e. Location (type) and address of incident: farm, home, business,
 - f. Any adverse effects on humans, animals, or the environment,
 - g. Contact information for applicator and/or other witnesses or parties involved.
- 3. When adverse health effects to humans are described, the complainant is advised to contact his or her health care provider or Oregon Poison Control Center at 800-222-1222. When adverse health effects to domestic animals are reported, the complainant is advised to contact his or her veterinarian or the local animal emergency clinic. Contact information for animal health care provider is collected if available.
- 4. The complainant is provided the ODA Pesticide Complaint Form. The complainant is requested to complete and submit the form to the Department (see Investigator Notebook Appendix for example; editable pdf version available on Investigator Wiki).
- The investigative process and ODA Pesticides Program regulatory authority is explained in the ODA Pesticide Investigator Notebook.
- 6. The complainant is provided ODA contact information (phone number and email) and a time to meet with the complainant is requested. The complainant is informed that the ODA contact will serve as the primary point of contact for any questions or information related to the compliance investigation (See Communications Section of Investigator Notebook).
- 7. When adverse health effects to humans, animals, or the environment are alleged (including preapplication concerns), the complainant is informed that their concerns will be referred to PARC. Send an email (PARC@oda.state.or.us) to the PARC Coordinator with the case o-pl, [=:.pl, o0number, complaint form (if completed), and any other available information (e.g., health care provider information, veterinarian contact information).
 - a. When the allegation involves a human death or hospitalization due to pesticide exposure, the PARC Coordinator is notified immediately.
 - b. All other PARC-related complaints are provided to the PARC Coordinator within (1) business day or as soon as possible.
- 8. Lead Investigator is informed of the complaint.
- The Investigator Notebook provides specifics on conducting the investigation and continuing communication with the complainant and other involved parties.
- 10. Complaints that reveal issues related to the regulatory and non-regulatory authority of other state or federal agencies such as OR-OSHA, ODF, DEQ, ODFW, OHA, OSP, US EPA, USFWS, USDA APHIS, and FAA will be evaluated by the Lead Investigator or Program Manager. When appropriate, agency representatives are contacted as soon as possible to determine whether

additional sampling or evidence could be secured while performing complaint site visit and evaluation. It may also be appropriate to conduct a joint investigation with the following relevant agencies:

- OR-OSHA Any workplace pesticide exposure injury. OR-OSHA has protocols that its
 employees must follow for their investigations. This includes not contacting employers prior
 to a site visit. ODA will contact and coordinate any follow-up or joint site visits with OROSHA staff
- ODF State and private forestland pesticide incidents can fall within the Oregon Forest Practices Act. ODA will contact and coordinate any follow-up or joint site visits with ODF staff
- DEQ Allegations of adverse impacts to the environment, air, soil, or water quality issues
 can involve DEQ. ODA will contact and coordinate any follow- up or joint site visits with
 DEQ staff.
- ODFW Incidents involving fish and wildlife or damage to habitat may involve ODFW.
 ODA will contact and coordinate any follow-up or joint site visits with ODFW staff.
- US EPA If the incident meets Significant Case criteria as defined in the US EPA/ODA
 Cooperative Agreement, the Lead Investigator will coordinate with USEPA Region 10 staff
 any follow-up or joint site visits.
- 11. All requests from media or other parties not directly involved in the investigation are directed to the Program Manager or Lead Investigator. Program Manager and Lead Investigator will coordinate responses with ODA Director of Communications and other agency representatives.
- 12. The Case Reviewer/Enforcement staff emails a copy of the case report to the PARC Coordinator when "Refer to PARC?" is checked "Yes" on the Overview Tab and the case is completed or an enforcement action is issued. In addition, a notice of case completion or actions taken are issued to parties involved when the case is completed.

IV. Reference Information

(Reference to documents identified within this SOP are maintained by ODA Pesticides Program and available upon request.)

- 1. ODA Pesticide Investigator Notebook
- 2. ODA Pesticide Complaint Form
- 3. Notice of Case Completion or Actions Taken
- 4. US EPA/ODA Cooperative Agreement
- 5. Pesticide Use Data Request (ODA, ODF, OHA)

Appendix 8 - Oregon Department of Fish and Wildlife Standard Operating Procedures for Pesticide-Related Incidents



Oregon Department of Fish and Wildlife Standard Operating Procedures for Pesticide-Related Incidents

Prepared by: Danette Faucera, Water Policy Coordinator 11/20/14 Version 1.0

b. Introduction

The Oregon Department of Fish and Wildlife's (ODFW) mission is to protect and enhance Oregon's fish and wildlife and their habitats for use and enjoyment by present and future generations. One means of implementing ODFW's mission involves coordinating with other State and federal agencies, including the Pesticide Analytical and Response Center (PARC), on pesticide-related incidents involving a suspected fish or wildlife poisoning or a spill that affects fish and wildlife and/or their habitat. Pesticide incidents may involve referrals from PARC or other entities, require notification to PARC and/or the Oregon Emergency Response System (OERS), and may involve concurrent investigations with PARC member agencies and/or the federal government.

In order to facilitate the timely transfer of incident information specifically between PARC and its member agencies, each member agency has developed Standard Operating Procedures (SOPs) as a supplement to the statewide document "Coordinating Oregon's Response to Pesticide Incidents." The individual SOPs outline the statutory authority, pesticide-related jurisdiction(s), areas of expertise, and investigative procedures for each member agency.

II. Purpose

The purpose of this document is to establish uniform procedures to make pesticide-related incident referrals (e.g., notifications to PARC and/or OERS) and to describe ODFW's actions following notification of a pesticide-related incident involving a suspected fish or wildlife poisoning or a spill that affects fish and wildlife and/or their habitat.

These procedures will guide ODFW staff in the response and investigation of natural resource losses or destruction and injury of fish, wildlife, and their habitat specifically related to pesticide incidents.

Note: ODFW intends to use this document as a supplement to ODFW's "Draft Natural Resource Losses Response, Investigation, and Wildlife Rehabilitation Procedures Manual" (May 2013), which provides a more detailed procedure, investigation forms, and instructions. Applicable ODFW staff will be provided with this document and offered further guidance from the Water Policy Coordinator or Habitat Resources Program Manager in Headquarters, as needed (see Contact Information, Attachment A).

II. Scope

These procedures apply to pesticide incidents that cause injury, death, contamination, or destruction of fish or other wildlife or injury or destruction of fish or wildlife habitat or from any violation of the conditions set forth in any permit, order, or rule of the Environmental Quality Commission that cause injury, death, contamination, or destruction to fish, wildlife, or their habitat. Specific responsibilities of ODFW personnel for incidents occurring in estuaries and the Pacific Ocean are outlined in "Protocol and Organizational Structure for Oil and Hazardous Spills in Marine and Estuarine Waters", ODFW Marine

Region, December 1992. More detailed information on ODFW's role in pollution or hazardous material incidents can be found in the "Draft Natural Resource Losses Response, Investigation, and Wildlife Rehabilitation Procedures Manual", ODFW, May 2013. ODFW will use the procedures described in these manuals to the extent practical given available personnel, resources, and technical and safety considerations specific to each incident.

ODFW will review and update these procedures as needed.

III. Standard Operating Procedures

ODFW's policy to investigate natural resource losses is governed by OAR 635-410 (Natural Resource Losses), with further jurisdiction to seek compensation for damages provided under ORS 468B.060 (Liability for Damage to Fish or Wildlife or Habitat) and the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). ODFW will implement OAR 635-410-0015 during the field investigation of the natural resource loss in order to:

- 1. Analyze and determine the cause(s) of losses;
- 2. Promptly respond to and mitigate losses;
- 3. Determine habitat or fish and wildlife management measures that may be required to restore fish and wildlife production in affected areas;
- 4. Determine violations of statute, rule or permits; and
- 5. Inform Department staff, other agencies, the general public and news media on the extent, nature, and causes of natural resource losses.

To implement the policies and procedures, ODFW will perform the following steps upon discovering or receiving a report of a suspected pesticide-related incident from the public or other entity (including PARC):

Step 1. Document Initial Information

ODFW shall be notified by PARC as soon as practical, within one business day, of any suspected pesticide-related poisoning of fish or wildlife or impact to habitat. Staff will document incoming information on ODFW's Initial Report Form (Appendix B).

If ODFW discovers a pesticide-related incident or is notified of such by another source, staff will first document available information on the Initial Report Form.

Step 2. Notify Response Agencies

ODFW staff receiving an initial report will notify other appropriate ODFW staff, the State of Oregon Emergency Response System (OERS), and PARC, as applicable. Staff will share information recorded on the Initial Report Form (Appendix B).

ODFW will:

- Immediately report **pesticide spills** to OERS at 1-800-452-0311.
- Notify the PARC Coordinator at (503) 986-6470, (844) 688-7272, or <u>PARC@oda.state.or.us</u> within one business day of any **non-spill incident related to pesticides** (e.g., label violations, drift resulting in injury, non-target impacts, etc.) that are alleged to have had an impact on human and/or animal health or the environment (air, soil, or water).
- Notify the District Biologist, Watershed/Region Manager, and Natural Resources Damage Assessment (NRDA) Coordinator of pesticide-related incidents involving a suspected fish or wildlife poisoning or a spill that affects fish and wildlife and/or their habitat.

Step 3. Respond

When notified of a suspected fish or wildlife pesticide poisoning or spill that affects fish and wildlife and/or their habitat, ODFW District Biologists will confer with their Region or Watershed Manager and make a decision if an initial response per OAR 635-410-005 (Natural Resource Losses) is warranted based on available information. ODFW will base the response decision on suspected cause, species impacted, and extent of damage to fish and wildlife and their habitat (Table 1) and may respond with either an on-site assessment or technical advice. Response outside of normal business hours may be delayed as a call down list is initiated to contact appropriate field staff.

Initial response consists of emergency actions taken by agencies to gain control of the situation and to protect the public and the environment. ODFW's role in the initial response phase is to minimize impacts to fish and wildlife and their habitat. ODFW may assist in identifying potential fish and wildlife receptors, habitats, and resources that are at risk, assess extent of damage to the resource(s), collect specimens and samples, and identify laboratories for analysis. ODFW staff are not first responders, but select District staff have required basic training under Federal OSHA law 29 CFR 1910.120 (Hazardous Waste Operations and Emergency Response) and can assist with an investigation after a site is stabilized and declared safe to enter. Each District is equipped with a "Natural Resource Losses Investigation Kit," which is supplied with basic equipment for collection of specimens/samples and damage assessment. ODFW will collect fish, aquatic organisms, and wildlife (depending on the severity of the incident), but generally relies on the Department of Environmental Quality or the Department of Agriculture to take water quality, vegetation, and soil samples during a coordinated investigation because ODFW staff do not have adequate expertise or advanced equipment to do so. Advanced procedures pertaining to an investigation can be found in the "Draft Natural Resource Losses Response, Investigation, and Wildlife Rehabilitation Procedures Manual".

ODFW will:

- Determine if an on-site response is warranted per OAR 635-410-005 (Natural Resource Losses).
- Coordinate ODFW's initial field actions, when applicable, with incident command and/or other
 response agencies. Avoid entering contaminated areas, refrain from any investigation or wildlife
 rescue, work within potentially contaminated areas or work with potentially contaminated
 material or wildlife until incident command or a HAZMAT specialist from an emergency
 response agency has determined the identity of any hazardous materials, identified appropriate
 safety requirements, and authorized entry.
- Not enter potentially contaminated areas that require the use of respirators.
- Wear appropriate protective clothing and observe all other safety requirements prescribed by
 incident command and/or a HAZMAT specialist from an emergency response agency when
 working in potentially contaminated areas or working with potentially contaminated material or
 wildlife
- Perform initial reconnaissance to determine the severity of impacts to fish, wildlife and their habitat (Table 1).
- Advise incident command, if established, of initial response measures to protect fish, wildlife and their habitat.
- Coordinate any required wildlife rehabilitation response.
- Keep accurate records of ODFW initial response activities (see Natural Resource Losses Investigation Report Form, Appendix C) and expenses.
- Coordinate with PARC, other applicable state and federal agencies, and the public throughout an investigation, as appropriate.

Step 4. Assess Damage

Damage assessment is the process of documenting and evaluating data from field investigations and other sources to determine injury to natural resources. ODFW is the lead state agency for damage assessment for fish and wildlife and their habitat. ODFW works with the federal fish and wildlife agencies, neighboring fish and game agencies, other trustees, and the potentially responsible party (PRP) in making a quantitative determination of the injury to fish and wildlife resources and in the determination of appropriate restoration measures.

ODFW typically undertakes the field investigation for damage assessment for smaller incidents using procedures outlined in this manual. For larger incidents, ODFW, together with the federal fish and wildlife agencies, may request that the PRP provide consultants and any other resources needed to conduct the field investigation according to a recommended plan of study.

ODFW will:

- Conduct a field investigation, if warranted, for damage assessment (Table 2; also see "Draft Natural Resource Losses Response, Investigation and Wildlife Rehabilitation Procedures Manual" for more detailed information on survey protocol).
- Count or collect samples (primarily dead, dying, or injured fish, aquatic organisms, and wildlife, but may also include water, vegetation, and soil).
- Ensure the proper care, custody and analysis of samples taken for evidence.
- Keep accurate records of ODFW field investigation data and expenses.
- Coordinate with PARC, other applicable state and federal agencies, and the public throughout an investigation.

Step 5. Follow Up

ODFW Administrative Rules for natural resource losses outline the basis for determining the monetary value of fish and wildlife destroyed or injured by a pollution incident (OAR 635-410-0030). The rules also provide the basis for determining appropriate restoration measures as well as administrative procedures for recovery of damages from the PRP and implementation of the restoration plan. As allowed under ORS 468B.060 (Liability for Damage to Fish or Wildlife or Habitat) and the Comprehensive Environmental Response, Compensation and Liability Act of 1980, ODFW may bring legal action, in coordination with the Attorney General, to recover the value of fish and wildlife injured or killed as the result of pollution or violation of the condition of any permit, and for all costs of restoring fish and wildlife production in affected areas, including habitat restoration.

ODFW will:

- Assist in the Damage Recovery Process described in OAR 635-410-0035 to recover the value of the loss and to restore wildlife productivity, when applicable.
- Provide investigation forms and reports to PARC as they become available and/or at the
 conclusion of an investigation and to other interested parties as requested.

Table 1. Information assessed by ODFW during an initial response to a pesticide-related incident to determine the severity of an incident.

	Level 1	Level 2	Level 3
# of Affected Fish and	Few	Many	Numerous and/or affects to long-term
Wildlife			productivity
Sensitive, Threatened,	No	Potential	Yes
or Endangered Species			
Critical Habitat	No	Potential	Yes
Geographical Area	Small (<	Local but	Extensive
Impacted	1/8 mile)	significant	
Value of Habitat to	Low	Important	High value for maintaining abundance or
Fish and Wildlife			diversity
Longevity of Impact	No lasting	Short term	Long lasting, may require restoration
	damage		
Suspected Violation	No	Yes	Major violation or release of hazardous
			materials
Equipment/Staff	Region	Assistance	Large number of staff needed, specialized
Needs		needed	training and equipment
Expense to Agency	Low	Moderate	Efforts to investigate, rehabilitate wildlife
		staff time	obtain compensation, and restore habitat result
			in much expense and major demands on
			staff time
Public/Media Interest	Low	Potential	High

Table 2. Investigative procedures performed by ODFW during an investigation of a pesticide-related incident.

·	Level 1	Level 2 and 3
Initial Report	Yes	Yes
Form		
Investigation	Pages 1-2	Yes
Form		
Safety Clearance	As needed	Obtain permission to investigate only after the area is
		deemed safe to enter
State	Contact PARC	Region, HQ (request assistance), PARC, other responding
Coordination		agencies
Federal	As needed	USFWS and/or NOAA (federally-protected species such as
Coordination		migratory birds or threatened or endangered species)
Describe Habitat	Yes	Quantitative estimates of habitat loss by type
Damage		
Estimate Injury	Count dead and	Estimate number of dead or injured fish and wildlife by
	injured fish and	species
	wildlife by species	
Collect Samples	No	Collect samples of dead fish and aquatic organisms and
		wildlife as evidence (initiate chain of custody); collect
		samples of soil, water, and vegetation if appropriate agency experts are not available (initiate chain of custody)
		experts are not available (initiate chain of custody)

Attachment A - ODFW Contact Information

Oregon Department of Fish and Wildlife 4034 Fairview Industrial Drive SE Salem, OR 97302 (503) 947-6000 http://www.dfw.state.or.us/

General Pesticide Issues: Danette Faucera, Water Policy Coordinator (503) 947-6092

Spills:

Jon Germond, Habitat Resources Program Manager and OERS Contact (with 24-hr pager) (503) 947-6088

For local assistance during normal business hours, contact the closest ODFW field office: http://www.dfw.state.or.us/agency/directory/local_offices.asp

Attachment B - Oregon Department of Fish and Wildlife Hazardous Materials Release Initial Report Form

I.	Obtain Preliminary Information:									
	Reported By:									
	Address:									
	Affiliation:									
	Phone:Date of Report:Time: (Month Day Year) AM or PM									
	Other Agencies Contacted/on Scene:									
	Local Responders:									
	DEQ:									
	State Police:									
	Tribes:									
	DOI:									
	Other:									
II.	Get Information About HAZMAT Release:									
l	Name of Responsible Party:									
	Address:									
	Affiliation:									
	Phone:									
	Date of Release: Time: AM or PM									

	gon Department of Fish and Wildlife Hazardous Materiantinued)	als Release Initial l	Report Foi	rm						
III.	Name of Water Body or Other Affected Areas:									
	Location of Release:									
	River mile, highway, milepost, township, range, section) Cou	inty:								
	2) Release source or potentially responsible party:									
	Materials involved (description and volume):									
	3) Species of fish and/or wildlife affected and extent of da	ımage:								
IV.	Notifications									
	Have the following been notified?									
	Local Emergency Response Organization (911)	YES	NO	TIME						
	(OERS) 1-800-452-0311									
	ODFW Wildlife Division									
	Regional Office									
	Watershed District									
	ODFW Office of Information & Education									
V.	Prepared By:	Title:								
	Office:									
	Note: Send copy of this information to Headquarters Wild	life in Salem.								

Attachment C - Oregon Department of Fish & Wildlife Natural Resources Losses Investigation Report Form A) Loss Reported by:_____ Street:_____City:_____Zip:_____ _____ Time:_____ Phone:_____ Mobile:_____ Date:__ B) Name of Water Body or Locality:___ River Mile (RM):______ Township:_____ Range:_____ ¼ Section:_____ _____ County:____ Time and Date Loss First Observed:____ Time and Date of Investigation:___ Duration of Loss: From Time: ______ Date: _____ _____ Date:_____ F) Extent of the Loss:____ Stream Miles or Acreage:_______ (RM_______ to RM_____) G) Species of Fish/or Wildlife Affected:____ Condition of fish/or wildlife: (Check one or more) Recently Dead Dead greater than 24 hours Distressed Dying I) Physical Appearance of Dead Fish:___ Signs of Distressed Fish and Wildlife: J) K) Water Conditions: Temp. (Degrees F)_____ Flow: (CFS)____ Acre Feet: (AF)_____ Clarity or other Appearance: Suspected cause of Loss:_____ M) Identity of Potentially Responsible Party:____ _____ City:_____ Zip:____

Mobile:

Street:

Phone:_

N)	Pollution Source:
O)	Identity and Volume of the Pollutant:
P)	Map of the Affected Area: (sketch below) Attach photos or other geographic media.

Q) Water Sample Data (show location on map, line 16).

Bottle Number	Date	Time	DO	pН	Temp. F/C	Other Data
		atel I	llate lime	Hata Lima Lift	Data Time DO nH	

¹ Bottle numbers of quart Mason jars provided with the Natural Resources Loss Investigation Kit are engraved under the red mesh.

R) Biological, Sediment, Soil or Vegetation Sample Data (show location on map, line 16).

Location	Container Number	Date	Time	Species	Other Data

S) Fish and/or Wildlife Kill Transect Data (show transect location on map, line 16).

Transect Number	Fish or Wildlife Counted	Width	Length	Surface Area	PM or Land Mark
Total					

Species/Life Stage	Number Counted	Number of Total Counted	Estimated Number Killed
Other Comments:			
Recommendations for	r Restoration:		
repared by: Investigator			
_			
ate:	Title:		

Appendix 9 - Oregon Poison Center Pesticide Analytical Response Center Standard Operating Procedure Relating to Pesticide Exposures

(Revised November 2016)

I. Introduction

The Oregon Poison Center (OPC) is the designated accredited regional poison center serving the state of Oregon. The OPC is a comprehensive toxicology resource, established by the Oregon State Legislature in 1978. The roles and responsibilities of the OPC established in this legislation include:

- 1. Emergency telephone management and treatment referral of victims of poisoning and overdose incidents:
- 2. Information to health professionals involved in management of poisoning and overdose victims;
- 3. Community education programs designed to inform the public of poison prevention methods.

The OPC is accredited by the American Association of Poison Centers (AAPCC) and operates according to these national accreditation standards. Accreditation standards define criteria related to: access and services provided by the poison center, professional expertise of staff, data collection, patient management guidelines, emergency planning and preparedness and ongoing quality review. The OPC is staffed by Registered Nurses with advanced training in toxicology and Emergency Medicine Physicians who are board certified Medical Toxicologists.

The OPC provides emergency assistance to the public, calling regarding potential exposures to poisoning and toxic substances, and as well as emergency responders and health care providers seeking consultation regarding management and treatment assistance for patients experiencing and toxic exposure. Referrals to the OPC are facilitated through a national emergency number 1 (800) 222-1222. Calls to this number are routed directly to the regional poison center serving the caller's location.

In addition to provision of emergency medical assistance for individuals experiencing a poisoning or toxic exposure, the Poison Center is a training site for health care providers and students of many disciplines. The poison center also provides community outreach education regarding poisoning and toxicology.

II. Purpose

The purpose of this document is to describe the Oregon Poison Center's role in pesticide exposure management, standard operating procedures for managing pesticide exposure cases and procedures related to the referral of incidents to PARC agencies and receipt of referrals from PARC agencies.

III. Standard Operating Procedure

Pesticide Exposures:

The OPC manages over 42,000 calls annually from throughout Oregon regarding poisoning and toxic exposures to a wide variety of substances including pesticides, pharmaceuticals, envenomations, industrial chemicals, plants and household products.

The poison center utilizes standard operating procedures for assessment and management of all exposure cases. The OPC staff collects detailed substance exposure data on each case, but utilizes careful assessment and evaluation to determine the significance of that particular exposure to the actual medical condition of the patient. As a result, OPC data reflect large numbers of potential exposures to substances with varying levels of causality.

Upon receipt of a call to the poison center, the RN or Pharmacist specialist conducts an assessment of patient condition, circumstances of exposure, substance of exposure as well as a patient health history. The RN/Pharmacists work collaboratively with the medical staff of the poison center to determine a risk assessment and to develop a treatment plan. The OPC staff has access to an extensive variety of resources and data bases to assist in identification of product ingredients contained in the multitude of substances implicated in cases referred to the poison center. Many exposures can be safely managed at home, with the OPC staff providing ongoing instructions for home care and conducting a series of follow-up calls to ensure the patient is responding well to treatment and no additional problems arise. More complex cases are referred to a health care facility for additional assessment and treatment. In these cases, the OPC staff contact the receiving facility to let them know of the patient referral and to provide treatment recommendations to the health care provider. The OPC continues to monitor these patients while in the hospital to provide ongoing assessment and treatment guidance to the health care team. The role of the OPC is not a regulatory one, but to provide medical guidance and recommendations for effective patient treatment. The OPC activities and records are confidential and protected by the provisions of the Federal Health Information Portability and Accountability Act.

The OPC generates an electronic medical record for each call. Specific data elements are collected, including substance, time and site of exposure, clinical effects, therapies, treatment site and ongoing patient assessment and treatment criteria. De-identified data from the patient record is electronically transmitted in real-time to the National Poison Data System (NPDS). NPDS is utilized for National Toxicosurveillance by Centers for Disease Control to identify and track potential sentinel events representing potential public health concerns.

IV. Referrals to PARC

To assist in meeting the requirements of ORS 413.042, 433.004 & 433.006 (that pesticide poisonings diagnosed or suspected by a healthcare provider be reported to local or state public health authorities), the OPC reports significant symptomatic pesticide exposures to the Pesticide Exposure Safety & Tracking (PEST) program staff of the Oregon Health Authority. Symptomatic pesticide exposure case records are faxed to PEST at the time the case record is closed and complete. PEST staff evaluates each case to determine whether it meets criteria for follow-up. Contact information for those cases which meet criteria for follow-up and in which the patient/guardian has given permission, is provided to PARC for review.

In addition to the process described above for routine referrals to PARC, there may be isolated instances in which the OPC staff may consult with PARC and member agencies. These rare, isolated instances would be in the event additional information is needed regarding the circumstances or substances of exposure for the purpose of effectively managing the patient's medical condition.

V. Referrals from PARC/Member Agencies

PARC/ Member agencies can refer pesticide exposure cases (patients and/or treating health care providers) requiring medical assistance, directly to the Oregon Poison Center 24/7 through the national poison center emergency number at 1-800-222-1222. These referrals may be a direct referral of the patient/exposed individual as well as health care providers seeking assistance in patient management of patient. Once contacted, the OPC will utilize standard procedures to conduct a patient assessment and to provide ongoing assistance in patient management and treatment.

Patient information and medical records are confidential and will not be shared without written consent of the patient. In addition to patient referrals, PARC/ Member agencies seeking toxicologic information regarding medical effects of pesticides can contact the OPC for information and consultation.

Appendix 10 - Oregon Department of Transportation Pesticide-Related Incident Referral Procedures

(Reviewed October 2018)

Purpose

To provide guidance to the Oregon Department of Transportation to ensure proper internal communication occurs in order to appropriately refer pesticide-related incidents to the Pesticide Analytical and Response Center (PARC). Also, to ensure proper internal coordination occurs when pesticide-related incidents are referred to the Department from PARC.

Background

The Department may receive pesticide-related concerns directly from the public to managers or staff or more formally through AskODOT. Certain pesticide-related concerns are to be referred to Pesticide Analytical and Response Center (PARC) for follow up.

PARC was created by Executive Order in 1978 to ensure timely and formal review and investigation of pesticide-related incidents involving alleged impacts to human health, animal health, and/or the environment. PARC Board members, and affiliated members, and required to refer known incidents to the PARC Coordinator. The Department is affiliated with PARC through a letter of agreement that documents the Department's commitment.

Policy

Pesticide-related incidents provided to the Department that involve alleged impacts to human health, animal health, and/or the environment, shall be referred to the Pesticide Analytical and Response Center (PARC) as appropriate for follow up.

When the Department receives a referral from PARC, appropriate and timely internal investigations will be conducted and all related information will be shared with PARC.

Definitions

PARC: The Pesticide Analytical and Response Center was established by statute (ORS 634.550). PARC's primary function is to collect and analyze information about reported incidents and coordinate necessary investigations. Member agencies conduct most of the investigations and take any necessary enforcement action(s).

ODOT Statewide Integrated Vegetation Management (IVM) Coordinator: Located in the ODOT Maintenance and Operations Branch of the Highway Division, the Statewide IVM Coordinator is responsible for managing and establishing best management practices for pesticide use on Department property. The ODOT Statewide IVM Coordinator represents the Department at PARC meetings.

Responsibility

Action

All employees

Refer all known pesticide-related incidents involving alleged impacts to human health, animal health, and/or the environment to the ODOT Statewide IVM Coordinator.

Report pesticide spills meeting reportable quantity levels to the Oregon Emergency Response System (OERS) at 1-800-452-

Managers and Supervisors

ODOT Statewide Coordinator Communicate this policy to all employees. Monitor and ensure policy compliance.

Notify PARC by email PARC@oda.state.or.us within one IVM business day, or as soon as possible, upon receipt of a pesticide-related incident occurring on Department owned property that is alleged to impact human and/or animal health, or the environment (air, soil, or water).

Ensure accurate and timely information is provided in support of PARC-referred investigations.

Appendix 11 - Oregon Office of the State Fire Marshal Standard Operating Procedures

	COMMUNITY RIGHT TO KNOW UNIT	Number: CR2K-0001 Adoption Date: 11/20/2014 Revision Date:
OSFM Approved:		
		Date
Michael Hoeffner, M	Manager Emergency Response Services Div	rision
SUBJECT: CR2K Re	sponse and Support to Pesticide Incidents	or Referrals.
•	ablish a policy detailing how CR2K suppores PARC of a pesticide incident.	ts and responds to PARC

I. SCOPE

This SOP applies to all CR2K staff and addresses how the CR2K Unit handles notifications from PARC of a pesticide incident and how CR2K will process incident referrals.

II. DEFINITIONS

PARC (Pesticide Analytical and Response Center) -

A governing board consisting of multiple state agencies, including Oregon State Police/Office of State Fire Marshal. Its primary functions are to coordinate pesticide investigations and to collect and analyze information about reported pesticide incidents. See ORS 634.550.

Pesticide Incident -

An alleged or actual case in which a pesticide is involved and one or more of the PARC member agencies are investigating.

Referral -

The initial notification from the PARC to CR2K that a pesticide incident is being investigated or the initial notification from a complainant to CR2K about a possible pesticide incident and is trying to notify the PARC.

III. PURPOSE

To provide a policy by which CR2K will respond to notifications of a pesticide incident, how CR2K responds to a request for information from PARC, and to provide a policy for CR2K to refer information regarding a pesticide incident to PARC.

IV. POLICY

Part A - CR2K Information and Support of Incidents

CR2K will provide information to the PARC in support of investigations a PARC member agency or agencies may be conducting. Releasing information that has been classified as secured will be done so on a case-by-case basis and only with the approval of the CR2K Program Coordinator or an OSFM Manager. The PARC may access our information in any of three ways:

- 1. CR2K On-Line Searchable Databases,
- 2. The CR2K HSIS program,
- 3. Custom Information Requests (Completion of an Information Request Form is required).

For more information regarding accessing CR2K information and what information is available, see the attachment "Instructions for accessing Community Right to Know Information."

For assistance with requesting information, the PARC may contact either or both of the CR2K contact people listed on the PARC Referral Criteria Document.

Part B - Notification from PARC of a Pesticide Incident

When PARC determines that OSFM/CR2K should be notified of an alleged or actual pesticide incident, PARC will either email or call both the CR2K contacts listed on the PARC Referral Criteria document. Based on the information received from PARC, the CR2K Program Coordinator will determine what actions CR2K will take to ensure the facility is in compliance with the CR2K reporting requirements. Actions may include an on-site inspection or a desk audit. The PARC Coordinator will be notified what actions will be taken by CR2K.

Part C - Receiving a Pesticide Complaint from other than PARC

If CR2K receives a complaint or is notified of an alleged or actual pesticide incident from a party other than the PARC, the CR2K staff member will complete the OSFM Pesticide Incident Information Intake form. This form will then be forwarded to the PARC by email or fax.

The caller will be advised that CR2K will notify the PARC of the information and that it is recommended the caller also notifies the PARC directly.

V. ATTACHMENTS

- Community Right to Know Overview
- Instructions for accessing CR2K information
- Pesticide Incident Information Intake form
- CR2K Information Request form

Emergency Response Branch Community Right to Know Program

The Oregon Community Right to Know and Protection Act (CR2K) was passed by the Oregon Legislature in 1985 (ORS 453.307 to ORS 453.520). This law requires facilities with certain quantities of hazardous substances to annually report information about those substances to the Oregon Office of State Fire Marshal (OSFM), using the Oregon Hazardous Substance Information Survey (HSIS). The intent of the law is to provide emergency responders, pre-planners, and the public with information about hazardous substances in their communities so they may be better informed and prepared should an incident involving hazardous substances occur. This law also requires emergency responders to report incidents involving the release, or threatened release of hazardous substances to the OSFM.

The information collected on the HSIS includes the name of substance, the hazardous ingredient, the amounts stored at the facility, the type of container it is stored in, its temperature and pressure, health hazards associated with the substance, and if it contains an Extremely Hazardous Substance (EHS) as defined by the Federal Environmental Protection Agency.

The CR2K program takes steps to validate the information reported and then disseminates it to the Oregon Regional Hazardous Materials Response teams, each Oregon fire department, and other first responder agencies in Oregon, emergency managers, and health professionals. The information is also provided to the public and others when requested.

Office of State Fire Marshal 4760 Portland Road NE Salem, Oregon 97305 503-934-8249

Released October 2011 v.3

Appendix 12 – Oregon Health Authority/Pesticide Exposure Safety & Tracking (PEST) Program's Standard Operating Procedures Relating to the Pesticide Analytical and Response Center (PARC)

I. Introduction/Purpose

OHA's PEST program collections information about reports of human acute pesticide illness and injury (APII). It seeks to understand the connection between reported health effects, the nature of the exposure, and the toxicology of pesticide products (if known) for individual reports of pesticide exposure. This allows PEST to assess, based on available evidence, how APII is (and is not) impacting the health of Oregonians. This is a population-based evaluation using nationally-accepted criteria from the CDC's SENSOR-Pesticides program, not a medical evaluation of individuals.

An OHA team, including a physician/toxicologist, uses <u>SENSOR-Pesticides criteria</u> to classify information gained from individuals reporting APII available medical records and PARC agency case investigations. What results is a Classification Category and Severity Category for each case. On a periodic basis, the Classification Category and Severity Category determined for each PARC case are sent on to the PARC Coordinator.

APII data from Oregon has influenced national pesticide policy-making. From 1997-2013+, OHA has sent (de-identified) cases of APII from Oregon to the SENSOR-Pesticides program and national decision-makers. [See below.] Oregon cases have been included in at least 13 articles in peer-reviewed journals & four issues of MMWR. APII data from Oregon influenced EPA decision-making; specifically, on aluminum phosphide (2013) and paraquat (2016).

Starting with FY 2016 PARC cases, PARC will be able to integrate PEST's two evaluations of human health impacts (Classification Category and Severity Category) in its assessment of Contributing Factors leading to those exposures (as determined by PARC Board). Understanding both human health impacts of pesticide incidents and their causal factors may lead to policymaking in Oregon that takes into account the complexity of human APII.

Please note: This SOP is a "living" document and will be evaluated and changed as needed.

I. Statutory Basis

Authority to Investigate Reportable Disease & Significant Health Conditions
 Specific administrative rules (OAR 333-019-0000) under Oregon statute (ORS 413.042, 431.110, 433.004, 437.010, 616.010 & 624.005) allow the Oregon Health Authority to investigate reportable diseases, including APII. In addition, OAR 333-019-0005 allows the Authority conduct to special studies concerning the causes and prevention of diseases and other significant health conditions.

By statute (ORS 413.042, 433.004 & 433.006), healthcare providers in Oregon shall report cases of pesticide poisonings, whether diagnosed or "suspected," to OHA (preferred) or the local public health department (LHD) in the patient's county of residence. All individuals with suspected or confirmed pesticide poisoning must be reported within 24-hours (including weekends and holidays) of identification. All related medical records, including the individual's contact information, should be faxed to either the Perogram at Oregon Health Authority at 971-673-0979, or the Local public health department (pdf).

By statute (ORS 431.110, 431.120, 433.004, 437.010, 616.010 & 624.005), when a local public health department (LHD) receives such reports, it shall notify OHA immediately. LHD staff

should fax the reports to the PEST Program at OHA at 971-673-0979.

PARC to Collect & Utilize OHA's Case Classification

The 2015 Legislature added two sections to the PARC statute (ORS 634.550) that require PARC to both "...coordinate the receipt of, and response to, pesticide-related complaints indicating possible health or environmental effects..." and "...report biennially to the Legislative Assembly... regarding activities during the reporting period by the board and by public entities represented."

OHA's determination of Classification Category and Severity Category for PARC cases using SENSOR Pesticides criteria are the OHA's "activities" to be reported to the Legislature as part of PARC Legislative Reports.

Standard Operating Procedures

OHA's Case & Investigation Criteria

OHA's case criteria for an APII are those pesticide incidents in which a person reports:

- One dermal symptom, or;
- One ocular symptom, or;
- Two systemic symptoms (nausea, headache, etc.) or;
- A referral from PARC.

OHA initiates an investigation of those incidents meeting the case criteria and that are in at least one of the following categories:

- Involve a death, or;
- Has healthcare provider (HCP) involvement, or;
- Is a report of work-related APII, or;
- Involves two or more people, or;
- Is a referral from PARC.

The PEST Program is passive, population-based tracking program that is set up to detect and bring forward to PARC, as appropriate, reported cases of APII in Oregon. Within those parameters, it conducts follow-up on five prioritized subsets (described above) of pesticide poisoning cases reported to OHA. PEST does not conduct field investigations nor does it operate in a regulatory capacity.

The criteria above have been in place since 2006 and have been found to allow for an accurate characterization of the burden of APII in Oregon, as reported to OHA and confirmed under nationally-used criteria for APII from Sentinel Event Notification System for Occupational Risk (SENSOR) Program at the Centers for Disease Control & Prevention. The PEST Program at OHA strives to conduct follow-up on reports of APII that meet case criteria according to the schedule in the "Procedures (with Timelines & Rationale)" section below:

Procedures (with Timelines & Rationale)

This section is designed to detail the PEST Program steps that are followed for two different types of

 $^{^{1}\} Oregon\ Laws\ 2015, p.\ 9- \underline{https://www.oregonlegislature.gov/bills_laws/lawsstatutes/2015orLaw0833.pdf}$

referral: incidents of reported APII that referred to PEST by PARC as well as the converse, incidents of reported APII that are referred to PARC by PEST. See Attachment 3 (PEST Contact Information) for PEST's current point of contact.

General Rationale for the PEST Program Making Contact with Reporters of APII By design, the PEST Program staff make contact with reporters of APII occurs <u>after</u> the emergent phase of a reported APII has passed. Reporters of APII (or their parent/guardian) often want to resume their "regular" lives after such an experience.

Yet they may not realize that, in addition to the effects that it may have on their health, aspects of their reported APII may fall into the regulatory or topical purview of one or more PARC agencies. Agency attention to the circumstances of the reported APII may result in findings that agency rules were violated. Moreover, such reporters may not realize the role their reported APII can play in shaping pesticide policy in Oregon as well as on the national level.

So that reporters of APII in Oregon know of these opportunities, the PEST Program's standard procedure is to phone them at the phone number(s) of record on two separate occasions leaving messages as needed. Because APII reporters may just want to get back to their "regular" lives, they may not return such calls. Out of respect for the individual's privacy, PEST does not make a third call if either of the first two is unrequited.

Note: If OHA staff are in contact with individuals who believe they need immediate medical attention, staff will direct such contacts to the Oregon Poison Center at 800-222-1222

PEST's Source of Incident	Timeline for Contact with Individual Reporting Symptom(s) of APII	Rationale & Context	Permission to Refer to Parc
Direct report to OHA by individual reporting exposure with HCP involvement.	As soon as possible (but within 3 business days of receipt), PEST will contact, by phone, the individual reporting exposure. If call is not returned, PEST will call again within 5 more business days, leaving messages as needed.	The involvement of an HCP can indicate a high-severity APII and/or infringement of pesticide regulations not known to PARC agencies, so these are prioritized for follow-up.	Individual accounts of APII that are directly reported to OHA are referred to PARC only if permission to do so is given to PEST by that individual (or a parent/guardian). Such permission is needed under confidentiality regulations in Oregon's statutes.
Oregon Poison Center (OPC) faxes with HCP involvement.	As soon as possible but within 3 business days of receipt), PEST will request medical records (MR) from the clinician of record to gain contact information for the individual reporting the exposure. After receiving medical record (MR), PEST will contact, by phone, the individual reporting exposure as soon as possible. If call is not returned, PEST will call again within 5 business days, leaving messages as needed.	As their purpose is to record an emergency, OPC faxes with HCP involvement do not contain the patient/reporter's contact information. Extra time is needed so that PEST can: A) gain MR from HCP that includes patient's contact information; and (B) make contact with that individual. HCP-involvement can indicate a high-severity APII and/or infringement of pesticide regulations not known to PARC agencies, so these are prioritized for follow-up.	Individual accounts of APII that are directly reported to OHA are referred to PARC only if permission to do so is given to PEST by that individual (or a parent/guardian). Such permission is needed under confidentiality regulations in state of Oregon and/or federal statutes.
Direct report to PEST from HCP or LHD, per Oregon Reportable Diseases statutes	As soon as possible (but within 3 business days of receipt), PEST will contact by phone the individual reporting exposure. If call is not returned, PEST will call again within 5	The involvement of a HCP can indicate a high-severity APII and/or infringement of pesticide regulations not known to PARC agencies so these are	Individual accounts of APII that are directly reported to OHA are referred to PARC <u>only</u> if permission to do so is given to PEST by that individual (or a parent/guardian). Such

	more business days, leaving messages as needed.	prioritized for follow- up.	permission is needed under confidentiality regulations in state of Oregon and/or federal statutes.
OPC faxes reporting work-related APII or APII involving 2+ individuals not involving a heath care provider.	As soon as possible (but within 5 business days of receipt), PEST will contact, by phone, the individual reporting exposure. If call is not returned, PEST will call again within 5 business days, leaving messages as needed.	Making contact with these cases is also important because of the potential for additional APII if unsafe practices are not addressed by regulatory agencies.	Individual accounts of APII that are directly reported to OHA are referred to PARC only if permission to do so is given to PEST by that individual (or a parent/guardian). Such permission is needed under confidentiality regulations in state of Oregon and/or federal statutes.
Direct call to OHA by individual reporting an APII that is not work-related, doesn't involve a health care provider, nor involves the reported exposures of two or more individuals	As soon as possible (but within 5 business days of receipt), PEST will contact, by phone, the individual reporting exposure. If call is not returned, PEST will call again within 5 business days, leaving messages as needed.	Cases in this category account for less than 1% of the reports of APII that come to PEST's attention.	Individual accounts of APII that are directly reported to OHA are referred to PARC only if permission to do so is given to PEST by that individual (or a parent/guardian). Such permission is needed under confidentiality regulations in state of Oregon and/or federal statutes.
PARC	As soon as possible (but within 5 business days of receipt), PEST will contact, by phone, the individual reporting exposure once and then again within 5 business days, leaving messages as needed.	Information used in OHA's case classification with SENSOR-Pesticide criteria.	Not Applicable

For ALL Incident Sources

If calls to a reporter are not returned to PEST after 20 business days, incident will be coded "<u>No Further Action</u>." (Case will be re-opened should the individual call back or at PARC's request.)

$\underline{Procedures\ for\ OHA\text{-}Instigated\ PARC\ Cases}$

The EP Part A will be sent, by the PARC Coordinator, to the PARC agency investigator via the agency's PARC Board representative (if the agency decides to investigate the PARC referral). The expectation is that the agency investigator will send findings (agency report), which may include missing information, back to PEST via the PARC Coordinator.

Coordinating Oregon's Response to Pesticide Incidents

Part A's are sent to the assigned investigator of the appropriate agency(ies). This alerts PARC regulatory agencies to the incident's basic context, as conveyed to O HA, as well as the APII reporter's contact information so PARC agencies can investigate, if they choose.

OHA focuses its resources on classifying reporting cases of APII, including PARC cases, as discussed above. Consequently, it does not send EP Part A's for PARC-initiated cases as agencies already have information (all non-health-related) needed to start their investigations.

Schedule for Delivery of EP Part A (This is for cases initiated by PEST.)

Type of Deliverable	Type of Incident	Timeline for E-mailing EP to PARC
Reported Exposure Pathway (EP)	Cases with HCP involvement in the form of: 1) An OPC fax; 2) A HCP's direct report to OHA; 3) A direct call to OHA by individual reporting an APII.	Within 3 business days of PEST's discussion with reporter of APII, (with permission to refer to PARC), an EP's sent to the PARC Coordinator. Per PARC & Agency SOPs, the EP is to be sent to the case investigator (if one's to be assigned) by the agency's PARC representative.
	Cases of work-related APII or APII involving 2+ individuals not involving a health care provider	Within 5 business days of PEST's discussion with reporter of APII, (with permission to refer to PARC), an EP's sent to the PARC Coordinator. Per PARC & Agency SOPs, the EP is to be sent to the case investigator (if one's to be assigned) by the agency's PARC representative.

Use of EPs in Classifying PARC Cases

An OHA team, including a physician/toxicologist, uses SENSOR-Pesticides criteria to classify information gained from individuals reporting APII, available medical records, and available PARC agency case investigations.

Use of EPs for Assigning PARC Contributing Factor (CF) Coding

Before the PARC Board is scheduled to assigned Contributing Factor (CF) to a group of PARC cases, the PARC Coordinator sends PEST staff CF sheets with the draft codes thought to be appropriate.

PEST staff review the sheets for each case using appropriate EP's (Part A and Part B for the incident) as well as additional information which may have gained by PARC agencies since investigations commenced. In its reply, PEST adds or subtracts CF's but always gives explanation. If needed, discrepancies are resolved between PEST staff and the PARC Coordinator. Those draft CF sheets are reviewed at a PARC meeting with the Board finalizing assigned CF's to a case by consensus.

Coordinating Oregon's Response to Pesticide Incidents

Additional Pesticide-Related Processes involving OHA

Multi-Person and Multi-Household Pesticide Events

When more than one person is reporting symptoms to the same pesticide release, or if reports of APII are received from multiple households, OHA will email PARC the addresses/locations of the individuals reporting exposure. This will aid in agency investigations, which may include sampling for pesticide residues. OHA will send PARC the EP documents as they become available.

For the Oregon Public Health Division and PEST's standard operation procedure for such incidents, see Attachment 4 (OHA/Oregon Public Health Division's SOP for Reported Multi-Household Pesticide Exposure Events).

Pesticide Use Data Requests

Situations involving pesticide use may require various state agencies, such as Oregon department of Agriculture (ODA) and Oregon Department of Forestry (ODF), through the Pesticide Analytical and Response Center (PARC), to provide assistance in collecting pesticide use data for Oregon Health Authority (OHA) to conduct public health assessments. See Attachment 5 (Pesticide Use Data Request)

Appendix 13 - OHA/Oregon Public Health Division Standard Operating Procedures for Multi-Household Pesticide Exposures

(Updated October 2018)

I. Introduction

The Oregon Health Authority's (OHA) Pesticide Exposure Safety & Tracking (PEST) Program responds to human health concerns related to pesticide exposure in Oregon. The multi-householdpesticide exposure standard operating procedure (SOP) is followed when a report of human acute pesticide illness and injury (APII) meets all the following criteria:

- 1) A specific incident,
- 2) of a known or suspected pesticide being applied/spilled/released,
- involving people from more than one household reporting symptoms attributed to that same incident.

These criteria ensure efficient use of the Public Health Division's resources. The Public Health Division does not have the capacity to conduct medical assessment or treatment of individuals, nor to engage in pesticide sampling of people or the environment. For symptoms reported as non-pesticidal or unknown substances, PEST staff will refer incidents to the **On-Call Public Health Emergency Preparedness Duty Officer:** 971-246-1789 (cell), DEQ Duty Officer: 503-229-5263, Public Health Tox Call or other resources as appropriate.

II. Initial investigation

The timeliness of completing the investigation for a multi-household SOP is critical, as additional coordination occurs for such incidents. Upon learning of a multi-household incident, PEST investigators will attempt to confirm if the incident meets the above criteria as soon as possible. Information to confirm a multi-household incident may include:

- 1) Interviews with affected individuals or households (following the standard PEST SOP process);
- 2) Information from Pesticide Analytical & Response Center (PARC) member agencies (i.e., Oregon Department of Agriculture (ODA), Oregon Department of Fish and Wildlife (ODF&W), Oregon Department of Environmental Quality (DEQ), Oregon Department of Forestry (ODF), Oregon Occupational Safety and Health Administration (OR OSHA), Office of the State Fire Marshal (SFM), Oregon Poison Center (OPC)) or other State government agencies such as the Office of Emergency Management (OEM, which produces OERS reports);
- 3) Reports from local governments;
- 4) Medical records.

III. Incident notification

After confirmation of two or more cases demonstrates a multi-household exposure incident has occurred, PEST staff will develop an initial situation report to quickly communicate to public health leadership. This initial situation report will include the following preliminary information (as available and appropriate):

- The location of treated site (field, forestry parcel, building, etc.) that may be the source of the exposure;
- 2) Preliminary information on the exposed parties;
- 3) Preliminary identification of the pesticide(s) involved based on application record;
- 4) Any immediate public health concerns.

PEST will communication this information to the following audiences, as soon as practical:

- Initial internal communication to section management; additional audiences may include center management, Oregon State Health Officer and deputies, Public Health Director, Public Health Division (PHD) Communications, Preparedness Surveillance and Epidemiology Team, Health Security Preparedness and Response and the PHD Policy and Partnerships Unit so as to engage the local public health authority (LPHA);
- 2) The appropriate LPHA(s).

IV. Ongoing incident investigation and communications Ongoing investigation

After confirmation of a multi-household exposure and completion of initial communications activities, PEST staff will continue investigating cases as they arise. Investigations for individuals involved in a reported multi-household exposure proceed according to the standard PEST SOP, except that the interview may be modified to collect information specific to the incident. In order to inform this tailored data collection effort, PEST may consult with OPC or OHA toxicologists, PSET or other expert resources.

The larger caseload sometimes resulting from multi-household exposures may result in recruiting assistance from within OHA of additional staff members to assist in the investigation. This may include providing guidance about the reported pesticide or assisting with interviews or medical records requests. A large caseload may also warrant development of screening tools (such as with SurveyMonkey) and interview tools adapted for staff members who might need more guidance if investigating PEST cases is outside their normal role.

Referrals of individuals to PARC (for cases not yet known to PARC) follows the standard PEST SOP whereby PEST obtains permission for sharing information from each household or individual interviewed. If permission is granted, exposure but not health information is shared as in the standard SOP.

Ongoing communications

PEST will coordinate with other state agencies and LPHA as appropriate to communicate with local providers, media, and the public. For example, some counties might use or distribute PEST informational resources to providers and the public, while other counties might prefer that PEST communicate with local providers directly. After completion of the initial incident notification and as the ongoing investigation yields more information, a more robust communications plan will be developed. Communications materials targeted to different audiences will be developed.

LPHA

- Provide information about the option of gaining pesticide use information. PARC will provide, upon request and within 24 hours, pesticide application information relevant for medical treatment for those reporting APII. This is done by the healthcare providers submitting a Pesticide Poisoning Case Report form, available at http://www.oregon.gov/ODA/shared/Documents/Publications/PesticidesPARC/HCPRequestFormPARC.pdf, to the PARC Coordinator at parc-hcprequest@oda.state.or.us.
- Provide description of acute symptoms. PEST will make available symptoms associated with
 exposure to the reported active ingredient(s). Make educational materials available for
 dissemination, including <u>Active Ingredient Fact Sheets</u> from the <u>National Pesticide Information</u>
 Center.
- Provide advice for residents and visitors near the exposure location. Individuals reporting adverse
 health effects related to the pesticide incident are advised to 1) Consult a health care provider or
 call Oregon Poison Center for treatment advice, 2) Report health effects to PARC at 211 3)

- Individuals with questions about chronic or long-term effects of the reported pesticides can contact National Pesticide Information Center (1-800-858-7378 or npic@ace.orst.edu).
- Provide coordination information. Provide appropriate name and contact information for the lead PARC regulatory agency (e.g. Oregon Dept. of Agriculture, Oregon Dept. of Forestry, etc.) for non-medical pesticide questions.
- Facilitate identification of APII. LPHA can help inform local emergency departments and healthcare providers of the incident. This will allow for prompt identification of individuals exposed. Depending on the situation and upon consultation with the LPHA, it may be necessary to use the Health Alert Network or a similar communications platform to reach local emergency departments and healthcare providers about patients presenting with; 1) the known signs and/or symptoms of exposure to the active ingredient(s) of the preliminarily-identified pesticide(s), 2) onset of symptoms after doing activities that could have led to exposure 3) onset of symptoms during or soon after being present at the exposure location.
- Facilitate treatment of APII. LPHA can help inform local emergency departments and healthcare
 providers of medical treatment for exposed patients, based on expertise from OPC and other
 entities.
- Reportable condition reminder. Reminders that suspected or confirmed pesticide poisonings are reportable conditions (within 24 hours) under Oregon law to the PEST Program.

Providers:

- Facilitate identification of APII. Informing local emergency departments and healthcare providers of the incident will allow for prompt identification of individuals exposed. Depending on the situation and upon consultation with the LPHA, it may be necessary to use the Health Alert Network or a similar communications platform to reach local emergency departments and healthcare providers about patients presenting with; 1) the known signs and/or symptoms of exposure to the active ingredient(s) of the preliminarily-identified pesticide(s), 2) onset of symptoms after doing activities that could have led to exposure 3) onset of symptoms during or soon after being present at the exposure location.
- Facilitate treatment of APII. Inform local emergency departments and healthcare providers of
 medical treatment for exposed patients, based on expertise from OPC and other entities.
- Reportable condition reminder. Communications for providers will include reminders that suspected or confirmed pesticide poisonings are reportable conditions (within 24 hours) under Oregon law to the PEST Program.

Public pesticide information resources:

- Coordinate with public pesticide information resources. Notify the <u>National Pesticide</u>
 <u>Information Center, 211</u> and the <u>Oregon Poison Center</u> of the multi-household pesticide exposure to facilitate their education and advice efforts.
- Reportable condition reminder. Communications for OPC providers will include reminders that suspected or confirmed pesticide poisonings are reportable conditions (within 24 hours) under Oregon law to the PEST Program.