

Explanation of Possible Rule Changes to Chapters 16-230, 16-231 and 16-232 WAC

These suggested rule changes were agreed upon by a workgroup comprised of various agricultural sector representatives and representation from WSU. Except for the proposal to add a 15 mph maximum wind speed limit to the statewide rules, these changes do not impose any additional regulatory requirements. Though these proposals appear to make major changes to the rules, much of it is “housekeeping” by repealing rules that are redundant or very outdated. The Department believes that the changes would not pose an increased risk to sensitive crops, nor affect the Department’s ability to take appropriate action in the event of an incident. The Department is seeking comments on these suggested changes prior to filing an official rulemaking proposal (CR102) sometime in the fall of 2017.

For reference, when this document refers to the “statewide rules” it is referring to the rules in WAC 16-230-600 through 675, which apply to all counties and “Areas” in Eastern WA. Other references are to individual counties and/or Areas within counties, where requirements are more restrictive than the statewide rules. Provisions in the general pesticide rules that are cited as examples can be found in Appendix 2.

Explanations of the suggested changes are as follows:

1. Amend Nozzle and Pressure Requirements throughout WAC 16-230, 231 and 232

Existing requirements for nozzles and pressure found in the statewide rules and throughout the various county rules must be updated, regardless of any other changes. Nozzle and equipment technology has changed to the extent that following the existing rules can put sensitive crops more at risk. For a number of years now, the Department has been forced to issue a general permit covering all eastern WA on nozzle and pressure requirements to ensure that applicators aren’t bound by these restrictions in rule and are able to make applications more safely.

Generally, the existing rules for nozzles vary based upon particular Areas within a county. The more restrictive Areas have requirements for nozzles with larger orifice diameters (create larger droplet spectrum, thus less prone to drift) while the less restrictive Areas allow for nozzles with smaller orifice diameters. For example, Area 1 (most restrictive) of Adams County requires nozzles with a minimum orifice diameter of 0.052 inches, while Areas 2 and 3 of Adams County require nozzles with minimum orifice diameters of 0.36 and 0.31 inches, respectively. Nozzle manufacturers and pesticide labels no longer refer to the size of the nozzle orifice, but rather, refer to the size droplet spectrum that will be created (e.g., medium, coarse or very coarse) when using a particular nozzle at a specific pressure.

The nozzle committee, while they were meeting, proposed rules based upon the size droplet spectrum created according to ASABE (American Society of Agricultural and Biological

Engineers) standards. Areas that are more restrictive would require applications to be made by creating coarse or very coarse droplet spectrum, while Areas that are less restrictive would allow applications that create medium size droplet spectrum.

Example of existing requirement:

On and after April 5 through October 31, ground applications of use restricted herbicides shall be made using nozzles having a minimum orifice diameter of 0.052 inches: Provided, That applications of use restricted herbicides on asparagus shall be made using nozzles having minimum nozzle orifice diameter of 0.072 inches.

How above existing requirement would change: Throughout the year, ground applications of use restricted herbicides shall conform to the manufacturers specified combination of nozzle type/size and pressure in pounds per square inch, (psi) at the nozzle that produces a spray droplet size that falls within the coarse, or very coarse range as defined by American Society of Agricultural and Biological Engineers (ASABE) S572 FEB04 “droplet classification performance standards”: Provided, That applications of use restricted herbicides on asparagus shall conform to the manufacturers specified combination of nozzle type/size and pressure in pounds per square inch, (psi) at the nozzle that produces a spray droplet size that falls within the Medium, Coarse, or Very Coarse range as defined by American Society of Agricultural and Biological Engineers (ASABE) S572 FEB04 “droplet classification performance standards”.

2. Repeal temperature restriction (85° cut-off) in individual counties.

WACs affected: WAC 16-230-866 (Benton County)
WAC 16-231-180 (Franklin County)
WAC 16-232-074 (Walla Walla County)
WAC 16-230-420(2)(f) (Spokane County Area 2)

Why does the Department want to repeal these rules?

Benton, Franklin and Walla Walla Counties

The repeal of temperature restrictions (85° cut-off) in these three counties is a housekeeping change that will have no effect on the requirement that prohibits application of use restricted herbicides when the temperature reaches 85° F. Applicators in these three counties will still need to abide by this restriction since it is in the statewide rules, WAC 16-230-640, which reads as follows (yellow highlighted language shows the restriction):

“Use restricted herbicides shall not be applied on and after April 1 through October 31 of each year when there is a temperature inversion; or throughout the year if weather conditions are such that damage could result to adjacent and nearby towns, susceptible crops and plantings through physical drift or volatilization, or the temperature is 85°F. or above at the point of application...”

The exemptions to the above 85° cut-off in WAC 16-230-640 are identical to the exemptions in the three counties' rules, as follows:

“Application at the rate of fifty gallons or more per acre using nozzles having a minimum orifice diameter of .072 inches shall be exempt from the 85°F temperature cutoff requirement: Provided further, That when using the invert system, applications may continue up to 95°F with a maximum wind velocity of fifteen miles per hour and with water carrier at twelve or more gallons per acre.”

Along with the 85° cut-off, these exemptions will be repealed in the three county rules. The exemptions will remain in WAC 16-230-640, but will be amended per the ASABE spray droplet standards scheme (see 1., above).

Spokane County

Area 2 of Spokane County also has an 85° F cut-off from May 1 through October 15, but there are no exemptions during that time frame. For the remainder of the year the statewide rules apply to Area 2 of Spokane County. By repealing this restriction in Area 2 of Spokane County the statewide rules would apply year-around. This would allow the exemptions in the statewide rules, amended per the ASABE spray droplet standards scheme (see 1., above), to occur in Area 2 of Spokane County. We are not seeing problems created by the exemptions for the rest of Eastern WA, and would not expect to see problems in Area 2 of Spokane County if the exemptions are allowed.

3. Repeal wind restrictions in individual counties.

WACs Affected: (See Appendix 1)

Why does the Department want to repeal these restrictions?

A number of counties have maximum wind speed restrictions of either 10 mph or 12 mph with some allowances for higher wind speeds using “approved ground rigs” (see Appendix 1). WSDA has not “approved” any ground rigs for more than 25 years so these allowances are no longer applicable. Some of the more restrictive Areas in certain counties have limits of 7 mph during spring through fall. There are a number of reasons why these wind speed restrictions are irrelevant (or only relevant under the right circumstances):

- Potential for drift is a function of a combination of various factors with wind speed considerations dependent upon these other factors (eg – wind direction, nozzles, pressure, boom height, temperature, relative humidity, and inversion conditions).

- Proximity to sensitive crops and the direction of the wind are key factors when considering wind speed and potential damage. If the wind is blowing in a direction directly away from sensitive crops, a restriction on speed doesn't make sense (an 8 or 9 mph wind in a 7 mph zone may be the best time to spray to protect the sensitive crop).
- Applicators must take into account the wind speed and direction regardless of any maximum speed restrictions in rule. Drift and associated damage to sensitive crops can occur at wind speeds much lower than the maximums in these rules (most drift incidents investigated by WSDA occur at wind speeds under 10 mph).
- Pesticide labels and provisions in the general pesticide rules (eg – WAC 16-228-1220(2),(5)) require applicators to take other factors besides wind speed into consideration to prevent drift. The statewide rules (WAC 16-230-640) also prohibit making applications when weather conditions could cause damage through physical drift, which is enforceable even when wind speeds are below any set maximum in individual county rules.

Eliminating maximum wind speeds in individual counties and Areas does not mean that applicators would have free reign to make applications at higher wind speeds. They must consider all factors and only make applications under conditions that won't drift off-target. Drift with associated damage at any wind speed is a violation of various other rules.

While the maximum wind speed restrictions in individual counties can be repealed, WSDA does get complaints when the public sees spraying operations occurring in high winds (eg- 15+ mph). Those spraying operations may not be causing any problem (eg - drifting back onto the target site), but the perception is bad. Good stewardship should involve prohibiting applications at high wind speeds that generate public concerns. Many labels have a wind speed cut-off at 15 mph. WSDA would propose a maximum wind speed in the statewide rules of 15 mph, and eliminate all maximum wind speeds in individual Area/County rules.

4. Repeal restriction in statewide rules that limits addition of oil carriers and adjuvants to one pint per acre

WAC 16-230-635: *Petroleum and vegetable oil carriers and spray adjuvants may be used when not in excess of one pint per acre: Provided, That oil-type carriers in excess of one pint per acre may be used with invert systems: Provided further, That invert systems may be used on aircraft by written permit only.*

Why is the Department proposing to repeal this restriction?

The repeal of this provision is mostly a housekeeping change since this restriction is outdated and no longer serves an apparent purpose for the protection of sensitive crops.

WSDA has not cited a violation of this provision since at least the mid-90s. Herbicide and adjuvant chemistries have changed tremendously since this provision was adopted decades ago. With the limitation of one pint per acre for adjuvants, this provision may in some cases hinder current best management practices.

5. Repeal restrictions on oil carriers for brush control in individual counties

WACs affected: WAC 16-230-813 (Benton County)
WAC 16-231-110 (Franklin County)
WAC 16-231-210 (Yakima County)
WAC 16-231-310 (Adams County)
WAC 16-231-410 (Columbia County)
WAC 16-231-610 (Klickitat County)
WAC 16-232-050 (Walla Walla County, Areas 2b, 4 and 6)
WAC 16-232-110 (Lincoln County)

(Example from Franklin County)

WAC 16-231-110: *On and after April 5 through October 31, oil-type carriers are prohibited for brush control: Provided, That oil-type carriers may be used in invert systems the entire year.*

The prohibitions in individual counties are identical except for the time period they are in effect. For example, the prohibition in Franklin County starts on April 5 whereas the prohibition in Lincoln County starts on May 15.

Why is the Department proposing to repeal these restrictions?

As with the restriction in the statewide rules on oil carriers and adjuvants (4., above) these prohibitions no longer serve an apparent purpose. The workgroup could not see a reason to keep these restrictions and the Department has not cited them in conjunction with any investigations for many years. If an incident occurs that causes damage, the Department can cite the general pesticide rules (eg – WAC 16-228-1220(2)) as violated.

6. Repeal mixing, loading and equipment decontamination provision in statewide rules

WAC 16-230-625: *The mixing of use restricted herbicides, the loading and decontamination of equipment used to apply use restricted herbicides, and aircraft entering on to and exiting from landing sites shall be done in a manner as not to cause possible damage to susceptible crops.*

Why is the Department proposing to repeal this restriction?

This is a housekeeping change. The WAC does not define (give specifics on) any restriction and therefore these requirements are redundant with requirements in the

general pesticide rules (see WAC 16-228-1200(2), WAC 16-228-1500(1)(e)). If an incident occurs, violations can be cited under the general pesticide rules.

7. Repeal restrictions in individual county rules that limit mixing and loading aircraft to those formulations that can be applied in the Area where the airstrip is located.

WACs Affected: WAC 16-231-830 (Chelan & Douglas Counties)
WAC 16-231-930 (Grant County)
WAC 16-231-725 (Okanogan County)
WAC 16-231-230 (Yakima County)
WAC 16-232-015(2)(d) (Walla Walla County Area 2)

Chelan/Douglas, Grant, and Okanogan County all read the same:

The loading and/or mixing of use restricted herbicides is restricted to those formulations which may be applied in the area in which the airstrip is located.

Yakima County (WAC 16-231-230) reads:

The mixing and/or loading of use restricted herbicides is limited to those formulations which may be applied in that area. The loading of aircraft is prohibited in any area where aerial application of use restricted herbicides is prohibited.

Walla Walla County Area 2 (WAC 16-232-015(2)(d)) reads:

Restrictions on the use of airstrips. The loading and/or mixing of use restricted herbicides is prohibited on any airstrip, airfield or any location within Area 2: Provided, That the municipal airport located northeast of Walla Walla shall not be subject to this provision.

Why is the Department proposing to repeal these restrictions?

The Department has not investigated an incident at an aircraft mixing/loading site for many years. The risk of an incident occurring is very low and if an incident does occur at a mixing/loading site, any resulting damage would very likely be localized. The Department can cite provisions in the general pesticide rules for any incident at a mix/load site (eg – WAC 16-228-1220(2)) or during transport (eg – WAC 16-228-1220(8) and WAC 16-228-1500(1)(d),(e)).

8. Repeal provision in statewide rules that prohibits turning and flying low over cities, towns, sensitive crops, etc.

WAC 16-230-660: *Aircraft carrying use restricted herbicides are prohibited from turning and/or low flying during spraying operations over cities and towns unless authorized by the city or town in question pursuant to an agreement for pesticide applications; or residences, windbreaks, orchards or susceptible crops belonging to any*

person other than the owner of the property being treated, except by permission of the person whose residence, windbreak, orchard or susceptible crop is involved.

Why is the Department proposing to repeal this restriction?

This restriction regulates the operation of the aircraft when the booms are off. The Department may get a call about low flying aircraft once every few years. When we do, we generally refer the complaint to FAA. Department staff do not have any expertise in determining what would be considered a legitimate aircraft maneuver. If this provision is repealed, staff can still assist the complainant (as we do now) with getting the FAA involved.

9. Repeal restrictions on storage of use-restricted herbicides

WAC 16-230-630: *Use restricted herbicides shall not be stored in areas where their use is prohibited unless they are in a sealed container (tight screw-type bungs, tightly closed lids or packages), and the outside of the containers not contaminated with the use restricted herbicide.*

Why is the Department proposing to repeal this restriction?

The Department has not cited a violation of this provision since at least the mid-90s and is not aware of any incidents where damage occurred due to storage of a contaminated and/or open container of a use restricted herbicide. The Department believes that the chances of an incident causing damage are very low, and if such an incident did occur, the damage would be localized and not likely very severe. In such an instance the Department can cite violation(s) of the general pesticide rules (eg – WAC 16-228-1200(1), WAC 16-228-1220(2),(6)).

10. Repeal use restricted herbicides applied through irrigation provision

WAC 16-230-673: *Use restricted herbicides applied through irrigation systems are subject to the same requirements as ground applications of use restricted herbicides except for nozzle size and pressure requirements.*

Why is the Department proposing to repeal this restriction?

Applications of use restricted herbicides via chemigation are subject to the same requirements as ground applications (except for nozzle and pressure requirements). There is no need to make this statement in order for chemigation applications to be subject to the statewide rules.

APPENDIX 1

Wind Restrictions			
Statewide	<p>WAC 16-230-640</p> <p>Use restricted herbicides—Eastern Washington—Weather and temperature conditions.</p> <p>Use restricted herbicides shall not be applied on and after April 1 through October 31 of each year when there is a temperature inversion; or throughout the year if weather conditions are such that damage could result to adjacent and nearby towns, susceptible crops and plantings through physical drift or volatilization, or the temperature is 85°F. or above at the point of application: Provided, That application at the rate of fifty gallons or more per acre using nozzles having a minimum orifice diameter of .072 inches shall be exempt from the 85°F. temperature cutoff requirement: Provided further, That when using the invert system, applications may continue up to 95°F. with a maximum wind velocity of fifteen miles per hour and with water carrier at twelve or more gallons per acre.</p>		
County	Areas	Restriction	Exceptions
Benton County WAC 16-230-861 (all herbicides and class 1&2 insecticides)	Entire County	10 mph year-around	Higher velocities w/approved ground rigs
Franklin County WAC 16-231-145 (use-restricted herbicides)	Areas 1, 1A, 2, 3, & 4	12 mph year-around	Up to 20 mph w/approved hooded boom sprayer
	Area 1	10 mph April 1 – 10/31	
Walla Walla County WAC 16-232-035 (use-restricted herbicides)	Areas 1, 2, 2A, 3, & 3A	12 mph year-around	Up to 20 mph w/approved hooded boom sprayer
	Areas 1 & 2	7 mph April 1 – 10/31	
Walla Walla County WAC 16-232-065 (all herbicides and class 1&2 insecticides)	Areas 2B, 4 & 6	10 mph year-around	Higher velocities allowed with approved ground rigs
Spokane County WAC 16-230-470 (use-restricted herbicides)	Entire County	12 mph year-around	Up to 20 mph with approved ground rig

Yakima County WAC 16-231-235 (use-restricted herbicides)	Areas 1, 1A & 2	12 mph year around	Up to 20 mph with approved ground rig
	Areas 1 & 1A	10 mph April 1 – 10/31	
Adams County WAC 16-231-340 (use-restricted herbicides)	Areas 3 & 4	12 mph year-around	Up to 15 mph with ground rigs using rain drop nozzles No wind restrictions w/50+ GPA Up to 20 mph with approved ground rig
Columbia County WAC 16-231-425 (use restricted herbicides)	Areas 2 & 4	12 mph year around	Up to 20 mph with approved ground rig
	Area 2	7 mph May 1 – 10/31	
Whitman County WAC 16-231-530 (use restricted herbicides)	Areas 1 & 3	7 mph April 15 - 10/31 12 mph 11/1 through 4/14	
	Area 4	12 mph year-around	Up to 15 mph with ground rigs using rain drop nozzles
	All Areas		Up to 20 mph with approved ground rig
Klickitat County WAC 16-231-620 (use restricted herbicides)	Entire County	12 mph year-around	Up to 20 mph with approved ground rig
Okanogan County WAC 16-231-720 (use restricted herbicides)	Entire County	12 mph year-around	Up to 20 mph with approved ground rig
Chelan & Douglas Counties WAC 16-231-840 (use restricted herbicides)	Areas 2,3 & 4	12 mph year-around	Up to 20 mph with approved ground rig
	Area 1	7 mph April 16 - 10/31 12 mph Nov 1 – April 15	
Grant County WAC 16-231-935 (use restricted herbicides)	Areas 2, 3 & 4	12 mph year-around	No wind restrictions w/50+ GPA
	Areas 1 and 1A	10 mph April 1 – 10/31 12 mph 11/1 thru 3/31	•Up to 20 mph with approved ground rig
Garfield County	Areas 2, 3 & 4	12 mph year-around	Up to 20 mph with approved

WAC 16-232-225 (use restricted herbicides)			ground rig
	Areas 2 & 3	7 mph May 1 – 10/31	
Kittitas County WAC 16-232-315 (use restricted herbicides)	Area 1	12 mph April 15 – 10/31	No wind restrictions w/50+ GPA •Up to 20 mph with approved ground rig

Appendix 2

Citations from General Pesticide Rules (WAC 16-228)

WAC 16-228-1200

(1) No person shall handle, transport, store, display, apply, dispose of or distribute pesticides in such a manner as to endanger humans and their environment or to endanger food, feed, or any other product that may be transported, stored, displayed, or distributed with such pesticides. Toxicities of pesticides shall be considered in distribution, storage, handling, and merchandising practices.

WAC 16-228-1220

...

(2) No person shall transport, handle, store, load, apply, or dispose of any pesticide, pesticide container or apparatus in such a manner as to pollute water supplies or waterways, or cause damage or injury to land, humans, desirable plants and animals, or wildlife. Provided that a pesticide labeled for aquatic use and used as directed shall not be considered a violation of this subsection: Disposing of pesticides at disposal sites approved by the appropriate agency complies with the requirements of this subsection. Toxicity, volatility, and mobility of pesticides shall be considered in complying with this subsection.

...

(5) No person shall apply pesticides if weather conditions are such that physical drift or volatilization may cause damage to adjacent land, humans, desirable plants or animals.

(6) Requirements for unattended pesticides and their containers:

(a) Good generally accepted housekeeping practices shall be maintained for all pesticides and their containers.

...

(8) No person shall disperse a pesticide or pesticide rinsate from any aircraft while in flight except over the target field and at the customary application height for that crop: Provided that emergency dumping shall not be considered a violation of this section.

WAC 16-228-1500

(1) The director may deny, suspend, or revoke any provision of a license, registration, permit or certification issued under chapters [17.21](#) and [15.58](#) RCW if it is found that the applicant or the holder of the license, permit, or certification has committed any of the following acts each of which is declared to be a violation:

...

(d) Operated a faulty or unsafe apparatus;

(e) Operated in a faulty, careless or negligent manner;

...