

## GUIDANCE FOR ORS 527.672 AERIAL HERBICIDE APPLICATIONS

### **ORS 527.672 Aerial herbicide applications**

**When a forest operation involves applying herbicides by aircraft near an inhabited dwelling or school, the operator is responsible for leaving an unsprayed strip of at least 60 feet adjacent to the dwelling or school. The responsibility of the operator under this section is in addition to any responsibility of the aerial pesticide applicator under ORS chapter 634.**

### **INTRODUCTION:**

ORS 527.672 was added to the Oregon Forest Practices Act via Section 21 of HB 3549, which was adopted in the 2015 Regular Session. The restrictions on aerial herbicide applications within ORS 527.672 took effect starting January 1, 2016. ODF staff in the field and in Salem will follow this guidance starting on January 1, 2017.

### **APPLICATION:**

ORS 527.672 is used for enforcement action. ORS 527.672 provides neither a purpose statement nor an identification of a protected resource. Therefore, violations of ORS 527.672 will be treated as administrative violations, as described for ORS 527.740 (120-acre limit on harvest type 3 units) in ODF Directive 6-3-0-001 Forest Practices Act Enforcement.

HB 3549 also inserted references to ORS 527.672 into ORS 527.990 Criminal Penalties and 527.992 Civil Penalties, thereby incorporating ORS 527.672 into the enforcement system of the Oregon Forest Practices Act.

### **COMPLIANCE:**

Unsatisfactory Condition: An unsatisfactory condition exists when an operator applies one or more herbicides by aerial means on forestland, and fails to leave an unsprayed strip of at least 60 feet adjacent to an inhabited dwelling or school. See ADMINISTRATION for the definitions of “unsprayed strip,” “inhabited dwelling,” and “school.”

Damage: ORS 527.672 includes neither a purpose statement nor a description of a protected resource, so there is no opportunity to identify damage to a resource. See Violation below.

Violation: An unsatisfactory condition under ORS 527.672 is automatically a violation. Because there is no opportunity to identify damage to a resource under ORS 527.672, ODF will consider noncompliance with that statute to be an administrative violation. Because the presumed intent of ORS 527.672 is protection of human health and safety, ODF’s policy is that except in rare circumstances it will issue a citation for a violation of that statute.

Written Statement of Unsatisfactory Condition: OAR 629-670-0125 allows the State Forester discretion to issue a written statement of unsatisfactory condition for administrative violations if the criteria specified in that rule are satisfied. However, because the presumed intent of ORS 527.672 is protection of human health and safety, ODF’s policy is that except in rare circumstances it will **not** issue a written statement of unsatisfactory condition in lieu of citation under OAR 629-670-0125.

Citation:

Use the following procedure if a citation is issued.

- Offense box. Enter “Applied herbicides by aircraft and failed to leave an unsprayed strip of at least 60 feet adjacent to [enter “an inhabited dwelling” or “a school” as appropriate].”
- In Violation of: Enter “ORS 527.672.”
- Unsatisfactory Condition box. Enter “Applied herbicides by aircraft and failed to leave an unsprayed strip of at least 60 feet adjacent to [enter “an inhabited dwelling” or “a school” as appropriate].”
- Order to cease further Violation. Complete the order as follows: “Pursuant to ORS 527.680(2), you are hereby directed to cease further violation of ORS 527.672 which requires that operators leave a 60-foot unsprayed strip adjacent to [enter “an inhabited dwelling” or “a school” as appropriate].”
- Order to repair Damage or Correct Unsatisfactory Condition. If a violation occurs, there is no opportunity to repair the consequences of the violation. Enter “No repairs are ordered.”

Alternate Practices:

Because ORS 527.672 does not allow alternate practices, there is no opportunity for ODF to approve a plan for an alternate practice. For example, agreement by the owner of an inhabited dwelling that an aerial herbicide application on that property or an adjacent property could take place closer than 60 feet to the dwelling would **not** lead ODF to allow such a practice under the Forest Practices Act.

**ADMINISTRATION:**

**Summary of Definitions for ORS 527.672 Aerial herbicide applications**

Table 1 provides a quick-reference summary of definitions developed by ODF as needed to administer ORS 527.672. A detailed introduction and background on ORS 527.672 is provided in the guidance following the table. Tables 2 and 3 duplicate Table 1 to some degree, but they provide necessary detail for the various definitions.

<b>Table 1: Summary of Definitions for Administration of ORS 527.672</b>
<b>Effective Date of Statute:</b> Starting January 1, 2016
<b>“Unsprayed strip”</b> means a no-direct application zone.
<b>60-foot</b> zone is measured in horizontal distance from an inhabited dwelling (the dwelling structure only) or a school (the property boundary of the school campus).
<b>“Inhabited dwelling”</b> means: ----- any structure meeting the following definition of a ‘dwelling unit’: <ul style="list-style-type: none"> <li>• A "<b>Dwelling unit</b>" means a <b>structure</b> or the part of a <b>structure</b> that is used as a <b>home</b>, residence or sleeping place by one <b>person</b> who maintains a household or by two or more persons who maintain a common household. The dwelling unit structure itself; excluding outbuildings, yard areas, or other land associated with the structure.</li> </ul>

**“School”** means the campus of a school, with school defined as follows:

- Public or private Oregon prekindergarten or a federal Head Start
- A public or private educational institution all or part of kindergarten through grade 12
- An educational facility of an education service district
- A community college
- The Oregon School for the Deaf
- A regional residential academy operated by the Oregon Youth Authority
- Public Universities, e.g., Oregon State University, University of Oregon
- Private Colleges or Universities

ORS 572.672 applies to aerial forest herbicide applications near schools regardless of formal school hours, the timing of scheduled or unscheduled events, or the presence (or absence) of students, staff, or others.

### **Background**

HB 3549 was adopted by the Oregon Legislative Assembly in 2015, and the Governor signed the bill into law on August 12, 2015. The bill was the culmination of long discussions during the legislative session regarding pesticide use. The bill contained many items related to pesticide use (e.g., technical adjustments to Oregon Department of Agriculture (ODA) fees, enforcement processes, and licensing standards), but the items relevant to the Oregon Forest Practices Act are as follows (after codification into ORS):

- Added ORS 527.672, outlining the new unsprayed strip requirement (see below for more detail).
- Inserted references to ORS 527.672 into ORS 527.990 and 527.992, thereby incorporating the unsprayed strip requirement into the enforcement system of the Oregon Forest Practices Act.

The legislature did not provide a preamble or purpose statement in HB 3549 or in ORS 527.672. The effective date of HB 3549 was not predicated on Board of Forestry rulemaking, and the legislature did not direct the Board to adopt rules for implementation. In the interim, and until further notice, ODF will use this guidance for administration of the unsprayed strip requirement.

### **Scope**

- The restrictions in ORS 527.672 became active starting January 1, 2016.
- The restrictions in ORS 527.672 are in effect only for aerial applications of herbicides on forestland. Ground-based applications are not subject to these restrictions. Applications of pesticides other than herbicides are not subject to the restrictions in ORS 527.672, but product label requirements and other relevant regulations would still apply.

### **Defining Unsprayed Strip (No-direct Application Zone)**

ODF defines “unsprayed strip” as a no-direct application zone. The logic for that determination is as follows.

ORS 527.672 does not specify the precise meaning of “unsprayed strip.” However, existing setbacks from waters in Type F streams are described as zones of “no direct application” in OAR 629-620-0400 Protection of the Waters of the State and Other Resources When Applying Chemicals. In addition, there was an indication in legislative committee hearings on the bill that the authors intended to restore the restriction on aerial herbicide applications near inhabited dwellings that was in the chemical rules until the Board of Forestry revised those rules in 1997. The rule apparently referred to was OAR 629-24-203(6) (see REFERENCES).

The pre-1997 guidance for OAR 629-24-203(6) indicated that the unsprayed strip would be a no-direct application zone. Current guidance for application setbacks described in OAR 629-620-0400 takes the same approach. For these reasons, ODF defines “unsprayed strip” as a no-direct application zone.

### **Administering “Unsprayed Strip” (No-direct Application Zone)**

"Direct application" means an herbicide is applied at a concentration at or above the concentration applied to the target area.

ODF’s purpose in administration of ORS 527.672 is to provide a setback for direct application to protect human health and safety. The purpose is not to maintain an herbicide-free zone around inhabited dwellings or schools. If an herbicide has been directly applied within the 60-foot zone by aircraft, a violation has occurred, as there is no opportunity to eliminate the consequences of noncompliance.

### **Evaluating Compliance**

ODF will use post-application visual observation of herbicide effects on vegetation (item 2 below) as the routine method of evaluating compliance with the unsprayed strip requirement. ODF will use other methods shown below in combination with this method, as outlined in items 1 through 4 following.

#### **1. Direct Observation at the Time of the Application**

- a. **What:** When aware that aerial herbicide applications may take place near schools or inhabited dwellings, ODF field staff may be on site to observe the applications. Joint observation with ODA staff is often advisable.
- b. **When:** ODF field staff should conduct these inspections when the forest landowner, neighbors, or others indicate there may be heightened concern over a proposed application.
- c. **Additional Information:** It is rare that direct observation alone would provide results conclusive enough for compliance evaluation. Typically, it is difficult to find a safe observation point close enough to the application and with an effective vantage point for the observation to be conclusive. Therefore, this method should be used only in combination with other methods discussed here.

#### **2. Post-Application Visual Observation of Herbicide Effects on Vegetation**

- a. **What:** On-site, post-application, visual inspection and comparison of herbicide effects on vegetation inside and outside the 60-foot zone. This is ODF’s standard method of assessing whether direct application has occurred in the 60-foot zone.
- b. **When:** ODF field staff should conduct these inspections when the forest landowner, neighbors, or others indicate there is a concern over a completed aerial herbicide application. ODF field staff should conduct inspections in other circumstances as other

priorities and workloads allow. In either situation, inspections should be timed to allow herbicide effects on vegetation in the subject unit to become evident.

c. **Additional Information:**

- i. To assess if direct application of herbicides has occurred, visually compare vegetation within the target unit to vegetation within the 60-foot zone. If the chemical effects are the same or similar between the two areas, then direct application has occurred in the 60-foot zone. Minor incursion or drift (showing less effect than in the application unit) into the 60-foot zone may not indicate noncompliance.
- ii. Environmental conditions such as very cold temperatures, disease, and summer to autumn transitions can cause foliar symptoms similar to what is caused by herbicides. As needed, ODF may request assistance from ODA staff, who have expertise and experience in identifying herbicide effects on foliage.
- iii. ORS 527.672 does not regulate ground-based herbicide applications. In some instances, there may have been ground-based applications within the 60-foot zone around schools and inhabited dwellings. ODF field staff should consider this possibility when evaluating compliance.

**3. Review of GPS Flight Records**

- a. **What:** Most helicopter pilots maintain GPS tracks for aerial herbicide applications. GPS tracks show where the aircraft has flown, and often whether nozzles were open or closed.
- b. **When:** ODF field staff should request these records when there is a pre- or post-operation complaint or other indication of potential noncompliance.
- c. **Additional Information:**
  - i. ODF should use GPS tracks only as supporting information, or to determine if further investigation is needed. For the following reasons, ODF should not use GPS tracks as proof that a violation of ORS 527.672 has occurred.
    1. The tracks show only the location of the aircraft, not the deposition of the herbicide;
    2. There are potential inaccuracies when a GPS track is transferred to a map projection; and
    3. GPS tracking equipment may be inoperative, or may lose satellite signals at times.
  - ii. Operators are not required to provide GPS tracks to ODF, but to date, most have been willing to do so. In some instances, ODA may have already obtained the records, and could make them available to ODF.

**4. Sampling and Analysis**

- a. **What:** When done properly, sampling of media and analysis of results for the presence of herbicides can help determine if direct application has occurred in the 60-foot zone.
- b. **When:** ODF field staff should use this method when there is a pre- or post-operation complaint or other indication of potential noncompliance. Refer to the ODF Complaint Investigation and Reporting Policy, Procedures, and Guidance Documents for other information on responding to complaints or other indications of noncompliance.
  - i. ODF does not intend that sampling and analysis will be done routinely to determine whether direct application has occurred in the 60-foot zone. ODF staff have neither the training nor the equipment to properly collect and ship sampled media. ODA has agreed to collect samples at no cost to ODF when there are specific concerns about an application, especially given that ODA would likely already be involved in

sensitive situations.<sup>1</sup> ODA likely would not have the resources to assist with sampling for all applications subject to ORS 527.672.

- ii. Samples would generally be analyzed at ODA's laboratory. ODA has agreed that it will pay for analysis of samples needed for ODA and ODF investigations. ODF would need to pay for analysis needed solely for ODF investigations. ODF should work with ODA prior to sampling occurring to clarify who will pay for what in a given situation.
- iii. Ideally, samples should be collected within one to two weeks after a subject application. In some instances, however, ODF might not be aware of specific concerns or allegations until a later date. Depending on specifics of the application and site, sampling and analysis probably are still appropriate at later dates. ODF should consult with ODA to determine the best approach.

**c. Additional Information:<sup>2</sup>**

- i. Establish a sampling and analysis plan in consultation with ODA before starting sampling.
- ii. To get meaningful results, it is critical that sampling and analysis be conducted properly. A single sample or a limited number of samples would likely be inconclusive. The need is to establish a gradient of herbicide concentrations from within the 60 foot zone extending into the intended application unit. See Figure 1<sup>3</sup> for a graphic representation of an example sampling scheme outlining the gradient concept.
- iii. Sample media would typically be vegetation, but in some instances could include soil, water, or other media.
- iv. ORS 527.672 does not regulate ground-based herbicide applications. In some instances, there may have been ground-based applications within the 60-foot zone around schools and inhabited dwellings. ODF field staff should consider this possibility when evaluating compliance.

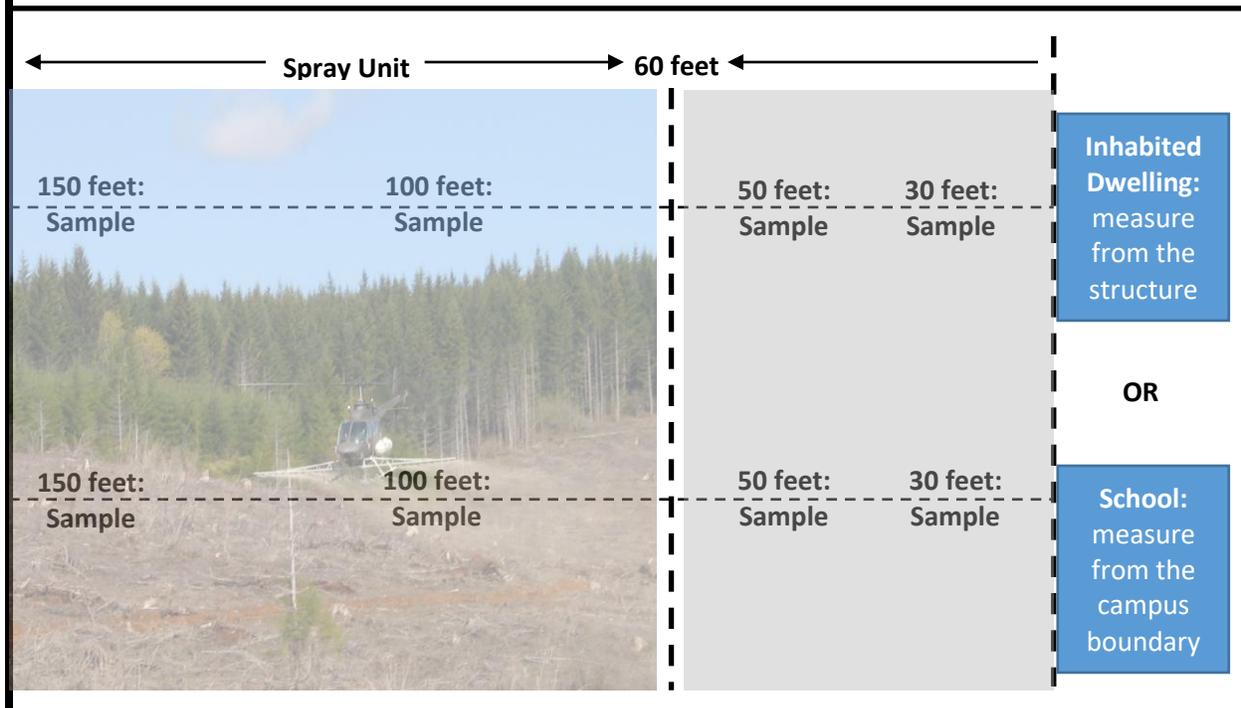
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<sup>1</sup> This sentence and the following elements in item 4.b are taken from a personal communication, Brad Knotts (ODF) with Mike Odenthal (ODA), June 16, 2016.

<sup>2</sup> Information related to ODA in item 4.c. is taken from a personal communication, Brad Knotts (ODF) with Mike Odenthal (ODA), May 25, 2016.

<sup>3</sup> Figure 1 is based on a personal communication, Brad Knotts (ODF) with Mike Odenthal (ODA), May 25, 2016.

**Figure 1: Example Gradient Sampling Scheme**



**Procedures:**

1. Use at least two roughly parallel lines of samples from inhabited dwelling (structure) or school (campus).
2. Establish concentration gradient from near protected site across the 60-foot zone, and into the spray unit.
3. Do not sample at the zero-foot or 60-foot mark; analysis results for samples at those locations are not conclusive in evaluating compliance.
4. Adjust the scheme as needed to fit each site. Consult ODA each time sampling is planned.

**Measuring 60 Feet**

Measure the 60-foot zone in horizontal distance.

ORS 527.672 does not specify how the distance is to be measured. However, because the Chemical and other Petroleum Product Rules specify that all distances established in that division are to be measured horizontally (see OAR 629-620-0000(4)), and the unsprayed strip is a related standard, ODF will measure the 60-foot zone in horizontal distance. The starting points for measurements are as follows:

- For an inhabited dwelling, measure the distance starting from the nearest edge of the dwelling structure.
- For a school, measure the distance starting at the nearest property boundary of the school campus.

### Defining “Inhabited Dwelling”

For the purposes of administering ORS 527.672, ODF defines “inhabited dwelling” as shown in Table 2. In summary, the definition attempts to describe structures that a reasonable person would consider a dwelling.

**Table 2: Definition of “Inhabited Dwelling” for Administration of ORS 527.672**

“Inhabited dwelling” means any structure meeting the following definition of a ‘dwelling unit’:

1. “**Dwelling unit**” means a **structure** or the part of a **structure** that is used as a **home**, residence or sleeping place by one **person** who maintains a household or by two or more persons who maintain a common household. The dwelling unit structure itself; excluding outbuildings, yard areas, or other land associated with the structure.

### Background for Table 2 “Definition of Inhabited Dwelling”

ORS 527.672 does not define “inhabited,” “dwelling,” or “inhabited dwelling.” In the absence of statutory direction, ODF has determined that “inhabited” means people would generally be present, even if they might not be present in the dwelling at the precise date and time when an aerial herbicide application takes place. The reasons for this determination are:

- It is appropriate to take an approach that is conservative of human health and safety; and
- It would be difficult to evaluate compliance based on presence of people at the time of an application. That is, how would ODF (or an operator) know if anyone was or was not present in a dwelling at any given moment?

A review of Oregon Revised Statute, Oregon Administrative Rules, and county land use regulations yields a general concept of a habitable dwelling, although the concept is used for processes such as evaluating whether new homes may be built on natural resource lands, or whether a permit for a replacement dwelling will be approved. Even so, the general concept of habitable dwelling approximates what the reasonable person would identify as a dwelling. Therefore, ODF will use that concept, with some modification, as shown in Table 2.

In developing Table 2, ODF also used concepts in the guidance from OAR 629-24-203(6) (see the discussion under Unsprayed Strip above). That rule was deleted in 1997, but the guidance is still helpful. Two versions of that guidance indicated the following:

- “Inhabited dwelling’ means a structure used as a residence. Barns, storage sheds, etc. are not considered to be inhabited dwellings.” (1978)
- “Outbuildings such as sheds or barns are not inhabited dwellings.” (1995)

### Defining “School”

ODF defines “school” as shown in Table 3.

**Table 3: Definition of “School” for Administration of ORS 527.672**

1. ORS 527.672 applies to aerial forest herbicide applications near schools regardless of formal school hours, the timing of scheduled or unscheduled events, or the presence (or absence) of students, staff, or others.
2. ORS 527.672 applies only to the “campus” of a “school.”
3. **“Campus”** means the buildings, other structures, playgrounds, athletic fields and parking lots of a school and any other areas on the school property that are accessed by students on a regular basis.<sup>4</sup>
  - a. “Campus” includes undeveloped, school-owned areas such as forested areas that are geographically connected to the developed campus and that are used for instruction of students.
  - b. “Campus” does **not** include undeveloped school-owned areas such as forested areas that are geographically unconnected to the developed campus.
  - c. “Campus” does **not** include buildings such as school district administrative facilities that are typically not used for instruction.
4. School” means any of the following<sup>5</sup>:
  - a. A public or private facility operating an Oregon **prekindergarten or a federal Head Start program**<sup>6</sup>
  - b. A public or private educational institution offering education in all or part of **kindergarten through grade 12**
  - c. An educational facility of an **education service district** as defined in ORS 334.003 (See REFERENCES) that provides regional educational services to component school districts.
  - d. A **community college** as defined in ORS 341.005, for the community college’s own buildings and ground maintenance, as follows: “A public institution operated by a community college district for the purposes of providing courses of study limited to not more than two years’ full-time attendance, with the exception of technical programs in which the curriculum may require more than two years of attendance but less than four years, and designed to meet the needs of a geographical area by providing educational services, including but not limited to career and technical education programs or lower division collegiate programs.”
  - e. The **Oregon School for the Deaf**
  - f. A regional residential academy operated by the **Oregon Youth Authority**
  - g. “School” also means: Each **public university** listed in ORS 352.002, for the public university’s own building and grounds maintenance.<sup>7</sup> Public Universities currently listed in that statute are:
    - i. University of Oregon
    - ii. Oregon State University
    - iii. Portland State University
    - iv. Oregon Institute of Technology
    - v. Western Oregon University
    - vi. Southern Oregon University
    - vii. Eastern Oregon University
5. “School” also means **Private Colleges or Universities**<sup>8</sup>

<sup>4</sup> Item 3 is from ORS 634.700 (1) Integrated pest management: Campus. Items 3a and 3b are ODF interpretations, with further elaboration shown under the Background for Table 3. Item 3c is an ODF interpretation based on the ORS 634.700 definition of campus.

<sup>5</sup> From ORS 634.700 (8) Integrated pest management: Schools

### **Background for Table 3 “Definition of School”**

ORS 527.672 states that an operator must maintain a 60-foot unsprayed strip adjacent to “an inhabited dwelling or school.” Neither HB 3549 nor public discussions among legislators provided substantive guidance on whether the authors intended a reading of “inhabited school” or merely “school.” However, because the authors could have used the text “inhabited dwelling or inhabited school,” ODF’s interpretation is that the intended meaning is merely “school” (not “inhabited school”). In addition, students and others may be present on school grounds at times or seasons outside of regular school hours, so the question is somewhat moot. Therefore, ODF’s determination is that ORS 527.672 applies to a school at all times, regardless of formal school hours or the timing of scheduled or unscheduled events at the school.

A clear definition of “school” is needed for administration of ORS 527.672, but again, neither HB 3549 nor public discussions among legislators have provided such detail. Therefore ODF needed to develop a working definition of “school.” ODF began with a common definition, as follows:<sup>9</sup> “An organization that provides instruction: as (a) an institution for the teaching of children; (b) college, university.” This definition provides a solid starting point for developing a comprehensive definition.

ODF then searched Oregon Revised Statutes and Oregon Administrative Rules. While not directly related to ORS 527.672, the definitions and approaches in state Integrated Pest Management statutes were the best fit, providing definitions of elementary schools, community colleges, and public universities at least partially for the purposes of managing pesticide use. Those statutes also outlined a concept that the regulations apply only to school “campuses”; ODF determined it was supportable to adopt that concept as meeting the apparent intent of the legislature to protect human health and safety.

There is the further question of whether undeveloped, school-owned properties that are away from the developed portion of the campus with school facilities, but that may still be used for instruction, would be considered “campuses” in the context of ORS 527.672.<sup>10</sup> Such parcels are often used by schools for learning, research, and/or demonstration, and may have operational agricultural or forest uses.

In most instances, ODF will consider that if such an undeveloped property has a direct, geographic connection to the developed campus, the property will be considered part of that campus. One example would be a forested area that is contiguous to a high school campus and that may have students present at times. Undeveloped parcels that are not geographically connected or adjacent to a developed campus will not be considered part of the school campus. An example would be Oregon State University’s McDonald-Dunn Forest, which is used for student instruction, but is not geographically connected to the developed Oregon State University campus. ODF’s determination in this instance is based on the likelihood that in adopting ORS 527.672, the legislature (1) was focused on traditional

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<sup>6</sup> “Public and private” does not occur here in the ORS 634.700 (8) definition of schools. It is inserted in this guidance to account for private pre-kindergarten facilities.

<sup>7</sup> From ORS 634.660 (1) Integrated pest management: State agencies and universities

<sup>8</sup> Included here based on the Merriam-Webster definition of “school.”

<sup>9</sup> From <http://www.merriam-webster.com/>, March 9, 2016.

<sup>10</sup> As used in this context, “developed” means school facilities such as instructional buildings, athletic fields, or other constructed facilities are present. “Undeveloped” means those school facilities are not present, e.g., forestland with few or no structures.

school campuses, and (2) did not intend to prohibit aerial herbicide applications outright on forested areas managed by universities, as would be the case if these areas were considered school campuses.

### **When is a Campus no longer a School?**

There may be instances where school campuses are not used as schools for some period of time, e.g., for a period of years when enrollment in a district has decreased. In some cases, the campus will again be used as a school; in others, the campus may remain dormant or may be converted to some other use, e.g., office buildings. Once a campus has been used as a school, ODF will consider that it is a school for the purposes of ORS 527.672 until the campus is used for a different purpose, or it deteriorates to the point that it is no longer reasonable to consider that it would be used as a school.

### **Identifying Schools and Inhabited Dwellings**

ORS 527.672 clearly indicates that it is the operator's responsibility to comply with the unsprayed strip requirement. The statute does not direct ODF to develop an inventory of schools or inhabited dwellings, and it does not state that ODF must notify the operator of the presence of such sites. Therefore, the operator has the ultimate responsibility to use the definitions described above to identify schools and inhabited dwellings that may be affected by a specific aerial herbicide application. ODF may provide to an operator any relevant information it possesses, but is not responsible to maintain an inventory of inhabited dwellings or schools, or to notify operators of the presence of such sites.

Currently, there is no requirement that an operator must notify ODF of the presence of schools or inhabited dwellings, and there is no requirement that the operator must submit a written plan for aerial herbicide applications near such sites. ODF field offices will need to evaluate compliance based on a post-operation review, based on this guidance. As always, ODF field offices should work to help operators and landowners prior to operations beginning to help them understand protection requirements.

### **Outreach to Operators and Landowners**

Because ORS 527.672 places responsibilities on operators, and because identifying schools and inhabited dwellings on the landscape may be difficult, ODF staff in field offices and in Salem should reach out to potentially affected operators and landowners with information on the requirements in the statute.

### **REFERENCES:**

- Abbreviations/Acronyms
  - GPS: Global Positioning System
  - ODA: Oregon Department of Agriculture Pesticide Program
  - ODF: Oregon Department of Forestry
- 334.013 Composition of education service districts
  - (1) On and after the effective date of the order entered under section 25, chapter 784, Oregon Laws 1993, except as the boundaries of an education service district may be changed by merger under ORS 334.710 to 334.770 or other provision of law, the education service districts are as follows:
    - (a) Region 1. Clatsop, Columbia, Tillamook and Washington Counties.
    - (b) Region 2. Multnomah County.
    - (c) Region 3. Marion and Polk Counties.
    - (d) Region 4. Lincoln, Linn and Benton Counties.
    - (e) Region 5. Lane County.
    - (f) Region 6. Douglas County.

(g) Region 7. Coos and Curry Counties and the area lying within the Reedsport School District.

(h) Region 8. Jackson, Josephine and Klamath Counties.

(i) Region 9. Hood River and Wasco Counties.

(j) Region 10. Crook and Deschutes Counties.

(k) Region 11. Lake County.

(L) Region 12. Umatilla and Morrow Counties.

(m) Region 13. Union and Baker Counties.

(n) Region 14. Malheur County and the area comprising the Huntington School District.

(o) Region 15. Clackamas County.

(p) Region 16. Yamhill County.

(q) Region 17. Harney County.

(r) Region 18. Wallowa County.

(s) Region 19. Sherman, Gilliam and Wheeler Counties.

(t) Region 20. Grant County.

(u) Region 21. Jefferson County and the area comprising the Warm Springs Reservation.

(2) Where a boundary change or formation of a component school district results in a joint school district, the joint school district shall be included in the education service district in which the joint district's administrative office is located.

- **OAR 629-620 Chemical and Other Petroleum Products**, rules and guidance
- **OAR 629-24-203(6) Protection of Streams, Lakes, Wetlands, and Dwellings when applying Chemicals** [From December 1, 1994 Oregon Administrative Rules; deleted in 1997]  
When applying herbicides by aircraft near inhabited dwellings, operators shall leave an unsprayed strip of at least 60 feet adjacent to such dwellings.