Oregon OSHA’s Application Exclusion Zone for the Worker Protection Standard Rules.

Oregon OSHA administers and enforces the Environmental Protection Agency’s (EPA) pesticide Worker Protection Standard (WPS) as adopted in Division 4/W (Agriculture/Worker Protection Standard), OAR 437-004-6000. Oregon OSHA proposes to adopt two new Oregon Administrative Rules (OARs) that reflect specific requirements for employers in Oregon.

These rules complement and complete the changes adopted by Oregon OSHA on February 14th, 2017 on the amended Worker Protection Standard adopted by the EPA in the November 2, 2015 Federal Register. The rules, which exceed federal requirements, will take effect January 1, 2019.

The new OARs:

OAR 437-004-6405:
Restrictions associated with outdoor production pesticide applications (which replaces 170.405(a), is a new rule that describes the Application Exclusion Zone requirements (AEZ) including how employers ensure enclosed agricultural structures are closed properly, must provide instruction and information, and a decision matrix that navigates the rule requirements.

OAR 437-004-6406:
Pesticide spray drift and innovative methods is a new rule that describes that if issues relating to spray drift occur, then the employer is responsible for addressing those issues, and how drift reduction technologies can be used to gain approval for innovative methods through the variance process.

The WPS rules are also referenced, in Division 2, General Industry, at OAR 437-002-0170; and in Division 7, Forest Activities, at OAR 437-007-0010.

Pesticides, although a clear necessity in many workplaces, also represent varying levels of risks to workers and others (depending on both the particular pesticide used and the circumstances of the application). The Worker Protection Standard, taken as a whole, provides a number of important protective measures to reduce those risks. However, the risk of unintended exposures due to what is typically referred to as unintended “drift” can create exposure to workers outside the intended application area. In the case of worker housing, that exposure can also involve the workers’ family members. The provisions of this proposed rule – as was true of the original EPA rule addressing AEZs – are intended to address that potential by providing an added measure of protection against unintended and unanticipated
exposures outside of the locations where pesticides are intended to be applied. The AEZ surrounds and moves with spray equipment, beyond the safeguards enforced with respect to the treated area, must be free of all people other than appropriately trained and equipped pesticide handlers. The rule changes are expected to lead to an overall reduction in incidents of unsafe pesticide exposure and to improve the occupational health of agricultural workers and pesticide handlers.

Oregon OSHA held five hearings in multiple locations on these proposed rules. The division received 938 written comments during the extended comment period and over 100 oral comments at these hearings. These comments were vast and diverse, and all were considered by Oregon OSHA before the division adopted the rules as filed. Oregon OSHA will be publishing a summary of comments and agency decisions document on its website for viewing.

This is Oregon OSHA Administrative Order 2-2018, adopted June 29, 2018 and effective January 1, 2019.

Oregon OSHA contact: Garnet Cooke, Salem Field Office @ 503-378-3274, or email at garnet.r.cooke@oregon.gov

Please visit our web site osha.oregon.gov Click ‘Rules and laws’ in the Topics, rules, guidelines column and view our adopted rules, or select other rule activity from this page.

Note: In compliance with the Americans with Disabilities Act (ADA), this publication is available in alternative formats by calling 503-378-3272.
PERMANENT ADMINISTRATIVE RULES

I certify that the attached copies* are true, full and correct copies of the PERMANENT Rule(s) adopted on June 29, 2018 by the Date prior to or same as filing date

Department of Consumer & Business Services/Oregon Occupational Safety & Health Division 437
Agency and Division

Heather Case 350 Winter Street NE, Salem OR 97301-3882 503-947-7449
Rules Coordinator Address Telephone

to become effective January 1, 2019 as Oregon OSHA Administrative Order 2-2018.
Date upon filing or later

Rulemaking Notice was published in the November 2017 Oregon Bulletin.**
Month and Year

RULE CAPTION

Oregon OSHA’s Application Exclusion Zone for the Worker Protection Standard Rules.
Not more than 15 words that reasonably identifies the subject matter of the agency’s intended action.

RULEMAKING ACTION

ADOPT:
OAR 437-004-6405, 437-004-6406

ORS 654.025(2), 656.726(4)

ORS 654.001 through 654.295; 654.001 through 654.295; 654.750 through 654.780
Stats. Implemented

RULEMAKING SUMMARY

Oregon OSHA administers and enforces the Environmental Protection Agency’s (EPA) pesticide Worker Protection Standard (WPS) as adopted in Division 4/W (Agriculture/Worker Protection Standard), OAR 437-004-6000. Oregon OSHA proposes to adopt two new Oregon Administrative Rules (OARs) that reflect specific requirements for employers in Oregon.

These rules complement and complete the changes adopted by Oregon OSHA on February 14th, 2017 on the amended Worker Protection Standard adopted by the EPA in the November 2, 2015 Federal Register. The rules, which exceed federal requirements, will take effect January 1, 2019.

The new OARs:
OAR 437-004-6405:
Restrictions associated with outdoor production pesticide applications (which replaces 170.405(a), is a new rule that describes the Application Exclusion Zone requirements (AEZ) including how employers ensure enclosed agricultural structures are closed properly, must provide instruction and information, and a decision matrix that navigates the rule requirements.

OAR 437-004-6406:
Pesticide spray drift and innovative methods is a new rule that describes that if issues relating to spray drift occur, then the employer is responsible for addressing those issues, and how drift reduction technologies can be used to gain approval for innovative methods through the variance process.

The WPS rules are also referenced, in Division 2, General Industry, at OAR 437-002-0170; and in Division 7, Forest Activities, at OAR 437-007-0010.
Pesticides, although a clear necessity in many workplaces, also represent varying levels of risks to workers and others (depending on both the particular pesticide used and the circumstances of the application). The Worker Protection Standard, taken as a whole, provides a number of important protective measures to reduce those risks. However, the risk of unintended exposures due to what is typically referred to as unintended “drift” can create exposure to workers outside the intended application area. In the case of worker housing, that exposure can also involve the workers’ family members. The provisions of this proposed rule – as was true of the original EPA rule addressing AEZs – are intended to address that potential by providing an added measure of protection against unintended and unanticipated exposures outside of the locations where pesticides are intended to be applied. The AEZ surrounds and moves with spray equipment, beyond the safeguards enforced with respect to the treated area, must be free of all people other than appropriately trained and equipped pesticide handlers. The rule changes are expected to lead to an overall reduction in incidents of unsafe pesticide exposure and to improve the occupational health of agricultural workers and pesticide handlers.

Oregon OSHA held five hearings in multiple locations on these proposed rules. The division received 938 written comments during the extended comment period and over 100 oral comments at these hearings. These comments were vast and diverse, and all were considered by Oregon OSHA before the division adopted the rules as filed. Oregon OSHA will be publishing a summary of comments and agency decisions document on its website for viewing.

Please visit our web site osha.oregon.gov Click ‘Rules and laws’ in the Topics, rules, guidelines column and view our proposed rules; or, select other rule activity from the left vertical column on the Proposed Rules page.

**RULE CONTENT/CHANGES SUMMARY BY RULE NUMBER**

OAR 437-004-6405: Restrictions associated with outdoor production pesticide applications (which replaces 170.405(a)) where workers or other people are adjacent to pesticides being applied in outdoor production areas.

OAR 437-004-6406: Prevention of contamination of employee housing and related agricultural structures due to pesticide spray drift.

*With this original, file one photocopy of certificate, one paper copy of rules listed in Rulemaking Actions, and electronic copy of rules.
**The Oregon Bulletin is published on the 1st of each month and updates rules found in the OAR Compilation. For publication in Bulletin, rule and notice filings must be submitted by 5:30 pm on the 15th day of the preceding month unless this deadline falls on a weekend or legal holiday, when filings are accepted until 5:00 pm on the preceding workday.**
FILING CAPTION: Oregon OSHA’s Application Exclusion Zone for the Worker Protection Standard Rules.

EFFECTIVE DATE: 01/01/2019

AGENCY APPROVED DATE: 06/29/2018

CONTACT: Garnet Cooke
503-378-3274
garnet.r.cooke@oregon.gov

Oregon OSHA
350 W inter St NE
Salem, OR 97301

Filed By:
Heather Case
Rules Coordinator

RULES:
437-004-6405, 437-004-6406

ADOPT: 437-004-6405

RULE TITLE: Restrictions associated with outdoor production pesticide applications.

NOTICE FILED DATE: 10/20/2017

RULE SUMMARY: Restrictions associated with outdoor production pesticide applications (which replaces 170.405(a)) where workers or other people are adjacent to pesticides being applied in outdoor production areas.

RULE TEXT:
Note: Oregon OSHA has declined to adopt 40 CFR 170.405(a). In Oregon OAR 437-004-6405 applies. This rule applies in Oregon where workers or other people are adjacent to pesticides being applied in outdoor production areas that are within the boundaries of the establishment. This rule becomes effective January 1, 2019. Note: Nothing in these rules affects separate statutory or regulatory requirements such as the buffer zone requirement related to aerial herbicide applications in forestry operations (ORS 527.672).

(1) Treated area: The area to which a pesticide is being directed and/or deposited during an application. After the application is complete, the treated area is subject to the labeling-specified restricted-entry interval (REI) and the post-application entry restrictions specified in Sec. 170.407 of the Worker Protection Standard (WPS).

(2) Enclosed agricultural structure: a fully-enclosed space (has walls, ceilings, and floors that minimize the entry of outside air when doors, windows, and mechanical air intakes are closed) with an interior area that shelters occupants from dermal exposure to pesticide spray drift.

(3) Application Exclusion Zone (AEZ): The AEZ is an area that moves with and exists in relationship to the application equipment. The number of feet shown is the horizontal radius of the area surrounding the application equipment during the application process and may extend beyond the treated area. It extends downward from that horizontal plane to the ground. Pesticide labels that have more stringent restrictions regarding distances must be followed. The agricultural employer must implement the AEZ as follows:

(a) Workers and labor housing occupants must evacuate the AEZ, which shall extend 150 feet from the application equipment and last until 15 minutes after the application equipment passes, when the label requires the handler to use...
respiratory protection during application and one of the following applies:
(A) The application is by air blast sprayer;
(B) The pesticide is applied aerially;
(C) The spray quality is smaller than medium;

(b) Workers and labor housing occupants must either remain in an enclosed agricultural structure or evacuate the AEZ, which shall extend 100 feet from the application equipment and last until 15 minutes after the application equipment passes, when the label does not require the handler to use respiratory protection during application and one of the following applies:
(A) The application is by air blast sprayer;
(B) The pesticide is applied aerially;
(C) The spray quality is smaller than medium.

Workers not on paid status or labor housing occupants must be permitted to evacuate even if the employer otherwise chooses to allow them to remain in an enclosed agricultural structure.

(c) Workers and labor housing occupants must either remain in an enclosed agricultural structure or evacuate the AEZ, which shall extend 25 feet from the application equipment when all of the following apply:
(A) The application is not by air blast sprayer;
(B) The pesticide is not applied aerially;
(C) The pesticide is sprayed from a height greater than 12 inches from the planting medium;
(D) The spray quality is medium or larger;

(d) No AEZ applies for appropriately trained and equipped handlers involved in the application.

Note: No AEZ is required for applications not covered by the above. Examples include applications of granular, soil incorporated (other than fumigants) pre-plant, dipping cuttings, and at-plant pesticide applications as long as they are applied from a distance of less than 12 inches from the planting medium and use a spray quality of medium or larger. See Figure 1 -- Worker Protection Standard Application Exclusion Zone Decision Matrix.

(4) The agricultural employer must ensure that prior to pesticide applications, any enclosed agricultural structures (labor housing or work-related structures) that are located within the AEZ and that are used at any time by employees and other occupants must have all of the following:
(a) All doors and windows closed;
(b) Any air in-take devices or mechanisms turned off;
(c) Provisions to protect or store personal or household items that are not located in an enclosed agricultural structure from potential contamination;
(d) A closeable storage area for shoes/boots to prevent tracking of pesticide into the structures where people live or reside.

(5) Employers must provide the following information in a manner that is easy to understand and effectively conveys the information needed prior to the pesticide application, to occupants of an enclosed agricultural structure in the AEZ:
(a) Instructions on closing windows and doors to minimize exposure to outside air regardless of whether they are staying inside the enclosed agricultural structure or evacuating during nearby pesticide applications.
(b) Instructions on how to close potential air-intakes and any other measures to minimize exposure to outside air during nearby pesticide applications.
(c) The start and stop times for remaining inside the enclosed agricultural structures and how to determine when the application equipment is in range.
(d) Instructions as to whether people can, as appropriate, evacuate or stay in an enclosed agricultural structure, how to maintain protective measures, and how long they must remain outside the AEZ.
(e) Instructions on how to protect personal or household items in the AEZ from potential contamination.
(f) Instructions on how to report pesticide residue or deposit on enclosed agricultural structures, personal, or household items in AEZ.

(6) Employers must provide information and ensure that all adult occupants of agriculture labor housing within the AEZ
have access to:
(a) An information station located in close proximity to agriculture labor housing that contains information on pending applications, with a means of alerting occupants to changing information.
(b) Information on how to prevent and reduce pesticide exposure.
(c) Information about the location of the pesticide safety information required by Sec. 170.311(a)
(7) If anyone other than a trained and protected handler exits an enclosed agricultural structure and enters the AEZ the handler must suspend the pesticide application as per Sec. 170.505(b).

Figure 1- Worker Protection Standard, Application Exclusion Zone Decision Matrix
*Spray quality: (as defined by the American Society of Agricultural and Biological Engineers Standard S-572.1) considers several factors including the nozzle design, system pressure, and speed of the application equipment. The eight spray quality categories are referenced in nozzle charts:
Smaller than medium (droplet spectrum with volume median diameter of less than 294 microns+):
Extra fine (XF)
Very fine (VF)
Fine (F)
Medium or larger (droplet spectrum with volume median diameter of 294 microns+ or more):
Medium (M)
Coarse (C)
Very coarse (VC)
Extra coarse (XC)
Ultra coarse (UC)
+Micron = (um) = micrometer: Standard unit of measure for particulate matter.
1 um is 1/1000th of a millimeter.

STATUTORY/OTHER AUTHORITY: ORS 654.025(2), ORS 656.726(4)
STATUTES/OTHER IMPLEMENTED: ORS 654.001-654.295, ORS 654.750-654.780
Figure 1 – Worker Protection Standard, Application Exclusion Zone Decision Matrix

When pesticide applied:
- Aerially
- OR Air Blast Spray
- OR Spray Quality* is Smaller than Medium
  Yes
  Using a pesticide that requires a respirator
  Yes
  - 150' Application Exclusion Zone (AEZ)
  - 15 minute waiting period for AEZ
  - Must evacuate AEZ
  No
  - 100' Application Exclusion Zone (AEZ)
  - May evacuate or stay in AEZ
  - 15 minute waiting period for AEZ

When pesticide applied:
- NOT Aerially
- NOT Air Blast Spray
- AND Spray Quality* is Medium or Larger
- AND more than 12" from planting medium
  Yes
  - 25' Application Exclusion Zone (AEZ)
  - May evacuate or stay in AEZ

Otherwise:
No Application Exclusion Zone Required

Examples:
- Less than 12" from planting medium
- Granular, soil incorporated pre-planting
- At-plant applications
- Spray Quality* of Medium or Larger
RULE TITLE: Pesticide spray drift and innovative methods.

NOTICE FILED DATE: 10/20/2017

RULE SUMMARY: Prevention of contamination of employee housing and related agricultural structures due to pesticide spray drift.

RULE TEXT:

(1) In the event that drift makes contact with labor housing areas or other structures used by employees, including enclosed agricultural structures within an AEZ, the employer must ensure that it is properly cleaned up with a minimum of employee or housing occupant exposure.

Note: Identifying and addressing any issues resulting from the spray application are the responsibility of the employer; any employees assigned these duties must have training appropriate to the job expectations.

(2) To encourage innovation, including the use of EPA’s Drift Reduction Technology and other methods that the employer can demonstrate reduce the potential for spray drift, Oregon OSHA may grant approval for an AEZ that differs from the rule requirements yet meets the intent of these rules through the variance process described in OAR 437-001-0400.

Note: Examples of possible innovations include:

Advanced application practices for handlers in the prevention of spray drift (which may include using only one side of the application equipment) and the use of the Environmental Protection Agency’s Drift Reduction Technologies

Two applicators, one monitoring conditions and remaining in contact with applicator of the treated area

Safer chemicals and chemistries

STATUTORY/OTHER AUTHORITY: ORS 654.025(2), ORS 656.726(4)

STATUTES/OTHER IMPLEMENTED: ORS 654.001-654.295, ORS 654.750-654.780