



Smoke Management Plan (SMP) Application

GENERAL:

A SMP is required by North Coast Unified Air Quality Management District (NCUAQMD) when you are burning more than an acre of material per day, larger than a 10ft pile, multiple piles, broadcast, along a strip, a commercial burn, or if your burn will affect Sensitive Receptor(s). Sensitive Receptors are defined in NCUAQMD regulations as hospitals, schools, colleges and universities, population centers, residential subdivisions, commercial areas, residential care facilities, daycare centers, group home, freeways and major roadways, campgrounds, recreational areas, or other areas as determined by the NCUAQMD.

Applications must be submitted to the NCUAQMD and approved prior to any planned ignition. The application must be signed by the person responsible for the burn to be considered valid. Attach additional sheets if necessary, and complete the application in its entirety as incomplete forms will be denied. Submittal of an SMP application is not considered permission to proceed with a burn, nor does the submittal of an SMP application relieve you from complying with any rules or regulations of any other government agency.

INSTRUCTIONS:

- A valid Burn Permit must be obtained from the NCUAQMD.
- A CAL-FIRE burn permit is also required for Non-Standard permit holders in State Responsibility Areas (SRA) during fire season, which begins typically on May 1st.
- Prior to each ignition every day, you must obtain a **BURN AUTHORIZATION NUMBER** from the Burn Permit Program Coordinator at (707) 443-3093 (ext 122).
- Prior to ignition you must verify it is a **PERMISSIVE BURN DAY** by calling the Burn Day Status line at 1-877-287-6329 (or 707-443-7665) as indicated on your Burn Permit. Weather conditions at the burn site must comply with the requirements of your SMP.
- SMP holders may apply to burn on a designated **NO BURN DAY**, by submitting an application for a "**NO BURN DAY PERMIT**" from the District.

Failure to follow the conditions outlined in this SMP application, your Burn Permit, or failure to follow any NCUAQMD rule or regulation is a violation and may result in enforcement action. If applicable, you may be required by the NCUAQMD to submit an annual estimate of emissions (see page 4 of application).

SMP APPLICATION CHECKLIST:

- ✓ Valid NCUAQMD Burn Permit
- ✓ Completed and signed Smoke Management Plan (SMP)
- ✓ Map of the property - showing Sensitive Receptors within a 5 mile radius for burns under 100 acres, or a 20 mile radius for project burns over 100 acres

SMP APPLICATION

Company Name (if applicable): _____ **Applicant:** _____

Property Owner: _____ **Phone #**(_____) _____

Applicant Mailing Address: _____ **City:** _____ **Zip Code:** _____

Applicant Phone: (_____) _____ **Cell:** (_____) _____ **Fax #:** (_____) _____

1. **NCUAQMD Burn Permit #:** _____ (Enter the Burn Permit # found on the upper left hand corner of your burn permit)

2. **Location of Burn:** Give the legal description (township, range, sections) and/or the common address for the burn site.

3. **Type of Material to be Burned:** Redwood Slash Mixed Conifer Slash Grasslands
 Brush Oak Understory Berry Vines
 Orchard Prunings Commercial Structure Vehicle
 Residential Structure Other: _____

4. **Date the Material was Logged or Cut:** _____

5. **Burning Method:** Tractor Piles Broadcast Strip Burning Hand Piles
 Other: _____ # Piles _____ Pile Size(s): _____

6. **Projected Tonnage:** _____ **6. Projected Acreage in a Calendar Year:** _____
Give an estimate of the total tons of material to be consumed by the burn, and give an estimate of the total acreage to be burned, or if pile burning, the amount of acreage the material in the pile came from.

Tonnage Estimate Chart			
Pile Size	Tons Per Pile	Pile Size	Tons Per Pile
6x6	0.21	20x20	4.7
10x10	0.45	25x25	7.5
15x15	2.1	50x50	29

7. **Expected Duration of the Fire:** Hours: _____ Days: _____
Give an estimation of how long the fire will be burning, either in hours or days. If the fire will be burning over the evening hours please indicate this.

8. **Site Elevation:** _____ **Slope Aspect:** _____

9. **Identify All Potential Smoke Sensitive Areas Within 5 Miles of the Burn:** Sensitive areas include any towns and/or major roads within a radius of 5 miles that could be impacted by smoke from the burn project. For burn projects over 100 acres, a map showing sensitive areas within a radius of 20 miles from the burn site and the expected direction of smoke travel is required.

10. Meteorological Prescription: Provide a detailed meteorological prescription that must be met to proceed with this fire. At a minimum, the prescription shall include acceptable wind direction. Other considerations may include wind speed, temperature profile, winds aloft, humidity, temperature, actual and predicted inversions, burn day status and forecast, precipitation forecast, and any other meteorological condition which may affect smoke dispersion and/or fire behavior.

Identify Source of Weather Information: _____

11. If Smoke Impacts Occur to any Smoke Sensitive Areas: Describe what specific actions will be taken if smoke from this fire unexpectedly impacts smoke sensitive areas. This may include the ability to extinguish the fire with equipment on hand, or with assistance from a fire protection agency.

12. Actions That Will Be Used to Minimize Smoke Emissions: List what pre-treatment methods (drying times, tarps, stacking methods, etc.) have been used to minimize smoke emissions and/or reduce fuel loading. Fans or air blowers may be needed to reduce particulate emissions. Include any alternatives to burning that have been considered and to what extent they were used.

13. Public Notification Procedures to be use Prior to Ignition: Describe what notification procedures are to be used to make sure the public is aware of the planned burn (examples include newspaper / radio announcements, road signs, flyers / handouts, door-to-door announcements, etc.).

Signature of Responsible Party: _____ **Date:** _____

Print Name: _____

ADDITIONAL NCUAQMD CONDITIONS:

- Prior to each ignition every day, you must obtain a **BURN AUTHORIZATION NUMBER** from the Burn Permit Program Coordinator at (707) 443-3093 (ext 122).
- Prior to ignition you must verify it is a **PERMISSIVE BURN DAY** by calling the Burn Day Status line at 1-877-287-6329 (or 707-443-7665) as indicated on your Burn Permit. Weather conditions at the burn site must comply with the requirements of your SMP.

Submit Spot Forecast when requesting burn authorization.

NCUAQMD USE ONLY
Approved by: _____ Date _____

Annual Estimate of Emissions (To Be Submitted next January)

How to Estimate Tonnage Calculations for Burn Piles:

- Choose the pile size most representative of the piles on your burn site
- Multiply the number of piles (by vegetation type) in your project by the corresponding “Tonnage per Pile” value to get the total tonnage/
- Example #1: Eighteen (18) piles of redwood slash were burned over the course of the calendar year. The diameter of each pile was 10 feet by 10 feet. Multiply 18 piles x 0.71 tons, which equals (=) 12.78 tons of redwood slash (100%) burned. If a combination of material then estimate the % of each type.
- Example #2: Twenty-five (25) piles were burned over the course of the calendar year. Ten (10) of the piles were Douglas Fir slash and were 4 feet by 4 feet in diameter. Fifteen (15) of the piles were conifer slash and were 25 feet by 25 feet in diameter. Calculate the following:
 - 1) Multiply 10 piles x 0.056 tons which equals (=) 0.56 tons of Douglas Fir slash burned.
 - 2) Multiply 15 piles x 7.4 tons which equals (=) 111 tons of conifer slash burned.

Tonnage Calculations for Specified Pile Sizes					
Indicate County: Humboldt, Del Norte, Trinity					
Pile Size	# Piles	Tons /Pile*	Total Tons Burned	Type of Vegetation Burned**	% Per Type
4ft x 4ft diameter x 3ft height		0.56			
5ft x 5ft diameter x 4ft height		0.12			
6ft x 6ft diameter x 5ft height		0.21			
8ft x 8ft diameter x 6ft height		0.45			
10ft x 10ft diameter x 6ft height		0.71			
12ft x 12ft diameter x 8ft height		1.3			
15ft x 15ft diameter x 8ft height		2.1			
20ft x 20ft diameter x 10ft height		4.7			
25ft x 25ft diameter x 10ft height		7.5			
50ft x 50ft diameter x 10ft height		29			

*Pile tonnage calculated using paraboloid volume (cu.ft) formula [Paraboloid Volume (cu.ft) = 3.146 x (height x diameter) /8, USDA 2/96 Forest Service General Technical Report #PNW-GTR-364] multiplied by 30 lbs/cu.ft, multiplied by 0.2 packing ratio [U.S.Forest Service Conformity Handbook, Table 6, Revised 2/13/01].

** Types of Vegetation: 1) Redwood, 2) Douglas Fir, 3) Mixed Conifer, 4) Tan Oak, 5) Orchard Prunings, 6) Sitka Spruce, 7) Berry Vines, 8) Madrone, 9) Grass, 10) Brush, 11) Field Crop Stubble, 12) Forest Understory, 13) Mixed Oak, 14) Alder, 15) Invasive/Exotic Species, 16) Hay, 17) Other _____.

Date: _____

Name/Company: _____

Property Location: _____

