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Integration of Forest Practices Act Standards and EPA/FIFRA buffers relevant to Atrazine Labels

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Background

Over approximately the last year, questions have arisen over how the following statement in atrazine product labels applies to forestry use of atrazine:

“This product must not be applied within 66 feet of points where field surface water runoff enters perennial or intermittent streams or rivers...”

The purpose of this document is to clarify how this requirement applies in the forest environment. The document is organized by the water classification system described in Water Protection Rules described in the forest practices rules adopted under the Oregon Forest Practices Act.

Atrazine labels also contain a statement prohibiting direct application of the product into waters. Applicators have had a much clearer idea of how to comply with this requirement, but it bears repeating here, since it is related to the following discussion.

Summary

All forest chemical applications must comply with the following:

- Requirements on the label of the pesticide product being used.
- Best management practices described in the forest practice rules to avoid erosion and sedimentation during and after timber harvesting and related activities.
- All other Forest Practices Act standards.

For the purposes of administering atrazine label requirements, the Oregon Department of Agriculture (ODA) considers that (1) a point where field surface runoff enters a perennial or intermittent stream or river means the point where one stream enters another, and (2) the forest practice rule definitions of streams will be used to define perennial or intermittent streams or rivers.

For streams, current forest practice rules combined with the “no direct application to waters” label statement provide most of protection required by the language referring to no application within 66 feet of points where field surface runoff enters streams. However some additional protection is required for streams, and significantly increased protection is required for significant wetlands, lakes, and reservoirs. It is important to note that the additional buffer distances required for streams apply only to stream intersections, not to entire stream reaches. However, to ensure compliance with atrazine labels statements, applicators may often choose to simplify the job by applying the additional buffer distances along the entire stream length. All of these items are described in the following.

Type F stream

- Forest Practices Act
 - Has fish use
 - Vegetation retention required in buffers (called riparian management areas) of 50 feet for small streams, 70 feet for medium, and 100 feet for large
 - Operator must retain all vegetation within 10 feet of average high water level
 - Operator must retain all trees within 20 feet of average high water level
 - Operator must retain additional trees to meet specified numbers
 - Applicator must protect all vegetation required to be retained
 - **No direct aerial herbicide application within 60 feet horizontal distance of average high water level (along entire Type F stream)**
 - **No direct ground herbicide application within 10 feet horizontal distance of average high water level (along entire Type F stream)**
- Atrazine label
 - **No direct applications of atrazine by aerial and ground methods within 66 feet horizontal distance of the point where any other stream enters the Type F stream. This means the applicator must add at least an extra 6 feet to the FPA 60 foot no direct application buffer *at these points only.***

Type D stream

- Forest Practices Act
 - Has domestic use (drinking water, etc.), but no fish use
 - Vegetation retention required in buffers (called riparian management areas) of 20 feet for small streams, 50 feet for medium, and 70 feet for large
 - Operator must retain all vegetation within 10 feet of average high water level
 - Operator must retain all trees within 20 feet of average high water level
 - Operator must retain additional trees to meet specified numbers
 - Applicator must protect all vegetation required to be retained
 - **No direct aerial herbicide application within 60 feet horizontal distance of average high water level (along entire Type D stream)**
 - **No direct ground herbicide application within 10 feet horizontal distance of average high water level (along entire Type D stream)**
- Atrazine label
 - **No direct applications of atrazine by aerial and ground methods within 66 feet horizontal distance of the point where any other stream enters the Type D stream. This means the applicator must add at least an extra 6 feet to the FPA 60 foot no direct application buffer *at these points only.***

Medium and Large Type N Stream

- Forest Practices Act
 - No fish use, no domestic use
 - Vegetation retention required in buffers (called riparian management areas) of 50 feet for medium, and 70 feet for large
 - Operator must retain all vegetation within 10 feet of average high water level
 - Operator must retain all trees within 20 feet of average high water level

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- Operator must retain additional trees to meet specified numbers
- No specific spray setback, but applicator must protect all vegetation required to be retained
- Atrazine label
 - **No direct application of atrazine by aerial and ground methods within 66 feet horizontal distance of the point where any other stream enters the large or medium Type N stream. The 66-foot no direct application buffer applies *at these points only*.**

Small Type N Streams

- Forest Practices Act
 - No fish use, no domestic use
 - For perennial small Type N streams with large enough drainage size, operator must retain shrubs and small trees within 10 feet of average high water level. Applicator must protect vegetation required to be retained.
- Atrazine label
 - Applicators must follow label requirements. **Atrazine labels state “No direct application to water.”** For most small Type N streams with water at application time, aerial application path is across the stream, with the applicator shutting off before reaching the stream and starting again after passing it. The label does not require specific application setbacks, but the practical effect is that no direct application buffers of varying widths are left along small Type N streams with water at the time of application.
 - ***If water is present at the time of application, aerial and ground applications must have 66-foot horizontal distance no direct application buffer at the point where the small Type N stream enters any stream classified larger than a small Type N. This means the applicator must ensure that the buffer described in the bullet immediately above is at least 66 feet from these stream intersection points only.***
 - **The 66-foot buffer is not required for small Type N streams without water at the time of application.**

Significant Wetland (estuaries, bogs, other wetlands greater than eight acres), lakes, ponds or any impounded water bodies

- Forest Practices Act
 - Vegetation retention for significant wetlands and lakes
 - Applicator must protect all vegetation required to be retained
 - **No direct aerial herbicide application within 60 feet horizontal distance of average high water level of significant wetlands, most lakes, and other standing water that is greater than ¼ acre (along entire water body)**
 - **No direct ground herbicide application within 10 feet horizontal distance of average high water level of significant wetlands, most lakes, and other standing water that is greater than ¼ acre (along entire Type D stream)**
- Atrazine label
 - **Any natural or impounded lake or reservoir, regardless of size, must have a no direct application buffer of 200 feet horizontal distance for either ground or**

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aerial applications. The 200-foot buffer applies to the entire water body and supersedes the buffers required by the Forest Practices Act.

Relevant Characteristics of Forestland Application Units Considered in Interpreting the Atrazine Label Requirement

- Usually harvested once every 30-50 years. Herbicide applications might occur 2-3 times in the first 3 years after harvest, but atrazine would rarely be applied more than once until the next harvest.
- Typically, application units have a high amount of organic material in and on the soil. Soils have high infiltration rates. As long as operators comply with erosion prevention BMPs, direct movement of sediment into streams is uncommon. Sheet erosion collecting into rills and depositing into streams is very rare.
- **BMPs are included in the FPA to ensure minimum soil runoff. Vegetative buffers are desired and are addressed through vegetation protections provided above.**