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October 16, 2014

Dear Agricultural Burn Permit Customer:

As you may know, Department of Ecology (Ecology) has revised the rules for Agricultural burning set in Washington Administrative Code (WAC) 173-430. These changes became effective December 12, 2010, but we will implement them effective January 1, 2011. In anticipation of these changes the Yakima Regional Clean Air Agency (YRCAA) met with your representatives on November 18, 2010 to inform you of the changes. We realize that not all of our community may know of these changes. Therefore, a summary of the changes to the rule (WAC 173-430) is attached for your information. The primary change to the rule is the fee basis for pile burning permits. Fees will be based on tons to be burned rather than acres. For burning of orchard wood, we developed a worksheet to calculate tons of wood. The worksheet will be posted on our website and available in our office at the front desk. A copy of the worksheet with the three acceptable methods and explanation is enclosed for your reference.

To further simplify the agricultural burn permit process, we are attaching our new permit in this letter. You may fill it out before you come to our office and we will help you with the calculation, if needed. Of course, you can always call us for any help you may need.

Effective January 1, 2013 pile burning permit fee is \$80 for the first 80 tons of material to be burned and \$1.00 for each additional ton. YRCAA is committed to continue serving you through the daily allocation program. YRCAA will continue to strive to find easier ways to advise of the daily allocation by issuing the allocation one day prior to the burn day at 3:00 to 3:30 PM daily and 3:00 to 3:30 PM Friday for the weekend. This way, you do not have to wait until 10:00 AM to start burning. When the forecast and the models show excellent ventilation and dispersion for the following day, YRCAA will allocate unlimited burning. Most importantly, we at YRCAA thank you for your cooperation and understanding of our Valley's need to maintain healthful air quality.

Best regards,

Hasan M. Tahat, Ph.D.
Engineering and Planning Division Supervisor

Encl: Summary of the changes to Agricultural Burning WAC 173-430
Worksheet for estimating tonnage of a pile of orchard tear-out wood
Agricultural burn permit application and additional burn page (if needed)

Cc: Gary Pruitt, YRCAA, Executive Director



APPLICATION IS FOR BURNING NECESSARY TO AN ONGOING AGRICULTURAL OPERATION. AG _____
If approved, this becomes your permit.

Grower Name: _____ Phone Number _____
Contact Name: _____ Phone Number _____
Mailing Address: _____ Fax Number _____
City _____ State _____ Zip Code _____ E-Mail _____

REASON FOR BURNING - Each application must state the reason for burning. Selecting the appropriate Best Management Practices (BMP) Guidance and filling in the appropriate BMP Part and Section below satisfies this requirement.

Orchard Crops Part _____ Section _____
Non-Cereal Grain Crops Part _____ Section _____ (Hops, grapes, ditches, etc.)
Other BMP _____ Part _____ Section _____

Other Reason _____

SPECIFIC BURN INFORMATION - List each burn planned. Use a separate sheet if needed. Notify us of all burning requiring a permit. If all the information is not known at the time of the application, you must provide it no later than seven days prior to any burn. Once burning is completed, you must notify us of completion no less than ten days after completion of each burn.

Location of Burn and Address (When Applicable)	Quantity In Acres or Tons (see worksheet)	Target Burn Date(s)	Date YRCAA Notified / By Whom	Date Burn Commenced	Date Burn Completed
Burn 1					
Burn 2					
Burn 3					
Burn 4					
Burn 5					
Total					

GROWER CERTIFICATION - I certify that all burning will be conducted as part of a commercial agricultural operation as defined in WAC 173-430-030 and the land will continue to be used in agricultural production for the foreseeable future. I have read, understand, and agree to comply with all the conditions of this permit and any BMPs listed above under "Reason for Burning." I understand that this permit is only valid after the appropriate fee is paid. I agree that YRCAA staff may enter my property to inspect for compliance with the conditions of this permit.

Signature _____ Date _____

YRCAA Use Only		
Received by: <input type="checkbox"/> Fax <input type="checkbox"/> Mail <input type="checkbox"/> Email <input type="checkbox"/> In Person By _____ Date _____ Fee \$ _____ <input type="checkbox"/> Paid <input type="checkbox"/> Invoice No. _____		
Application is: <input type="checkbox"/> Approved as submitted <input type="checkbox"/> Denied (see reason(s)) <input type="checkbox"/> Approved with additional conditions on next page.		
Reason(s) for denial or invalidation of permit: _____		
_____ Approved / Denied By YRCAA Air Pollution Control Officer (APCO)	_____ Date	_____ Expiration Date



AGRICULTURAL BURNING PERMIT CONDITIONS

1. Prior to Planning a Burn:

- a. Utilize all practical alternatives to minimize the need to burn;
- b. Submit a completed Agricultural Burning Permit Application and pay the appropriate fee;
- c. Receive approval of the Permit Application;
- d. Allow the material to dry before burning. The minimum required drying time is 30 days; and
- e. Arrange piles, or plan to feed a single pile, to burn hot and promote complete combustion and minimize smoke.

2. Prior to Burning, for Each Day:

- a. Determine the burn status. Do not burn during an impaired air quality event (burn ban) or an air pollution episode;
- b. Call YRCAA and receive expressed permission to burn a specific quantity of material, at a specific location, on a specific day. Burn allocations are given one day prior to burning. This step is not needed if a burn ban is present;
- c. Call Fire Dispatch: Upper County 509-248-2103; Lower County 509-865-4202;
- d. Inspect the material to be burned and remove any material which is prohibited (see 3b below); and
- e. Do not burn during unsafe burning conditions, including, but not limited to high winds, dry surroundings, proximity to structures and high temperatures.

3. During the Burning:

- a. Burn only during daylight hours. Plan and manage fires to be out prior to sunset.
- b. Burn only natural vegetation. It is prohibited to burn garbage, dead animals, asphalt, liquid petroleum products, paints, rubber products, plastics, paper, cardboard, treated wood, construction debris, metal, or any substance which normally emits dense smoke or obnoxious odors;
- c. Attend the fire at all times and promote complete combustion;
- d. If needed to prevent excess smoke, kindle the fire with clean, dry, untreated wood;
- e. If needed to prevent excess smoke, accelerate the fire with propane or other gaseous fuel (do not use diesel or other liquid fuel);
- f. If needed to prevent excess smoke, use fans to force air into and around the material;
- g. Do not burn more material than the quantity allocated for any day;
- h. Comply with local fire district notification and fire safety requirements; and
- i. Extinguish any fire found to create excess smoke which causes a nuisance or a detriment to health, safety or welfare of any person.

4. After Burning:

- a. Provide notice to YRCAA no less than ten working days after completing any agricultural burn; and
- b. Pay any additional fees invoiced for burning not paid for at time of application.

5. Additional Conditions:

- a. _____
- b. _____
- c. _____
- d. _____
- e. _____
- b. _____

Failure to comply with any permit condition may result in the immediate revocation of the permit and enforcement action against the permit holder, property owner, and parties conducting a burn.

Worksheet for Estimating the Tonnage of a Pile of Orchard

Use any of the following methods:

Method 1:

This method relies on the relatively constant growth rate (in terms of wood weight) of orchard trees.

Variables required:

- Number of acres of orchard torn out = **N**
- Age of trees torn out = **A**
- Growth rate per year, depending on age of trees = **GR**

Age	Growth Rate
10	.76
15	.78
20	.80
25	.83
30	.76
35	.72
40	.68
45	.64
50	.60

To calculate tons to be burned (**T**): **NxAxGR**

Example: For a 10 acre orchard tear out, with 25 year old trees:

$$T = 10 \text{ acres (N)} \times 25 \text{ years (A)} \times 0.83 \text{ (GR)} = \mathbf{207.5 \text{ tons}}$$

Your Calculation: _____ X _____ X _____ = _____
N A GR T

Method 2:

This method uses an estimate of a pile size and then uses typical pile densities to estimate pile tonnage.

Variables required:

- Pile volume in cubic feet = **V**
- Compaction factor (285) = **CF**

285 accounts for the average density of orchard wood and the air space between the separate pieces of wood in a cube-shaped pile.

To calculate tons to be burned (**T**): **V / 285**

Example: For a pile 20x20x10 feet. The volume (**V**) is calculated (20X20X10) = 4000 cubic feet for a cube-shaped pile.

$$T = 4000 \text{ cubic feet pile} / 285 \text{ (compaction factor)} = \mathbf{14.05 \text{ tons}}$$

Your Calculation: $V = \frac{\text{Width}}{\text{Width}} \times \frac{\text{Length}}{\text{Length}} \times \frac{\text{Height}}{\text{Height}} = \text{_____ cubic feet}$

$$\frac{\text{V}}{\text{V}} / \frac{285}{\text{CF}} = \frac{\text{_____ Tons}}{\text{T}}$$

Method 3:

Use a default value of **21 tons** per acre of trees removed to be burned.

If you need help with pile volume calculations, please call us.



AGRICULTURAL BURN PERMIT APPLICATION MUST INCLUDE

- ❖ **Estimate Worksheet (attached)**
- ❖ **Application (attached)**
- ❖ **Copy of Scheduled F form**
- ❖ **Print picture off Google or Gis Mapping of where the burn will be conducted on property (links below)**
- ❖ **Copy of Lease agreement for farms not owned by person submitting burn permit**

Please print all documents attached. Email or Fax all documents to

admin@yrcaa.org or 509-834-2060 fax

For Google or GIS Mapping click on one of the links below.

<http://yakimap.com/servlet/com.esri.esrimap.Esrimap?name=YakGISH&Cmd=Map>

<https://www.google.com/maps/@46.6022721,-120.4494418,14z>