

### Federal Air Rules for Indian Reservations Fact Sheet: Orchard & Vineyard Burning on the Yakama Reservation

# Why do farmers tear out existing orchards and vineyards?

Orchardists change varieties of fruit and farming techniques to remain competitive in the market. This requires the orchardists to tear out existing blocks of orchards and vineyards to prepare for replanting.

### What happens to the material that is removed?

Several methods can be used to dispose of woody material from orchard and vineyard pruning and tear outs, including burning, chipping, shredding, grinding, composting or use as hog fuel.

Although burning may appear to be the easiest way to dispose of vegetation, the use of alternative disposal methods can result in cleaner air for our families and community.

## What are the health effects related to burning orchard and vineyard material?

Smoke is made up of a complex mixture of gases and fine particles produced when wood and other organic matter burn. The biggest health threat from smoke comes from fine particles. These microscopic particles can get into your eyes and respiratory system, where they can cause health problems such as burning eyes, runny nose, and illnesses such as bronchitis. Fine particles can also aggravate asthma and chronic heart and lung diseases—and are linked to premature deaths in people with these chronic conditions.



## Who is most affected by this type of air pollution?

Elders, children, pregnant women and people with heart or respiratory diseases (like asthma) are most at risk from breathing smoke and particulate matter.



What rules apply to burning orchard and vineyard material?

Open burning of orchard and vineyard material is regulated by the Federal Air Rules for Indian Reservations in Idaho, Oregon, and Washington (FARR). FARR open burning rules must be adhered to when burning orchard or vineyard material:

- During a burn ban, open burning is not allowed. EPA may declare a burn ban whenever air quality concentrations approach, or are predicted to approach, the heath standards for particulate matter. Please call the FARR Hotline at 1-800-424-4EPA or check the FARR website www.epa.gov/r10earth/FARR before burning to find out if a burn ban is in effect.
- During a burn ban, all open burning must be put out immediately or allowed to burn down by withholding additional fuel.
- Do not burn garbage, plastics, demolition debris (treated or painted wood), tires, diesel fuel, or any other prohibited materials - these are illegal.
- Material that is burned must be kept as dry as possible.
- Material that will not burn (dirt, rocks) must be separated from the material to be burned as much as possible.
- During open burning, a natural or artificial draft (moving air) must be present.
- The material being burned must be separated from the grass or peat layer when possible.
- The fire must not be allowed to smolder (burn slowly with no flame).
- Check with local fire protection service and the Yakama Nation Fire Management to find out about their requirements before you burn.

### How can I burn more cleanly and safely?

**Keep it Dry:** Make sure the materials are as dry as possible and free from dirt. Three weeks is recommended for drying for prunings and small branches, and at least six weeks is recommended for drying for large branches and stumps.

**Keep it Hot:** Build and maintain the fire as hot as possible. Burning at low temperatures creates smoke as a result of incomplete combustion. Heat and ignite the entire pile as quickly as possible with a propane torch or other commercial lighting device.

**Oxygen:** Stack your starter pile of brush and wood as tightly as possible, but make sure it has enough air circulating throughout. Brush and wood require plenty of air to burn efficiently. Smaller pieces will burn more quickly than larger chunks. Carbon monoxide, volatile organic compounds and soot particles are produced when there is not enough oxygen available.

**Use the Right Material:** Only burn natural vegetation. Add material after the starter pile is fully engulfed. Once the fire is started, feed it continuously. Avoid pushing dirt into the pile with the pruning or tear out material.

**Manage the Fire:** Make several small diameter, tall piles rather than one large, sprawling pile. Keep the piles small enough to control the fire and prevent escape. You must have fire suppression equipment and water available.

**Don't leave your fire unattended:** Unattended fires are a hazard and you need to be on hand to maintain a hot fire. Do not walk away until the fire is out and cool.

**Manage the Smoke:** Light a small test fire before starting your fire to check the direction of the smoke plume and ventilation. Be sure the plume is blowing away from neighbors, roads, schools and other sensitive places to prevent smoke impacts to surrounding people and places. If a burn has the potential to cause visibility hazards on roadways, contact the local transportation agency prior to burning for applicable traffic control requirements.

### Who should I contact if I have further questions about burning orchard and vineyard material?

#### **USEPA Region 10 Contacts:**

FARR Hotline AWT 107 1200 6<sup>th</sup> Ave., Suite 900 Seattle, WA 98101 1-800-424-4372

Jerry Craig, US EPA, FARR Compliance & Outreach 15 West Yakima Ave., Suite 200, Yakima, WA 98902 Craig.Jerry@epa.gov (509) 952-3057

#### Yakama Nation Contacts:

Hillary Renick, Air Quality Specialist 604 W. 4th Ave. Suite E Toppenish, WA 98948 hillary@yakama.com (509) 865-5121 ext: 6078

Yakama Nation Fire Management (509) 865-6653

### Additional Information

Additional information about the FARR is available at the EPA Region10 FARR website

#### www.epa.gov/r10earth/FARR.

The website provides additional background information on the rule and implementation of the FARR.

The FARR Hotline is available at 1-800-424-4EPA to provide information, forms and respond to questions.

