



Smoke Management Plan (SMP) Application

GENERAL:

An 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 (see Rule 206 of Regulation II – Open Burning at [www. http://www.ncuaqmd.org/files/rules/reg%202/Rule%20206.pdf](http://www.ncuaqmd.org/files/rules/reg%202/Rule%20206.pdf)).

Applications must be submitted thirty (30) days prior to any planned burn to allow for review and approval by the NCUAQMD. Plan your projects accordingly, as the NCUAQMD must have lead time to review your plans, especially during the peak prescribed burning periods of the year. 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.

OPEN BURNING PROCEDURES WITH AN SMP:

- A valid Burn Permit must first 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 typically begins on May 1st.
- Use of the CARB Prescribed Fire Information Reporting System (PFIRS) is required. You must first submit a copy of your SMP (including spreadsheet and maps) to the NCUAQMD for approval. Once your SMP has been approved you may then submit your approved plan into PFIRS.
- 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:

- ✓ Obtain valid NCUAQMD Burn Permit.
- ✓ Submit completed and signed Smoke Management Plan (SMP) – all 3 pages and spreadsheet(s).
- ✓ Submit sufficient map(s) of the property and burn location(s) - showing Sensitive Receptors within a 5 mile radius for burns under 100 acres, or a 20 mile radius for project burns over 100 acres.

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

12. Monitoring Requirements: If smoke may impact smoke sensitive areas, the smoke management plan may need to include appropriate monitoring, which may include visual monitoring, ambient particulate matter monitoring (such as portable PM2.5 EBAM monitors, etc.) or other monitoring (PM sensors, etc.) approved by the NCUAQMD for burn projects that are:

- | | <u>Select</u> |
|--|---------------|
| (1) for projects greater than 250 acres | Yes / No |
| (2) projects that will continue burning or producing smoke overnight | Yes / No |
| (3) projects conducted near smoke sensitive areas | Yes / No |

If you answered YES to any of the above questions, then your burn project may be subject to specific air monitoring requirements as indicated by the NCUAQMD requirements below. Applicable projects will require that monitoring detail information is included in the SMP spreadsheet.

13. 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: _____

14. 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.

15. 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.).

Note: Applications must be submitted to the NCUAQMD at least thirty (30) days prior to any planned burn to allow for review and approval by the District. Plan your projects accordingly, as the District must have lead time to review your plans, especially during the peak prescribed burning periods of the year. All pages of the SMP Application and Spreadsheet (page 4) must be filled out or the SMP application package will be considered incomplete.

Signature & Acknowledgement of Property Owner: _____ **Date:** _____

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

DISTRICT REQUIREMENTS THAT MUST BE FOLLOWED:

- ✓ 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.
- ✓ 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).
- Monitoring requirements: The District will provide notice and consult with CARB as necessary with large (250 acres or larger) or multi-day burns (with heavy fuels and over 100 acres).
- Submit Spot Forecast when requesting burn authorization.
- Other:

NCUAQMD USE ONLY

Approved by: _____

Date _____

Annual Estimate of Emissions

Date: _____

Name/Company: _____

Property Location: _____

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		0.12			
5ft x 5ft diameter x 4ft height		0.21			
6ft x 6ft diameter x 5ft height		0.45			
8ft x 8ft diameter x 6ft height		0.56			
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 _____.