

OREGON OSHA PESTICIDE EMPHASIS PROGRAM ANNUAL REPORT Federal Fiscal Year 2014

Willson Dust and Spray Masks



Made of a fine grade of gray rubber. For protecting mouth, nose, throat and lungs from dust and flying particles. Self-adjusting to the face and fits comfortably. All parts easily replaced. Long fiber cotton filters. One in box, with 12 filters, weight 4½ ozs.

- No. 2. Cloth Filter Type, with 12 Filters..Each 3.00
- No. 2F. Extra Filtersper 100 1.50
- No. 3. Sponge TypeEach 3.60
- No. 3S. Extra SpongesEach .30

Willson Rubber Goggles



Airtight rubber mask goggles for protecting the eyes against acids, chemicals, spray compounds and dust. Can be worn with Willson spray mask. Unhardened rubber

frame, glass lenses, replaceable. Packed 12 in a carton. No. X63. Wt. per doz., 1¾ lbs....per Doz. Pair 13.68

Photo: www.pesticidepics.org

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Introduction:

Oregon OSHA and the United States Environmental Protection Agency (EPA), Region 10 Pesticides and Toxics Unit, collaborate on pesticide safety issues. Oregon OSHA enforces the Worker Protection Standard, which is supplemented with a pesticide emphasis program. This report is the annual review of the pesticide emphasis program for federal fiscal year 2014 (FY2014). The data elements and analysis are presented, along with recommendations for program improvements for the coming year.

Data Elements:

The data elements examined in this report are based on Oregon OSHA’s Program Directive A-235, entitled “Local Emphasis Program for Pesticides.” Inspections were completed from a programmed list selected from these North American Industrial Classification System (NAICS) codes which will be referred to as “selected NAICSs” for the purposes of this report.

- NAICS 111998 General farming, field Crops, except Cash Grains, Not Elsewhere Classified
- NAICS 111339 Deciduous Tree Fruits
- NAICS 111421 Nurseries & Tree Production
- NAICS 111422 Floriculture Production
- NAICS 115112 Crop preparation including pesticide spraying

NAICS were selected based on the amount and toxicity of pesticides in use, frequency of pesticide applications, the diversity of crops, and the number of workers employed, and work practices in use. Other NAICSs inspected as a result of complaints, referrals or programmed Agricultural Health inspections are included in this report if the inspection addressed pesticide-related issues.

Data Summary:

Pesticide exposures occur throughout the handling process, from purchase to disposal. The goal of the Pesticide Emphasis Program is to reduce occupational exposures to pesticides in agriculture through enforcing the pesticide-related standards such as the Worker Protection Standard, Hazard Communication, Respiratory Protection, Pesticide Storage, Fumigation, and supervision. Implementation of these requirements can reduce the likelihood of exposures resulting in acute or chronic effects. The Pesticide Emphasis Program continues to be an effective tool for disseminating information, education, compliance assistance and enforcement activities to reduce occupational exposures to pesticides in the agriculture industry.

The following is a brief summary of the findings resulting from the evaluation of FY2014 activity. Please see each section for tables and explanations of each.

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- ◆ **Inspection Activity:** In FY2014, 75 inspections were completed, with 55 inspections resulting in citations, and covering 2682 workers. Citations were issued in 73% of the inspections completed. The Worker Protection Standard (WPS) was applicable in 61 inspections, indicated by Tier 1 and Tier 2 in the table below. WPS Tier 1 inspections accounted for 71% (53/75) of the pesticide emphasis inspections, and 11% (8/75) were Tier 2. For all WPS inspections, 87% (53/61) were classified as Tier 1. Inspections where pesticides have been used within the preceding 30 days plus the restricted entry interval are classified as Tier 1; inspections where pesticides have not been used within the preceding 30 days plus the restricted entry interval are classified as Tier 2.

In the selected NAICS, 51 inspections were completed, and citations were issued in 39 cases, with 80% (41/51) classified as WPS Tier 1 inspections. Of the 75 pesticide emphasis inspections, 19% (14/75) fell outside the scope of the Worker Protection Standard.

Statistics for Completed Inspections by Industry (NAICS), FY2014

Industry (NAICS)		Completed inspections	Citation issued	In compliance	Percent with citation issued	Percent in compliance	WPS Tier 1*	WPS Tier 2*	Pesticide Emphasis, Non-WPS	Employees covered
Selected NAICS	111339	17	12	5	71%	29%	14	1	2	1305
	111421	19	15	4	79%	21%	17	1	1	722
	111422	1	1		100%	0	1			3
	111998	12	10	2	83%	17%	8	3	1	85
	115112	2	1	1	50%	50%	1	1		8
	111219	2	1	1	50%	50%	1	1		13
	111331	3	2	1	66%	34%	2	1		103
	111332	3	3		100%	0	3			26
	111334	5	2	3	40%	60%	4		1	199
	115114	1		1	0	100%			1	2
	115115	3	2	1	0	100%	2		1	84
	238170	1	1		100%	0			1	5
	311421	1	1		100%	0			1	8
	444130	1	1		100%	0			1	4
	444220	1		1	0	100%			1	41
	561422	1	1		100%	0			1	60
	561730	1	1		100%	0			1	2
624190	1	1		100%	0			1	20	
Total		75	55	20	73%	27%	53	8	14	2682

*Inspections where pesticides have been used within the preceding 30 days plus the restricted entry interval are classified as Tier 1.

*Inspections where pesticides have not been used within the preceding 30 days plus the restricted entry interval are classified as Tier 2.

Source: Information Management Division, Oregon Department of Consumer and Business Services, December 2014

Based on the types of inspections listed below, 44 were programmed planned and 36 of these were completed in the selected NAICS. There were 17 complaint inspections with 41% (7/17) receiving citations; of these 71% (5/7) had serious violations. 51% of the complaints were unsubstantiated. There were 10 referrals with 90% (9/10) receiving citations; of these 78% (7/9) had serious violations.

Attempted and completed inspections by inspection type and industry (NAICS), FY2014

	Total	Selected NAICS					Other NAICS
		111339	111421	111422	111998	115112	
Total completed inspections	75	17	19	1	12	2	24
Complaint	17	4	3	1	3	-	6
Referral	10	-	-	-	1	1	8
Follow-up	1	-	-	-	-	1	-
Programmed Planned	44	13	15	-	8	-	8
Programmed Related	1	-	-	-	-	-	1
Un-programmed Related	2	-	1	-	-	-	1
Attempted (triple zero)	21	1	2	1	2	1	14

Source: Information Management Division, Oregon Department of Consumer and Business Services, December 2014

◆ Violation characteristics:

The following table highlights the distribution of violations. In FY2014, there were 246 pesticide related violations cited with penalties totaling \$5880. In the selected NAICS, 171 violations were cited with penalties totaling \$3310. WPS violations accounted for 55% (94/171) of those violations with penalties totaling \$2020. Pesticide-related violations accounted for 77 violations with penalties totaling \$1290. Other pesticide-related violations include the Oregon OSHA standards addressing hazard communication, respiratory protection, personal protective equipment, emergency eyewash, supervision, pesticide storage, fumigation, and work-site inspections.

Pesticide Violations and Penalties in FY2014 Totals

Industry (NAICS)		Total Pesticide Related Violations	WPS Violations				Other Pesticide Related Violations			
			Serious	Other than serious	Repeat	Total penalties	Serious	Other than serious	Repeat	Total penalties
Selected NAICS	111339	49	-	25	-	-	3	21	-	\$480
	111421	68	10	28	-	\$1090	4	26	-	\$310
	111422	4	-	4	-	-	-	-	-	-
	111998	49	15	12	-	\$930	6	16	-	\$400
	115112	1	-	-	-	-	1	-	-	\$100
	Totals	171	25	69	-	\$2020	14	63	-	\$1290
	111219	11	5	1	-	\$500	3	2	-	\$300
	111331	22	-	9	-	-	2	11	-	\$210
	111332	9	1	5	-	\$100	1	2	-	-
	111334	16	1	7	-	\$300	3	5	-	\$100
	115115	2	-	1	1	\$200	-	-	-	-
	238170	1	-	-	-	-	1	-	-	\$100
	311421	4	-	-	-	-	1	3	-	\$210
	441130	-	-	-	-	-	-	-	-	-
	561422	1	-	-	-	-	1	-	-	\$300
	561730	8	-	-	-	-	-	8	-	-
	624190	1	-	-	-	-	1	-	-	\$250
	Totals	75	7	23	1	\$1100	13	31	-	\$1470
Grand Total		246	32	92	1	\$3120	27	94	-	\$2760

Source: Information Management Division, Oregon Department of Consumer and Business Services, December 2014

If a WPS violation is grouped with another violation, the WPS and non-WPS violations are counted separately, but the penalty amount for the whole group is retained with the WPS violation.

The violations below are divided up into either handler or worker related, showing the categories of issues for each group. The most frequently violated standards were for personal protective equipment (PPE-Respirators and PPE-Other). Of PPE violations, failure to adequately clean PPE was cited the most often. In FY 2013, there were multiple complaints at facilities using Thiram, and in FY 2014 there were zero.

Pesticide Violations Cited in FY2014

	Violation type	Violations
Handler related	PPE Respirators	34
	PPE- Other	27
	Hazard communication	34
	Pesticide storage	17
	Central posting	24
	Training	16
	Decontamination	19
	Safe Equipment Operation	1
	Emergency eyewash	7
	Fumigants	1
Worker related	Central posting	28
	Training	16
	Safe Practices brochure	9
	Notification to workers	2
	Health haz control measures	2
	Decontamination	5
Other	Other (Supervision/Inspections)	4
	Non-pesticide related	31

Source: Information Management Division, Oregon Department of Consumer and Business Services, December 2014

- ◆ **Pesticide Analytical Response Center (PARC) Cases:** The number of PARC cases in FY2014 dropped again from FY 2013. Two-thirds of the PARC cases involved multiple exposures at each site. Contributing factors observed with exposure cases included issues with the pesticide label – either failure to follow, or the lack of clear label directions, which occurred in half of the cases, and, scheduling pesticide treatments when employees were or would be present and failing to communicate to all employees that a pesticide application would be taking place. This remains an on-going problem.

PARC Cases with Oregon OSHA Involvement in FY2014									
Source	Exposure Type	Product	Signal Word	# Exp	Type of Establishment	WPS Applies	Citation Issued	Primary cause	Medical Treatment sought
R	Applicator	Copper Green Wood Preservative	Warning	1	Siding contractor		✓	Label language issue	Yes
R	Bystanders	IVR-SAN 15 & Activator H	Danger	3-4	Juice Company		✓	Accidental increase in concentration	Yes
R*	Applicators	Intensity	Warning	3	Hazelnut Farm	✓	✓	Multiple issues	No
R (OERS)	Bystanders	Unknown	Unknown	4	Farm supply store		✓	Fire department responded, store evacuated—cause undetermined	No
C*	Bystanders	Suspend SC	Caution	3	Call center		✓	Use inappropriate with label/failure to notify	Yes
C*	Bystanders	Hot Shot Fogger	Caution	1	Medical office		✓	Use inappropriate with label/failure to notify	Yes

Source: C = Complaint filed with Oregon OSHA; R = Referral from PARC; OERS = Oregon Emergency Response System; # exp = the number exposed; * indicates narrative to follow.

◆ Three PARC Cases Highlighted

The following narratives (referenced in the previous table with an asterisk) provide a synopsis for three cases.

Complaint – Pesticide Application at a Call Center:

A substitute commercial applicator arrived at a Call Center and asked the contact person if they wanted the “normal” service, and was told yes. The applicator then made an interior application using Suspend SC (EPA Registration # 432-763) while staff were present, and continued to completion despite employees becoming symptomatic and raising concerns. The label for the product clearly states: “Do Not Apply when people are present.” A “normal” service for the Call Center is an exterior application only. Three employees experienced symptoms including reddening of skin, shortness of breath and coughing. Staff obtained information on the product being applied through confrontations with the applicator, not the employer. The employer was cited for multiple serious violations. A referral was made to the Department of Agriculture.

Complaint – Pesticide Application in a Medical Clinic:

For the third year in a row, a pesticide application at a medical clinic produced adverse impacts on employees. A mental health facility which served as the office location of 20 case managers reportedly had an issue with spiders. Some employees sought permission from management, which was granted, to apply store bought foggers over the Labor Day Weekend. Only some employees were informed through word of mouth. Following the application, some employees still entered the building unaware of the activity. Upon returning to work the following Tuesday, the cans were still out and clustered inappropriately close together. An employee suffered an allergic reaction requiring the administration of an Epi-pin. The employer’s investigation revealed that ventilation in the form of opening windows and doors did not occur. These two items were clearly noted on the product label. The employer was cited for serious violations for failure to follow the label and to provide notification to employees. A referral was made to the Department of Agriculture.

Referral: Pesticide exposure at a Hazelnut Orchard:

Three employees were exposed to pesticides through the use of leaky backpack sprayers. This was further compounded by the lack of personal protective equipment (PPE), insufficient training and lack of decontamination supplies. In addition, insufficient supervision led to the employees accidentally obtaining a more hazardous herbicide – Intensity- than what they had been using. Intensity required more PPE. Symptoms experienced included nausea, vomiting, headaches and upper respiratory system pain. The employer was cited for numerous serious violations.

◆ **External Training:**

External training consists of two parts, workshops put on by the Oregon OSHA Public Education Section, and speaking requests performed in conjunction with Oregon Department of Agriculture events. Speaking requests were conducted mostly in conjunction with day long multi-program agendas put on by grower groups, the Oregon Department of Agriculture, or the Oregon State University Extension Service for the purpose of maintaining credits for pesticide licensees.

Pesticide Related Interventions – External Training, FY2014

Classes	Source*	Attendees
Hazard Communication – Aligned with GHS (HazCom)	Workshop & Internet	859
Personal Protective Equipment (PPE)	Internet only	668
Worker Protection Standard (WPS)	Workshop only	81
		1,608

*Oregon OSHA Public Education opportunities can be found on the Education tab at <http://www.orosha.org>

**Source: Information Management Division,
Oregon Department of Consumer and Business Services, December 2014**

Oregon OSHA speaking requests in FY2014

Date	Topic	Attendees
10/10/2013	Pesticide Safety Gone Awry	45
10/30/2013	Hazard Communication? Aligned with GHS	25
11/6/2013	Pesticide Safety Hazard Analysis	92
11/7/2013	Pesticide Safety: Hazard Detection	248
12/6/2013	Respiratory Protection for Ag Operations	30
12/6/2013	Pesticide Safety Gone Awry	30
1/7/2014	Hazard Communication/ Aligned with GHS	240
1/22/2014	What to Expect in an Oregon OSHA Pesticide Inspection	40
1/28/2014	Pesticide Safety Series	108
1/31/2014	(M)SDS and Upcoming Changes	130
2/5/2014	The new GHS	106
2/10/2014	Core Pesticide Training	120
2/25/2014	Worker Protection Standard/GHS for forestry	66
2/26/2014	Ag Health & Safety	22
2/26/2014	Pesticide Emphasis Program	5
3/7/2014	Worker Protection Standard	200
4/8/2014	Worker Protection Standard	10
4/9/2014	Worker Protection Standard	11
4/10/2014	Hazard Communication: Pesticide Recertification	110
4/18/2014	Pesticide Emphasis Program and Vineyards	20
		1,658

Public Outreach: Oregon OSHA tracks publication circulation and video requests. The next few tables show activity for FY2014.

Oregon OSHA Publications in FY2014

Titles	Number Distributed
Pesticide Use and Your PPE	93
Safe Practices When Working Around Agricultural Chemicals (English/Spanish)	6974
Air You Breathe: Oregon OSHA's Respiratory Protection Guide for Agricultural Employers	53
Pesticide Worker Protection Standard reference guide	682
Agricultural Activities AO 3-2014	23
Ag Labor Housing AO 1-2009	25

Oregon OSHA Resource Center Pesticide-related Videos, FY2014

#	Name	English	Spanish	Requests
72	BREATHE EASY - RESPIRATOR SAFETY (E/S)	X	X	7
446/447	BREATHE EASY: A RESPIRATORY PROTECTION PROGRAM	X	X	3
66/67	HAZARD COMMUNICATION - AGRICULTURE SERIES	X	X	3
352	HOW TO CONDUCT WORKER PROTECTION TRAINING/TRAIN THE TRAINER	X		3
475	OREGON GUIA PARA LA SEGURIDAD DE PESTICIDAS (FLIP CHART)		X	1
171	PESTICIDE HANDLERS AND THE WORKER PROTECTION STANDARD		X	1
151	PESTICIDE PROTECTION TRAINING FOR AGRICULTURAL WORKERS (E/S)	X	X	5
95	PESTICIDE SAFETY WORKER PROTECTION (1987. REV 1997)	X	X	1
608	PESTICIDE SAFETY: HELP WORKERS PROTECT THEMSELVES (SPANISH)		X	1
1051	PROTECTING YOURSELF FROM PESTICIDE HAZARDS IN THE WORKPLACE	X	X	1
327	SHEDDING SOME LIGHT ON PESTICIDE PROTECTION (S/E)	X	X	1
169	WORKING SAFELY IN THE GREENHOUSE	X		1
				28

Source: Information Management Division, Oregon Department of Consumer and Business Services, December 2014

◆ Oregon Pesticide Symposium—Multi-Agency Annual Meeting:

The annual Oregon Pesticide Symposium was held in April 2014, with representatives attending from these agencies: Oregon OSHA, Oregon Department of Agriculture, Oregon Department of Forestry, Oregon Department of Environmental Quality, Oregon Health Authority, Oregon Department of Transportation, Oregon State Fire Marshal, Oregon Institute of Occupational Health Sciences (formerly known as CROET), the National Pesticide Information Center, Oregon State University and the EPA Region 10.

◆ Conclusions:

The working relationships between Oregon OSHA and the EPA Pesticides Unit (Region 10) remain positive and productive. Both agencies have collaborated on EPA proposed rulemaking for the Worker Protection Standard. The EPA continually relies on Oregon OSHA's experiences in responding to comments they received on their proposal. The Oregon Pesticide symposium provides opportunities for agencies to collaborate and coordinate around pesticide safety and worker protection issues. The number of agencies present and people in attendance has grown. PARC remains a vital connection for communicating and coordinating agency actions related to pesticide exposure incidents.

◆ Accomplishments:

- ◆ Oregon OSHA partnered with NIOSH/NPPTL, EPA Region 10, and EPA Headquarters to change the EPA's Label Review Manual to remove outdated and incorrect respirator label language. This will ensure, henceforth, that all pesticide manufacturers applying for re-registration or registration of their pesticide products will have the correct respiratory protection language on their labels. This correction will have national impact.
- ◆ Two Hazard Alerts were developed for employers who use aluminum phosphide products to assist them in their development of fumigation management plans. One is for structural use (http://www.orosha.org/pdf/pubs/fact_sheets/fs55.pdf) and the other is for burrowing rodents (http://www.orosha.org/pdf/pubs/fact_sheets/fs54.pdf).
- ◆ Work began on a Questions and Answers Guide for Soil Fumigants in partnership with the Oregon Department of Agriculture.
- ◆ Expanded the Oregon Pesticide Symposium to include staff from all Oregon pesticide agencies that either enforce pesticide regulations or provide support for investigations for better information exchange and to improve communication.
- ◆ Worked extensively within the PARC Board to revise Oregon OSHA's Standard Operating Procedures (SOPs) for communicating and collaborating with PARC member agencies and assisted in the development of other agencies SOP's as directed by the Governor's office and the Oregon State Legislature.
- ◆ Updated the Oregon OSHA Pesticide Use and Your PPE brochure to reflect the correction in the respirator language.

◆ Goals for the coming year:

- ◆ Finalize the Questions and Answers Guide for Soil Fumigants in partnership with the Oregon Department of Agriculture.
- ◆ Expand the Oregon Pesticide Symposium to include all Oregon pesticide agencies that either conduct investigations or conduct activities in support of an investigation based upon each agency's regulatory authority. For the next Symposium, participants will review pesticide cases to better understand each agency's roles and responsibilities.
- ◆ Provide technical assistance in partnership with EPA Region 10, the Oregon Department of Agriculture, Oregon Department of Forestry and Slipstream Media to develop the first Worker Protection Standard pesticide safety training video for Forestry.
- ◆ Develop a Frequently Asked Questions section on Oregon OSHA's Pesticide Page to address questions concerning pesticide exposure.
- ◆ Continue to work with EPA Headquarters to correct respirator language on pesticide labels on currently registered products to allow pesticide users the ability to select appropriate respirators.