

# 2019

## WSDA Pesticide Management Division

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### Annual Report to the Legislature

*As Required by RCW 15.58.420  
and RCW 17.21.350(1)*

**February 2020**



Washington  
State Department of  
Agriculture

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AGR PUB 701-819 (N/2/20)

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This document fulfills annual reporting requirements under RCW 15.48.420 and RCW 17.21.350(1).

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# Summary

The Washington State Department of Agriculture (WSDA) Pesticide Management Division (PMD) carries out multiple activities in an integrated approach to ensure the safe and legal use of pesticides in Washington State. In Fiscal Year 2019 (FY19):

## **Pesticide Registration and Licensing Services Program**

- Registered or maintained registration of over **14,500 pesticide products**, including special local need registrations for specialty crops (e.g., hops, alfalfa seed, carrot seed, cranberries) with particular pest problems for which there is not a federally registered pesticide available.
- Administered approximately **11,700 exams** to license professional pesticide applicators, consultants, dealers and structural pest inspectors.
- Certified over **33,000 individuals** (applicators, consultants, dealers) and issued nearly **38,000 licenses** (includes individuals with multiple licenses).

## **Pesticide Technical Services and Education Program**

- Provided safety training to approximately **3,000 farmworkers, handlers and trainers**.
- Collected and disposed of **109,811 pounds of waste pesticides**, reducing the risks to public health and the environment.

## **Pesticide Compliance Services Program**

- Conducted 182 inspections to ensure that applicators, dealers, manufacturers and employers comply with state and federal pesticide laws. This includes; 37 inspections at farms, orchards, forests and nurseries to ensure compliance with the Worker Protection Standard (WPS). Of the 37 Tier 1 WPS Inspections (conducted at the time of application or within 30 days) 28 resulted in at least one violation. The most common violations involved posting application and safety information, decontamination supplies, safety training, and personal protective equipment.
- Conducted 135 investigations in response to complaints, agency referrals, and investigator surveillance. Two herbicide active ingredients most frequently involved in complaints are glyphosate and 2,4-D. Herbicides are extensively used by commercially as well as the general public.
- Of the 135 investigations:
  - 52 found violations.
  - 83 cases (61%) found no violation or that the problem was not related to pesticides.
  - 96 cases (71%) involved drift allegations and, of those, 43 resulted in violations.
    - 60 of these cases were related to agricultural activities (farm, forestry, nursery or greenhouse).
  - 17 cases involved confirmed human health exposure. Of these, 9 were related to agriculture, including 8 that involved pesticide drift. The other cases were not related to agriculture, but 5 of these remaining cases also involved pesticide drift.
  - 122 cases (90 percent) were related to alleged pesticide application, storage, or disposal issues.
  - 13 (10 percent) were related to licensing, distribution, or other incidents not involving a pesticide application.
  - 89 investigations were conducted in Eastern Washington and 46 were conducted in Western Washington.
  - 53 of the agriculture related cases were in Eastern Washington and just 7 in Western Washington.

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# 1. Introduction

When used appropriately, pesticides are an important tool for protecting crops, buildings and natural resources from damage and for preventing the spread of disease, such as those carried by insects, rodents and other animals. However, pesticides also pose certain risks. To protect human health and the environment, the Washington State Department of Agriculture (WSDA) carries out a variety of activities to ensure the safe and legal distribution, use and disposal of pesticides in Washington.

WSDA's Pesticide Management Division (PMD) takes the approach that the most effective way to protect people and the environment from pesticide exposure is first through ensuring compliance with the laws and rules. PMD strives to accomplish this through effective outreach, hands-on assistance and routine inspections with those working to comply, backed up by thorough complaint investigation and enforcement actions as needed.

This report identifies key activities carried out by three PMD programs in Fiscal Year 2019<sup>1</sup> (FY19):

- **Pesticide Registration and Licensing Services Program**
  - Registers pesticides and licenses pesticide applicators, dealers and consultants.
  
- **Pesticide Technical Services and Education Program**
  - Conducts farmworker education and training.
  - Oversees the pesticide waste identification and disposal program.
  
- **Pesticide Compliance Services Program**
  - Inspects marketplaces, importers, manufacturers, and pesticide application sites for compliance with state and federal requirements.
  - Investigates complaints related to possible pesticide misuse; improper storage, sales, and distribution; applicator licensing violations and building structure inspections for wood destroying organisms such as termites.
  - Maintains a registry of pesticide-sensitive individuals to be notified for commercial landscape and right-of-way applications.

Together these programs create an integrated approach to pesticide management under the authority of the [Washington Pesticide Control Act \(Chapter 15.58 RCW\)](#), the [Washington Pesticide Application Act \(Chapter 17.21 RCW\)](#), the [General Pesticide Rules \(Chapter 16-228 WAC\)](#), the [Worker Protection Standard \(Chapter 16-233 WAC\)](#) and a number of other [pesticide-specific regulations](#).

This document fulfills annual reporting requirements under the above-mentioned statutes.<sup>2</sup>

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<sup>1</sup> Fiscal Year 2019 = July 1, 2018 – June 30, 2019

<sup>2</sup> RCW 17.21.350(2) requires reporting on the pesticide residue food monitoring program. WSDA has no such program, however FDA does. Reports can be found at: <https://www.fda.gov/Food/FoodborneIllnessContaminants/Pesticides/ucm2006797.htm>

## 2. Pesticide Registration and Licensing Program

Safe pesticide use starts with the appropriate pesticide and the knowledge of how to use it properly and safely. Pesticides sold in Washington State must first be registered with WSDA (as per Chapter 15.58 RCW); and pesticide applicators, operators, consultants, dealers and commercial pesticide application equipment must be licensed (as per Chapters 15.58 and 17.21 RCW). Structural pest inspectors must be certified as well.

### Pesticide Registration

Under RCW 15.58.050, the Registration section maintains a registry of over **14,500 pesticide products**. Registration is on a two-year cycle, so about half (7,000- 8,000) are registered each year.

In FY 19, under RCW 15.58.405, the Registration section also:

- Issued eight new Section 24c Special Local Need (SLN) registrations for specialty crops (e.g., alfalfa seed, carrot seed, cranberries and hops) with particular pest problems for which there is not a federally registered pesticide available.
- Submitted four requests to the U.S. Environmental Protection Agency (EPA) for Section 18 Emergency Exemptions from registration for specialty crops (e.g., alfalfa seed, asparagus, mint) with urgent, emerging or atypical pest situations that will result in significant economic loss.
- Issued 12 Experimental Use Permits, which support research and development of new pesticides and uses. Crops included blueberries, apples, pears, potatoes, spring wheat, and turf.

### Pesticide Licensing and Recertification

Under Chapters 15.58 and 17.21 RCW, the Licensing section provides initial certification and continuing education for pesticide applicators, dealers, consultants and structural pest inspectors.

In FY19 PMD:

- Administered **11,681 exams** to new potential licensees.
- **Certified over 33,021 individuals** (applicators, consultants, dealers).
- **Issued 37,925 licenses** (includes individuals with multiple licenses).

**Table 1. Pesticide Licenses Issued - FY19**

License Type	Number Issued	License Type	Number Issued
Commercial Applicator (Ag and Non-Ag)	1,984	Commercial Consultant	1,355
Commercial Operator (Ag and Non-Ag)	8,914	Dealer Manager	1,975
Private Applicator (Ag)	13,744	Public Consultant	111
Limited Private Applicator (Ag)	124	Structural Pest Inspector	961
Rancher Private Applicator (Ag)	121	Demonstration and Research	257
Public Operator	6,925	Certified Trainer	881
Private Commercial	1,454		

### Recertification (Pesticide Licensing Continuing Education Courses)

PMD requires all Private Applicators to obtain 20 continuing education credits over a 5-year period to maintain their license. PMD requires all other non-limited licensees to obtain 40 credits over a 5-year period to maintain their license. PMD accredited/approved almost 2,000 individual sessions and over 750 unique courses in FY19. Of these courses, 131 were provided in Spanish.

## 3. Technical Services and Education Program

Pesticide safety goes beyond proper application of pesticides. The Technical Services and Education Program (TSEP) works to support public and environmental health through pesticide education and training (mostly farm-focused), and through the collection and disposal of unwanted pesticides. Supporting safer farmworkers and work environments also supports the success of Washington’s agricultural businesses.

### Pesticide Training

Farmworkers and pesticide handlers must be trained according to the Worker Protection Standards, Chapter 16-233 WAC (under RCW 17.21.440). The Farmworker Education Program provides pesticide safety training directly to over 2,000 farmworkers. Employers and groups also train farmworkers through TSEP’s Worker Protection Standard (WPS) Train-the-Trainer program.

The TSEP conducts standard training for:

- Farmworkers – pesticide safety
- Pesticide Handlers – safe pesticide handling, including hands-on training
- Trainers from farms and orchards – how to effectively deliver WPS-mandated pesticide safety training to their employees
- Trainers responsible for respirator programs – fit testing, use, maintenance, recordkeeping
- Pesticide Licensing Training – preparation for pesticide licensing exam
- Pesticide Application Equipment Best Management Practices
- On-site Airblast Technical Assistance (TA) – Pilot project on airblast calibration, configuration that can result in pesticide off target drift reduction.

**Table 2. TSEP Training Totals – FY19**

Training	Attendees	Events	Establishments represented
Hands-on Handler (Traditional and Hybrid)	2,452	22	466
Train-the-Trainer	143	5	94
Spanish Pre-License	228	7	129
Other Worker and Handler	80	2	28
On-site TA Pilot Project	29	7	8
<b>TOTAL</b>	<b>2,932</b>	<b>43</b>	<b>725</b>

NOTE: Totals may include individuals or establishments participating in more than one event

The agricultural community's participation helps strengthen the training's effectiveness. For example, sponsors for Pesticide Application Equipment Best Management Practices workshops in FY 19 included G.S. Long Company (an agrochemical dealer) and the Washington Winegrowers Association.

TSEP specialists also provide trainings requested by growers on such topics as properly using personal protective equipment, calibrating air blast sprayers, combating heat stress, and performing respirator fit tests. The training is conducted on site, is as interactive and hands-on as possible, and is specifically targeted to the needs of the farm. This training is often conducted following an inspection by PMD and assists growers to come into compliance with pesticide law.

### **Waste Pesticide Disposal**

The PMD's Waste Pesticide Identification and Disposal Program<sup>3</sup> collects unusable and unwanted agricultural- and commercial-grade pesticides from Washington State residents, farmers, small businesses, non-profits, and public agencies without a direct customer charge. The goal is to collect and properly dispose of unused or unusable pesticide products to prevent human and animal exposure, prevent use of cancelled pesticides on crops, and to help eliminate the potential source of contamination to the environment.

Some of the risk comes from old pesticides stored in sheds or on abandoned properties. By holding collection events across the state and offering free, proper disposal, WSDA provides the incentive to clear out these dangers and help prevent improper disposal.

Since 1988, WSDA's Waste Pesticide Collection Program has collected and properly disposed of more than 3.5 million pounds of waste pesticides from **8,590 customers (an average of over 410 pounds/customer)**. This includes long-banned pesticides, such as DDT and Chlordane, and more recently cancelled pesticides, such as Azinphos-methyl and Endosulfan. Nearly all of the collected pesticides are destroyed via a thermal destruction process, thus reducing both the amount added to hazardous waste landfills and the associated long-term liability.

In FY 19, PMD:

- Held **11 waste pesticide collection events** across the state.
- Collected and properly disposed of **109,811 pounds** of unwanted pesticides from **174 customers (an average of 631 pounds/customer)**.

## **4. Pesticide Compliance Services Program**

The Pesticide Compliance Services Program (Compliance) enforces state and federal pesticide laws and rules, and also enforces structural pest inspection rules. Compliance staff work out of five offices across the state: Moses Lake, Olympia, Spokane, Wenatchee and Yakima.

The primary Compliance activities are inspection and investigation. The program:

- Conducts inspections of pesticide applicators, dealers and producers.

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<sup>3</sup> Operated under RCW 15.58.045.



- Conducts investigations of alleged misuse of pesticides.
- Reviews permit requests for pesticide applications in sensitive areas.
- Provides technical assistance to the regulated community and the public.

When an inspection or investigation finds violations, the program takes either informal action (Notice of Correction or NOC), which does not include a financial penalty, or formal action (Notice of Intent or NOI), which can include a financial penalty, suspension of license or revocation of license, as appropriate. As part of regulatory reform, RCW 43.05.110 requires PMD to issue an NOC on all first-time violations unless the violation meets one of the following criteria:

- Has a probability of placing a person in danger of death or bodily harm.
- Has a probability of causing more than minor environmental harm.
- Has a probability of causing physical damage to the property of another in an amount exceeding \$1,000.
- Was committed by a business that employs 50 or more employees on at least one day in each of the preceding 12 months.

Some formal actions or NOIs include civil penalties (fines). As set by statute, the maximum civil penalty that PMD can assess for any single violation is \$7,500. To ensure that penalties are “fair and uniform,” PMD is required to follow penalty matrix in rule, WAC 16-228-1130. For further explanation of the PMD’s penalty process and the rules that apply to penalties, see Appendix A.

Table 3. Overview of PMD Compliance Activity - FY19	TOTAL	Resulting PMD Enforcement Actions		
		Total	NOC (warnings)	NOI (Penalties and License Suspensions)
<b>Inspections</b>	<b>182*</b>	<b>103</b>	<b>94</b>	<b>9</b>
<b>Investigations</b>	<b>135**</b>	<b>52</b>	<b>38</b>	<b>14</b>
<b>Civil Penalties Assessed***</b>	<b>\$24,800</b>			

\* Includes five inspections done for the federal Environmental Protection Agency (EPA) and not included in the enforcement columns. See Table3.

\*\* Includes two marijuana investigations over which the Washington State Liquor and Cannabis Board (WSLCB) has enforcement authority.

\*\*\*Reflects final orders issued in FY19. Civil penalties assessed in FY2019 may not correlate to violations identified in FY2019. Actions that go through an administrative hearing often close out in the following fiscal year. See Appendix B.

Compliance investigations typically focus on pesticide use, while inspections typically cover not only use but also licensing, storage, registration and recordkeeping. Pesticide use is categorized as follows:

- **Agricultural Use** - farming, forestry, nurseries or greenhouses.
- **Non-Agricultural Use**
  - Commercial/industrial cases, such as in offices, apartments, homes, businesses.
  - Commercial landscape applications.

- Applications for structural pests or inspections for wood destroying organisms.
  - Residential pesticide applications by a homeowner, resident or neighbor.
  - Right-of-way (ROW) applications made to locations including public and private roadways, electric lines, irrigation canal banks, etc.
  - Public (other than ROW).
  - Other (Licensing, distribution and miscellaneous incidents that do not involve a pesticide application.
- **Marijuana** - Use of pesticides on marijuana.

## 4.1 INSPECTIONS

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The Compliance program conducts inspections to:

- Monitor compliance with current laws and rules, including pesticide labels.
- Monitor compliance with previous enforcement actions.
- Identify problem areas and pursue compliance.
- Provide a visible field presence to encourage compliance and deter noncompliance.
- Collect evidence to document and support enforcement actions.

Though some inspections are “for cause,” such as a follow-up to a prior inspection or investigation, most inspections are routine.

**Table 4. Inspections Conducted and Enforcement Actions Issued – FY19**

Inspection type	No. of inspections	Resulting PMD enforcement actions		
		Total	NOC	NOI
Agricultural Use	22	13	11	2
Non-Agricultural Use	32	13	13	0
Other				
Applicator Licensing/Records	32	17	17	0
Dealer Records	18	11	11	0
Market Place	31	11	10	1
Worker Protection Standards	37	28	20	8
Bulk Pesticide Storage	5	2	2	0
Producer Establishment*	5	*	*	*
<b>TOTAL</b>	<b>182</b>	<b>95</b>	<b>84</b>	<b>11</b>

\* Under a cooperative agreement, WSDA inspects producer establishments for the EPA. Determination of violations and any related enforcement actions are done by EPA.

### Marijuana Grow Inspections

In addition to the standard agricultural and non-agricultural inspection shown in Table 4, above, PMD conducted 49 inspections of marijuana grow operations and issued 29 NOCs for those inspections.

## Worker Protection Standard Inspections

A significant portion of PMD’s compliance and outreach efforts are focused on ensuring compliance with the Worker Protection Standard (WPS). During FY19, PMD’s compliance staff conducted 37 WPS inspections, almost all of them unannounced. While all types of agricultural establishments must comply with WPS, over half of the WPS inspections were at orchards (see Table 5, below), where a lot of hand labor and frequent pesticide applications occur.

**Table 5. WPS Inspections by Site – FY19**

Inspection Site	No. of WPS Inspections	Tier 1*	Tier 2*	Resulting PMD enforcement actions		
				Total	NOC	NOI
Orchards	19	18	1	14	9	5
Row and Field Crops	1	1	-	-	-	-
Nursery/Greenhouse	6	6	-	4	3	1
Vineyards	3	3	-	3	2	1
Diversified	3	3	-	3	3	-
Commercial Applicator	2	2	-	1	1	-
Marijuana Grow	2	2	-	2	2	-
Ag Research Station	1	1	-	1	1	-
<b>TOTAL</b>	<b>37</b>	<b>36</b>	<b>1</b>	<b>28</b>	<b>21</b>	<b>7</b>

\*Tier 1 WPS inspections are conducted at the time an application is occurring or within 30 days of the last pesticide application. Tier 2 inspections are conducted at any other time.

Violations are incurred when the criteria for inspection elements have not been met. Many of the WPS inspections found multiple violations—28 of the 37 sites inspected were responsible for 81 distinct violations (see Table 6, below). As a result, 21 NOCs and 7 NOI were issued. See also Appendix C.

**Table 6. WPS Violations by Inspection Element – FY 18**

Inspection Elements	No. of Violations
Decontamination Supplies	17
Pesticide Safety Training	15
Central Notice Posting	21
Personal Protective Equipment	14
Notice of Application	7
Label Information Provided	3
Mix/Loading, Applications and Equipment	2
Emergency Assistance	-
Entry Restrictions	2
Information Exchange	-
<b>Total</b>	<b>81</b>

NOTE: These WPS inspection elements are included on the Worker and

## 4.2 INVESTIGATIONS

The investigation process is a systematic effort to thoroughly document the facts, collect evidence and determine if any violation(s) have occurred. PMD initiates investigations as the result of complaints, agency referrals, investigator surveillance and other sources of information. PMD works closely with other state and federal agencies and responds to stakeholder and citizen concerns.

By law, PMD is required to respond immediately to all complaints of human exposure and to respond to all other complaints within 48 hours.<sup>4</sup>

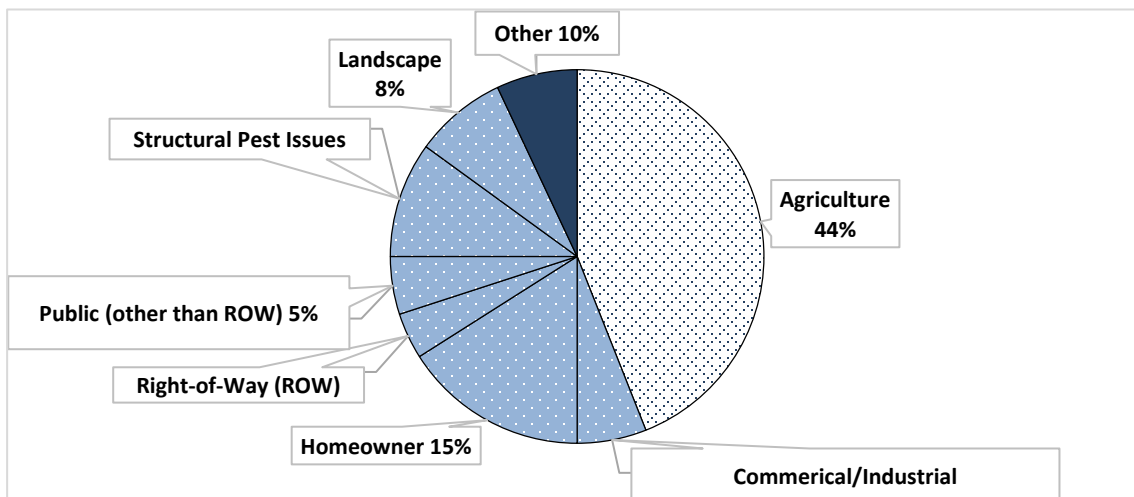
- PMD responded to 44 of 45 human exposure complaints within 24 hours of receipt.
- Most of those responses (39) were on the same day the complaint was received.
- Of those cases<sup>5</sup> that did not involve human exposure, all but one met the 48-hour response requirement.

During FY19 (July 1, 2018 - June 30, 2019), PMD conducted 135 investigations in a variety of settings, related to a variety of activities (see Figure 1 and Tables 7 and 12):

- 122 (90 %) related to possible<sup>6</sup> pesticide application, storage, or disposal issues.
- 18 (13.3 %) related to structural pest issues (may or may not have included application issues).
- 13 (10%) related to licensing, distribution or other incidents not related to pesticide application.

There are more than 28,000 individuals licensed to apply pesticides (over 8,000 commercially) statewide. Homeowner use of pesticides is widespread throughout the state.

**Figure 1. PMD Investigations by Type of Activity - FY19**



<sup>4</sup> RCW 17.21.190 and 17.21.340 require response to complaints; response times are specified in WAC 16-228-1040.

<sup>5</sup> Does not include marijuana investigations, which must be arranged with the Liquor and Cannabis Board (LCB).

<sup>6</sup> Upon investigation, not all complaints are confirmed to be pesticide-related.

Table 7. Overview of PMD Investigations – FY19

	TOTAL	Allegations* of drift	Other issues (non-drift)	Involving orchards	Non-orchard settings
<b>Agricultural Investigations*</b>	<b>60</b>	50	10	24 Includes 21 applications made by air- blast sprayer	36 Includes a diversity of cropping systems, application methods, and pesticide types.
<b>Non-Agricultural Investigations*</b>	<b>62</b>	46	16	na	na
<b>Other (licensing, distribution, misc.)</b>	<b>13</b>	0	13	na	na
<b>TOTAL</b>	<b>135</b>	96	39		

\*Allegations only – reflects focus of investigation, not findings.

Agricultural investigations focused largely on drift allegations, including several involving orchards, which may be intermixed with other crops, housing and heavily traveled roads. Investigation distribution has been consistent over the years and points to the need for greater education of applicators, particularly in regards to operation of air-blast sprayers and drift reduction techniques.

- Agricultural investigations included 23 allegations of human exposure with 22 of those associated with drift. Eight agriculture drift cases were confirmed as human exposure incidents.
- Non-agricultural investigations frequently included the failure to obtain the proper license type for the application, inadequate record keeping and the intentional or inadvertent spraying of another person’s property.
- Non-agricultural investigations included 22 allegations of human exposure with 17 of those associated with drift. Five non-agricultural drift cases were confirmed as human exposure incidents.

## Location of Investigations

There are significant differences in population dynamics, types of pest problems, and the nature of investigations between Eastern and Western Washington. Most investigations in Western Washington involved structural pest inspections, residential pesticide applications by a homeowner, resident or neighbor, intentional misuse, and unlicensed applicators. Most investigations from Eastern Washington involved agricultural applications, license issues, and drift. Eastern Washington staff conducted 43 more investigations than Western Washington staff (Table 8). The majority of Eastern Washington complaints were initiated in Benton, Grant, Chelan, Spokane and Yakima counties. The majority of Western Washington complaints initiated from King, Pierce, Thurston and Clark counties (the state’s most populous counties).

**Table 8. PMD Investigations by County - FY19**

Eastern WA Counties	No. of Investigations		Western WA Counties	No. of Investigations
Adams	2		Clallam	1
Asotin	1		Clark	5
Benton	11		Cowlitz	0
Chelan	8		Grays Harbor	1
Columbia	0		Island	2
Douglas	2		Jefferson	1
Ferry	0		King	8
Franklin	5		Kitsap	0
Garfield	1		Lewis	0
Grant	10		Mason	3
Kittitas	0		Pacific	1
Klickitat	0		Pierce	7
Lincoln	2		San Juan	0
Okanogan	6		Skagit	2
Pend Oreille	0		Skamania	0
Spokane	19		Snohomish	3
Stevens	4		Thurston	9
Walla Walla	5		Wahkiakum	0
Whitman	2		Whatcom	3
Yakima	11		<b>W. WA Total</b>	<b>46</b>
<b>E. WA Total</b>	<b>89</b>			
<b>Combined WA Total - 135</b>				

More agricultural investigations occur in Eastern Washington, whereas Western Washington investigates a much higher percentage on non-agricultural investigations (urban, homeowner, landscape applications, etc.). In fact, out of the 46 investigations in Western Washington, only seven involved commercial agriculture (includes two forestry investigations).

As consistently seen every year, herbicides (weed killers) dominated the greatest number of investigations, with two herbicide active ingredients, glyphosate and 2,4-D, the most frequently involved. Herbicides are extensively used commercially, as well as by the general public.

**Table 9. Investigations by Pesticide Type - FY19**

Pesticide Type	Number of Investigations
Herbicides Only (weed killers)	48
Insecticides Only	27
Combination of products*	16
Other Pesticide Types**	18
Pesticide application not involved	14
Unknown	12

\*Commonly an insecticide or herbicide combined with a fungicide

\*\*Rodenticides, Moss Killer, Bactericide, Disinfectant, Moth Balls, Plant Growth Regulators, etc.

### Overview of Investigative Findings

An investigation will determine if a pesticide is involved and whether any violations of pesticide laws or labels occurred. About one-third of our complaints result in a finding of no pesticide involved. When violations **are** found, the severity of impact ranges widely.

Of the 135 total investigations PMD conducted in FY19 (i.e., agricultural, non-agricultural and other – see Table 12), the majority (87%) had no direct impact on human health:

- 70 cases (52%) – typically minor plant damage from herbicide to neighbor’s plants, lawn, etc.
- 44 cases (32%) - no pesticide involved or no violation found.
- 17 cases (13%) – some human exposure and/or symptoms or illness, no human deaths.
- 4 cases (3%) - significant plant/crop damage, animal injury or environmental effects.

### Drift

Rules for applying pesticides include requirements for taking measures to prevent drift. Drift is a concern because of potential adverse impacts on human health, crops, other plants, fish, livestock, and bees and other pollinators. During FY19, 96 investigations related to allegations of drift. Of these, 50 cases were in the agricultural sector and 46 were in the non-agricultural sector (see Table 7).

Of the 96 drift allegations:

- 53 cases (55%) - no impact or minor adverse impacts, no human illness.
- 28 cases (29%) - no violation found.
- 15 cases (16%) - human illness, animal injury, or significant environmental effects, no human deaths.

Of the 42 allegations of human exposure out of these 96 drift cases, 13 cases involved confirmed human exposure or illness, while six of these cases had no confirmed human exposure nor any violations. See Table 10, below.

**Table 10. Severity of Impact by Type of Drift Investigation – FY19**

Drift Investigation Type (allegations)		*No violation found	**No or minor adverse impacts. No human illness.	Human illness or significant environmental effects. No human deaths.
Agricultural 50	Human Exposure	3	11	8
	Crop or plant damage	1	15	2
	Other‡	7	3	-
<hr/>				
Non-Agricultural 46	Human Exposure	3	12	5
	Crop or plant damage	8	8	-
	Other*	6	4	-
<b>TOTAL</b> 96		<b>28</b>	<b>53</b>	<b>15</b>

‡E.g., drift onto vehicles or other property.

\*No violation found- includes cases for which there was insufficient evidence to prove a violation, the incident was not pesticide-related, or the complainant withdrew the complaint.

### **Marijuana**

All aspects of marijuana production, processing, and retail distribution in the state of Washington are regulated by the Washington State Liquor and Cannabis Board (WSLCB). The WSLCB maintains a list of the almost 350 pesticide products that can be used on marijuana in Washington State. Marijuana pesticide investigations are conducted at the request of the WSLCB, and the PMD assists the WSLCB with the sampling of marijuana plants and product. Any related enforcement actions are taken by the WSLCB. In FY19, WSDA assisted WSLCB with two marijuana pesticide investigations. Sample results from those investigations showed positive detections for pesticides that are not allowed on marijuana.

**Table 11. Pesticide Use in Marijuana - FY19**

TOTAL investigations	Cases w/ evidence of unapproved pesticide use	Cases w/no evidence of unapproved pesticide use
2	2	0



## Enforcement

Of the 135 investigations PMD conducted in FY19, 52 resulted in formal or informal actions. See Table 12, below.

**Table 12. PMD Investigations and Actions by Type of Activity - FY19**

Activity	No. of Investigations	No. Resulting in Actions
AGRICULTURAL	60	24
NON- AGRICULTURAL		
Commercial/Industrial	5	4
Landscape (commercial)*	11	4
Public (other than Right of Way)	5	1
Residential/homeowner	21	9
Right of Way	6	-
Structural Pest Issues	14	9
OTHER (License/Distribution/Misc.)	13	1
<b>TOTAL</b>	<b>135</b>	<b>52</b>

\*Previously included in Commercial/Industrial

**Table 13. PMD Corrective Actions as Result of Investigation - FY19.**

Action Type	Actions Issued or Pending
Notice of Correction (NOC)	37
Notice of Intent (NOI)	15
<b>Total</b>	<b>52</b>

Note: Count represents the most stringent action issued for each case.

If corrections were not made in response to an NOC, and an NOI resulted, only the NOI is included here.

PMD posts information on NOI final orders online [agr.wa.gov](http://agr.wa.gov) on the Pesticide Enforcement Actions webpage. . This site lists the parties involved, as well as the penalty (amount of civil penalty and/or license suspension). PMD does not post information related to NOCs.

## 5. Conclusion

WSDA's Pesticide Management programs (Registration and Licensing, Technical Services and Education, and Compliance) are working together to protect public and environmental health. Identifying trends can help WSDA best integrate these programs' efforts. For example, because compliance data shows pesticide drift was still the dominant issue in agricultural investigations in FY19, WSDA has increased and

expanded farmworker training for FY19. WSDA is also working to identify opportunities to improve data tracking so as to better identify other trends that may need to be addressed in the future.

## Appendix A

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### WSDA Penalty Process and Rules

#### How does WSDA determine the amount of penalty?

As set by statute, the maximum penalty that WSDA can assess for any single violation is \$7,500. To ensure that penalties are “fair and uniform,” WSDA uses a penalty matrix in rule (WAC 16-228-1130). The matrix takes into account the seriousness of the violation, whether it is a first or a repeat offense, and whether there are any aggravating or mitigating factors involved. Larger penalties often reflect repeat offenses or multiple violations within the same incident.

If the violation involves human exposure, property damage, or environmental harm, it is assessed on the “adverse effects **probable**” side of the matrix. All other violations are assessed on the “adverse effects **not probable**” side. As required by rule, WSDA assesses the median penalty unless there are mitigating or aggravating factors involved for which they would assess the minimum or maximum penalty, respectively.

WSDA cannot assess a penalty higher than \$7,500 for a single violation, but the penalty rules (WAC 16-228-1100 through 16-228-1130; below) do allow WSDA to assess penalties beyond the levels in the matrix when there are aggravating factors present. For example, WSDA finds that a pesticide applicator drifted onto several farmworkers causing them all to become ill. If it is a first-time violation, the matrix indicates a penalty of \$450 and/or a 7-day license suspension. Even considering the aggravating factors in this case, the matrix only allows a \$550 fine and/or 9-day license suspension for the maximum penalty. The rules specifically allow WSDA to go beyond this maximum penalty for particularly egregious violations. WSDA uses this authority with discretion, typically when there is willful negligence, when multiple people are affected by a drift, or when multiple growers sustain damage from a single drift event.

According to WAC 16-228-1100(1), “regulatory action is necessary to deter violations of the pesticide laws and rules, and to educate persons about the consequences of such violation...”. Typically, PMD assesses both the civil penalty and the license suspension as provided in the penalty matrix. PMD considers the two components essentially equal in weight. When PMD determines that a license suspension would not be an effective deterrent, WAC 16-228-1120(2) allows PMD to “proportionately increase the civil penalty and proportionately decrease the licensing action...” In such cases, PMD doubles the civil penalty while eliminating the license suspension. This occurs most frequently when an infractor does not have a license to suspend, although there can be other circumstances that merit a proportional increase.

Specific requirements for determining the “level of violation” are found in WAC 16-228-1110(2). When a past action has placed an infractor at a specific level of violation, and the infractor commits another violation, PMD must take into account at what point the past action was fully adjudicated. (An action is fully adjudicated on the date that a Final Order is issued by the WSDA director.) If the past action has been fully adjudicated, the current violation will normally be assessed at the next level of violation.

However, if the current violation is committed prior to the last action being fully adjudicated, the level of violation stays at the same level as the past action. This can happen when there are a series of violations that occur over a short time frame.

**16-228-1130** What is the penalty assignment schedule?

This assignment schedule shall be used for violations of chapter [17.21](#) or [15.58](#) RCW or chapter [16-228](#) WAC. (See WAC [16-228-1150](#) for other dispositions of alleged violations, including Notice of Corrections.)

LEVEL OF VIOLATION	ADVERSE EFFECTS NOT PROBABLE			ADVERSE EFFECTS PROBABLE		
	MINIMUM	MEDIAN	MAXIMUM	MINIMUM	MEDIAN	MAXIMUM
First	\$200 and or 2 days license suspension	\$300 and or 3 days license suspension	\$500 and or 6 days license suspension	\$350 and or 5 days license suspension	\$450 and or 7 days license suspension	\$550 and or 9 days license suspension
Second	\$350 and or 3 days license suspension	\$500 and or 6 days license suspension	\$1000 and or 9 days license suspension	\$600 and 10 days license suspension denial or revocation	\$1300 and 20 days license suspension denial or revocation	\$2000 and 30 days license suspension denial or revocation
Third	\$700 and or 4 days license suspension	\$1000 and or 9 days license suspension	\$2000 and or 12 days license suspension	\$800 and 30 days license suspension denial or revocation	\$2400 and 40 days license suspension denial or revocation	\$4000 and 50 days license suspension denial or revocation
Fourth or more	\$900 and or 5 days license suspension denial or revocation	\$2000 and or 12 days license suspension denial or revocation	\$3000 and or 15 days license suspension denial or revocation	\$1000 and 50 days license suspension denial or revocation	\$4250 and 70 days license suspension denial or revocation	\$7500 and 90 days license suspension denial or revocation

## Appendix B

### Formal Compliance Enforcement Actions – Final Orders – FY19

Case Number NOI number	Party(ies) Involved/ County of Incident	Description	Action	Date of Final Order
TRH-0006-18 PM-19-0007	James Rumble Rumble & Company, LLC Benton County	An October 17, 2018, soil fumigation application was alleged to have off-gassed, affecting a labor crew working nearby to the treated field. The application was found to have been made in such a manner as to endanger 12 workers.	Settlement of \$1,950 civil penalty against Rumble & Company, LLC's, commercial application business.	5/24/2019
TRH-0006-18 PM-19-0006	Curtis Benedict Rumble & Company, LLC Benton County	An October 17, 2018, soil fumigation application was alleged to have off-gassed, affecting a labor crew working nearby to the treated field. The application was found to have been made in such a manner as to endanger 12 workers.	Settlement of \$550 dollars and a seven (7) day license suspension against Curtis Benedict's commercial operator license.	5/24/2019
BAO-0036-18 PM-19-0005	Shawn Lipp Apple Land Pest Control and Home Inspection Chelan County	A September 18, 2018, pest control application to a home was found to have been made with the commercial applicator not having the proper pest control endorsement. This was a repeat licensing violation for the applicator.	A Director's Final Order assessed a \$600 civil penalty and a six (6) day license suspension against Shawn Lipp's commercial applicator license and Apple Land Pest Control and Home Inspection.	5/9/2019
KFJ-0002-19 PM-19-0003	Anthony Hawkins Edge Pest Control King County	A December 29, 2018, flea pest control application made to a home was found to have been made contrary to label instructions and resulted in two alleged pesticide-related illnesses.	Settlement of \$1,700 civil penalty and a seven (7) day license suspension against Anthony Hawkins' commercial operator's license.	4/23/2019
KFJ-0002-19 PM-19-0004	Kaden Abplanalp Edge Pest Control King County	A December 29, 2018, flea pest control application made by Edge Pest Control to a home was found to have been made contrary to label instructions and resulted in two alleged pesticide-related illnesses.	Settlement of \$3,100 dollars and a three (3) day license suspension against Kaden Abplanalp's commercial applicator license and Edge Pest Control.	4/15/2019
ERE-0026-18 PM-19-0002	Tony Campbell Lamb Weston, Inc. Benton County	A case investigation and Worker Protection Standards inspection conducted as a result of a July 13, 201, pesticide exposure to three farm workers, found a chemigation system violation and violations of worker and handler provisions of the Worker Protection Standards.	A Director's Final Order assessed a \$5,200 civil penalty against Lamb Weston, Inc., as the responsible agricultural employer.	2/25/2019

<b>Case Number NOI number</b>	<b>Party(ies) Involved/ County of Incident</b>	<b>Description</b>	<b>Action</b>	<b>Date of Final Order</b>
TAS-0028-18  PM-19-0001	Ken Meines  Ranch Aero, Inc.  Garfield County	An August 22, 2018, an aerial pesticide application was alleged to have drifted off target, causing damage to non-target vegetation and contacting a person.	Settlement of \$2,300 civil penalty and a ten (10) day license suspension against Ken Meines, Ranch Aero, Inc., as the responsible commercial applicator.	2/15/2019
KFJ-0022-18  PM-18-0028	Matthew Green  Insight Pest Solutions, LLC  King County	Application records submitted to WSDA from an August 9, 201, record request as part of an investigation were missing required information.	Settlement of \$300 civil penalty against Matthew Green, Insight Pest Solutions, LLC., as the responsible commercial applicator.	2/15/2019
ERE-0033-18  PM-18-0027	Justin Arriola  Martin's Farming, Inc.  Franklin County	An Agricultural Use Inspection conducted on October 12, 2018, found pesticide label violations and violations of commercial pesticide handler provisions of the Worker Protection Standards resulting from a soil fumigation.	Settlement of \$1,350 civil penalty and a four (4) day license suspension against Justin Arriola, Martin's Farming, Inc., as the responsible commercial applicator and agricultural employer.	2/6/2019
TRH-0004-18  PM-18-0025	Cliff Plath  Jayhawk Orchard, LLC  Franklin County	A May 26, 2018, application made by a farm pruning crew was found to be in violation of handler provisions of the Worker Protection Standards.	A Director's Stipulation and Final Order assessed a \$700 civil penalty against Jayhawk Orchard, LLC, as the responsible agricultural employer	1/9/2019
CJS-0035-18  PM-18-0026	Danny Harris  WGE Holdings, LLC  Yakima County	A July 19, 2018, air blast application to an orchard, was alleged to have drifted off target, exposing an adjacent residence and vehicles.	A Director's Final Order assessed a \$350 civil penalty and a five (5) day license suspension against Danny Harris, as the responsible private applicator.	12/4/2018
KFJ-0001-18 PM-18-0023	Luis Villanueva  Thurston County	A May 24, 2018, pesticide application to Christmas trees, made by a crew under the supervision of Luis Villanueva, is alleged to have drifted off target exposing an adjacent yard and person in the yard.	A Director's Default Order assessed a \$450 civil penalty against Luis Villanueva, as the responsible private applicator.	12/4/2018
BAO-0030-18  PM-18-0022	Ryan Flanagan  Flanagan-Milbrandt, LLC  Douglas County	A September 4, 2018, Worker Protection Standard inspection found deficiencies with Flanagan-Milbrandt, LLC, vineyard: insufficient handler decontamination supplies, no emergency eye flush and no eyewash station at mix-load area.	A Director's Final order assessed a \$900 civil penalty against Flanagan-Milbrandt, LLC, as the responsible employer.	11/8/18

<b>Case Number NOI number</b>	<b>Party(ies) Involved/ County of Incident</b>	<b>Description</b>	<b>Action</b>	<b>Date of Final Order</b>
TAS-0012-18  PM-18-0021	Brian Windsor  TLC Flying  Whitman County	A May 20, 2018, aerial fungicide application to wheat is alleged to have contacted a person riding their bicycle along a state highway.	A Director's Default Order assessed a \$450 civil penalty and suspended his Private applicator's license for seven (7) days.	11/8/18
CSH-0009-18  PM-18-0020	Kirk Baumann  Baumann Farms Inc.  Walla Walla County	An April 24, 2018, ground herbicide application to wheat is alleged to have contacted two survey crew people working adjacent to field.	A Director's Default order assessed a \$900 civil penalty and a fourteen (14) day license suspension against Kirk Baumann as the responsible private applicator.	10/22/18
ERE-0016-18  PM-18-0019	Mike Corrales  Corrales AG Inc.  Franklin County	A May 4, 2018, ground herbicide application to timothy hay is alleged to have drifted onto nearby grape vineyard causing damage.	A Director's Default order assessed a \$450 civil penalty and a seven (7) day license suspension against Mike Corrales as the responsible private applicator.	10/22/18
JJR-0007-18  PM-18-0017	Michele Valori Aquilini  Red Mountain Vineyards, LP  Benton County	A June 12, 2018, follow-up Worker Protection Standard inspection found repeat deficiencies with Aquilini Red Mountain Vineyards: Incomplete safety training for handlers and incomplete decontamination supplies for handlers.	A Director's Default Order assessed a \$1,800 civil penalty against Aquilini Red Mountain vineyards, LP as the responsible employer.	10/5/18
TAS-0017-18  PM-18-0016	Daniel Faunce  Faunce Air, LLC  Whitman County	A June 28, 2018, Agricultural Use inspection found Worker Protection Standard deficiencies with Faunce Air LLC: incomplete Personal protective equipment (PPE) and incomplete decontamination supplies for handler.	A Director's Default Order assessed a \$900 civil penalty against Faunce Air, LLC as the responsible employer.	9/18/18
CJS-0019-18  PM-18-0015	Mike Adams  Firewater Ranch Partnership  Yakima County	An April 21, 2018, an air blast pesticide application under the responsibility of Mike Adams, drifted off target onto a residence and vehicles.	A Director's Stipulation and Final Order assessed a \$400 civil penalty and suspended his Private Applicator's license for four (4) days.	8/31/18
RAS-0005-18  PM-18-0014	Jose Jimenez Piepel  Premium Fruit Co. LLC  Chelan County	A March 20, 2018 air blast pesticide application supervised by Jose Jimenez drifted off target onto a residence and equipment.	A Director's Default Order assessed a \$450 civil penalty and suspended his Private applicator's license for seven (7) days.	8/31/18

## Appendix C

### WPS Civil Penalty Policy

#### WSDA POLICY REGARDING CIVIL PENALTIES FOR FIRST-TIME VIOLATIONS OF WAC 16-233

Under RCW 43.05.110(3), WSDA may issue a civil penalty, without first issuing a Notice of Correction, if a first-time violation of a statute or rule has a “probability of placing a person in danger of death or bodily harm.” Under RCW 34.05.110(4)(a), an exception may be made to the requirement that agencies allow a small business a period of at least two business days to correct a violation where the director determines that the violation presents a direct danger to the public health, poses a potentially significant threat to human health or the environment, or causes serious harm to the public interest. By way of this Policy, it is determined that the three circumstances outlined in this Policy meet the criteria described in RCW 43.05.110(3) and RCW 34.05.110(4)(a). This Policy recognizes that the requirements of WAC 16-233 are designed to reduce the risk of illness or injury resulting from worker/handler exposure to pesticides. WAC 16-233-005.

Accordingly, under RCW 43.05.110(3) and RCW 34.05.110(4)(a), a first-time violation of WAC 16-233 may be subject to imposition of civil penalties by WSDA under the following three circumstances:

(1) Violations involving **handlers**:

- (a) Any significant violation involving personal protective equipment (PPE) or decontamination (WAC 16-233-245 and WAC 16-233-250, respectively);
- (b) Failure to provide sufficient training to handler prior to mixing or applying category 1 pesticides, unless the handler is exempt from training requirements (WAC 16-233-225);
- (c) Failure to inform handler of label safety requirements, or provide a label (WAC 16-233-230), for category 1 pesticides; or
- (d) Failure to monitor handler every 2 hours for category 1 applications (WAC 16-233-210(2)).

(2) Violations involving **workers** where the nature of the violation results in 8 or more points under the matrix below:

<b>Violations Involving Workers</b>			
<b>Factor</b>	<b>Weight</b>		<b>Points</b>
Toxicity (select product with highest toxicity that applies) as indicated by the signal word on the pesticide label.	Danger-Poison	(4)	
	Danger	(3-4)	
	Warning	(2)	
	Caution	(1)	
Time Elapsed from application to exposure, unless exceptions to the time requirements apply. (WAC 16-233-120)	During application	(4)	
	Within 24 hours	(3)	
	24 to 72 hours	(2)	
	More than 72 hours	(1)	



	Restricted Entry Interval Expired	(0)	
PPE (primarily use, but can include cleaning, storage, etc. as well). (WAC 16-233-120)	Not provided Very Poor Poor Fair, but not complete	(4) (3) (2) (1)	
Decontamination. (WAC 16-233-150)	Not provided Major deficiency and/or inaccessibility Minor deficiency and/or inaccessibility	(3) (2) (1)	
Posting, notification or application information provided as required. (WAC 16-233-125 and 16-233-130, respectively)	Not properly provided:	(3-4)	
Total			

(3) Violations involving failure to provide emergency assistance to workers or handlers. (WAC 16-233-255)

# Appendix D

## List of Acronyms/Abbreviations

ALJ	Administrative Law Judge
C&T	Certification and Training
DOH	Washington State Department of Health
Ecology	Washington State Department of Ecology
EPA	Environmental Protection Agency
FEP	Farmworker Education Program
WSLCB	Washington State Liquor and Cannabis Board
L&I	Washington State Department of Labor & Industries
MSDS	Material Safety Data Sheet
NAI	No Action Indicated
NOC	Notice of Correction
NOI	Notice of Intent
PCO	Pest Control Operator
PMD	Pesticide Management Division
PPE	Personal Protective Equipment
RCW	Revised Code of Washington
SPI	Structural Pest Inspector
TSEP	Technical Service and Education Program
WAC	Washington Administrative Code
WDO	Wood Destroying Organism
WPS	Worker Protection Standard
WSDA	Washington State Department of Agriculture