

NORTHEAST AIR ALLIANCE

SMOKE MANAGEMENT PLAN

For

Butte, Lassen, Modoc, Plumas, Shasta, Siskiyou, Tehama

In accordance with the Air District's Smoke Management Program, this Smoke Management Plan (SMP) is to be completed by the applicant and submitted to the appropriate Air District Official as part of the overall burn plan review process. Once approved by the Air District, this SMP serves as a conditional permit to burn, when used in conjunction with its standard single-page Permit to Burn.

This SMP is required for all prescribed burns (Forest Management, Range Improvement and Wildland Vegetation Management Burning) conducted by land managers within the area encompassed by the Northeast Air Alliance (NEAA). This SMP is **NOT** required for prescribed burn projects less than ten (10) acres in size.

The information required herein is considered the minimum needed to effectively evaluate the effectiveness of smoke management efforts. Individual Air Districts may require supplemental information if the proposed prescribed burn project is:

1. Extremely large,
2. Likely to adversely impact Smoke Sensitive Areas (SSA's), such as Class I air sheds,
3. Likely to have multi-jurisdictional smoke impacts, or
4. Contains other site-specific complexities, which would require the need for further information.

Information may need to be extracted from the project burn plan on an infrequent basis in order to supplement the SMP. The Air District assumes no approval authority or liability for individual, project-specific burn plans. The Permittee is responsible for ensuring firefighter and public safety and all other plan elements, which pertain to matters not related to smoke management.

The terms used in this SMP have the same meaning as those defined in the Air District's open burning regulations or the California Code of Regulations, Title 17, Section 80101. Where differences occur, the Air District's definitions apply.

January 2012

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I. GENERAL INFORMATION

- A. Permittee Name and Organization: _____
Fire Manager/Burn Boss Name: _____ Phone: _____
Fax: _____ E-Mail Address: _____
Mailing Address: _____
B. Project Name: _____
C. Project Number: _____ D. Total Acres: _____
E. Legal Location: Township: _____ Range: _____ Section(s): _____
F. Air Quality Management District: _____
G. Indicate the category which best describes the prescribed burn project:

1. _____ **Forest Management Burning:** Use of open, outdoor fires as a part of forest management practice to remove forest debris or for forest management practices, which include timber operations, silvicultural practices, or forest protection practices.
2. _____ **Range Improvement Burning:** Use of open, outdoor fires to remove vegetation for wildlife, game or livestock habitat or for the initial establishment of an agricultural practice on previously uncultivated land.
3. _____ **Wildland Vegetation Management Burning:** Use of prescribed burning conducted by a public agency, or through a cooperative agreement with a private manager or contract involving a public agency, to burn land predominately covered by chaparral (as defined in The California Code of Regulations Title 14, Section 1561.1), trees, grass, or standing brush.
4. _____ **Wildfire Managed for Resource Benefits:** Use of naturally occurring fire (i.e. lightning) exceeding ten acres in size to achieve resource management objectives. NOTE: When a Wildfire occurs on a no-burn day, the initial “go/no-go” decision to manage the fire will be a “no-go” unless, after consultation with the Air District, the Air District decides, for smoke management purposes, that the fire can be considered a prescribed fire. A SMP must be submitted within 72 hours of project declaration for those fires that are expected to exceed 10 acres in size. The Wildfire protocol is available at www.arb.ca.gov/smp/met/met.htm

II. PROJECT INFORMATION

- A. Acres by Type of Burn
- | | |
|----------------------------|-------------------------|
| 1. Machine Pile Burn _____ | 2. Hand Pile Burn _____ |
| 3. Landing Pile Burn _____ | 4. Broadcast Burn _____ |
| 5. Understory Burn _____ | |
- B. Predominant Vegetation Type (check all that apply)
- | | | | |
|----------------|----------------|------------------------|-----------------------|
| 1. Brush _____ | 2. Grass _____ | 3. Timber Litter _____ | 4. Timber Slash _____ |
|----------------|----------------|------------------------|-----------------------|
- C. Desired Season of Project: _____ Acceptable Alternative: _____
- D. Spot Weather Forecast Required? YES NO

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E. Project/Unit Elevation (feet): Top: _____ Bottom: _____

F. Duration of Burn:

- 1. Ignition _____ Days
- 2. Burndown _____ Days
- 3. Total _____ Days

G. Drying time required for hand and machine piles: _____ Days

III. EMISSIONS ESTIMATES

- A. Total estimated particulate matter (PM 2.5 or PM 10): _____ Tons
- B. Optional: Estimate of Tons/Acre by Vegetation Type: _____

IV. WIND PRESCRIPTION

- A. Surface Wind Speed & Direction (Direction of wind is the direction wind is coming from)
<20 Feet: Ideal _____ Acceptable _____ Unacceptable _____
- B. Wind Direction Aloft
>20 Feet: Ideal _____ Acceptable _____ Unacceptable _____
- C. Identify potential meteorological conditions that would inhibit acceptable smoke dispersion:

V. SMOKE DISPERSAL SURVEILLANCE AND MONITORING

Smoke dispersal surveillance and monitoring will be accomplished by the following methods when indicated. If the project is conducted near smoke sensitive areas or if the smoke from the project may impact smoke sensitive areas, smoke monitoring is required on all projects over 250 acres/day and on those projects that would continue burning or producing smoke overnight or as required by the Air District. It is recommended that the Burner obtain a current Smoke Transport and Stability Forecast from the Redding Fire Weather Center. The Internet web address is <http://gacc.nifc.gov/oncc/predictive/weather/index.htm> A test burn shall be conducted on a small portion of the project area prior to project implementation. All weather and surveillance records shall be filed in the project folder and be available for Air District Review upon request.

- A. Balloon _____ RAWS _____ Aircraft _____ Visual Monitoring _____
Weather Forecast _____ Hygrothermograph _____ Belt Weather Kit _____
Other _____
- B. Method/Location of Visual Monitoring _____

- C. Interval Between Dispersal Monitoring Observations: _____

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VI. IDENTIFICATION OF SMOKE SENSITIVE AREAS (SSA's)

Smoke Sensitive Areas (SSA's) include, but are not limited to the following: population centers (towns, villages, home sites, subdivisions), hospitals, schools, daycare centers, nursing homes, shopping centers, populated recreation areas, well attended public events, major roads, airports, Class I Areas, and may include campgrounds and trails extensively used by recreationalists.

A. Likely to impact Class I Area? (federal Clean Air Act, Sec.169A) YES NO

B. Likely to impact another AQMD or State (Oregon or Nevada)? YES NO

[If YES, indicate which city/cities] Klamath Falls; Lakeview; Medford; Other _____

C. Likely to impact Smoke Sensitive Areas? (List below) YES NO

Smoke Sensitive Area Distance and direction from burn

D. Does the location of the project lie within more than one AQMD? YES NO

If yes, identify other AQMD's: _____

E. Previous history of adverse smoke impacts? (does not imply disapproval of project)

YES NO If yes, list examples: _____

VII. MITIGATIONS

The following mitigation measures shall be implemented:

A. Limit burning to _____ **Acres/Piles** per day (Circle appropriate measure)

B. Allow _____ hours between ignition of **Piles/Units**. Check here if not applicable _____

C. Ignite between _____ and _____ Hours. (Use military time)

D. Test Burn

E. Additional/other mitigation measures: _____

F. If YES on VI. B.

a. Indicate what maximum mixing heights that would be used when burning

b. The use of a "test burn" prior to full ignition, to verify the smoke transport direction]

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VIII. EVALUATION OF ALTERNATIVES TO BURNING

Projects, which have met applicable National Environmental Policy Act (NEPA) or California Environmental Quality Act (CEQA) requirements, will be considered to have complied with this provision. Either a copy of the applicable section of the environmental document can be attached to this SMP or a sufficiently detailed narrative of how alternatives to burning were carried out in order to reduce fuel loads and emissions.

IX. CONTINGENCIES

The following actions shall be taken if smoke adversely impacts smoke sensitive areas. Adequate resources or assets will be provided for the items checked below.

- A. Halt ignitions, except as needed to maintain control of fire
- B. Allow fire to burn to contingency control lines
- C. Suppress fire
- D. Begin immediate mop up
- E. Begin mop up within _____ hours of problem identification
- F. Complete mop up within _____ hours of initiation
- G. Discontinue mop up if favorable conditions return
- H. Other (Explain): _____

X. PUBLIC NOTIFICATION AND NEIGHBORING BURNER COORDINATION

All of the actions checked below will be taken in order to advise the public and known sensitive receptors that prescribed burning will be conducted in their vicinity and to assure the public that measures will be taken to minimize the smoke impacts.

- | A. Type of Public Notification | Describe Activity and Timing |
|---|------------------------------|
| <input type="checkbox"/> Radio | _____ |
| <input type="checkbox"/> Newspaper | _____ |
| <input type="checkbox"/> Television | _____ |
| <input type="checkbox"/> Posters/Flyers/Letters | _____ |
| <input type="checkbox"/> Personal Contact | _____ |
| <input type="checkbox"/> Signing at Appropriate Sites | _____ |
| <input type="checkbox"/> Other (Explain) | _____ |

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B. If potential impacts were identified in Section VI, additional notifications may be required within the potentially impacted area. If required, describe supplemental notifications that will be undertaken to mitigate adverse impacts: _____

C. Neighboring Burner Coordination

1. A minimum of 1 day prior to anticipated ignition, all burners shall forward to the NEAA e-mail list the following information: (This will be done ASAP when a Wildfire managed for resource benefits is expected to exceed 10 acres in size.)
 - Name of project
 - Agency conducting burn with contact info
 - Legal location, county, and landmark of burn
 - Type of burn
 - Total acreage / estimated acres per day
 - When the burn is planned
 - Duration of ignition given in days
 - Estimated direction of smoke travel
 - Communities or Smoke Sensitive Areas that could be impacted (if any). Smoke Sensitive Areas are defined in Section VI of this SMP.

2. Participate in the 1300 Burn Conference Call a minimum of 1 day prior to burning with daily representation during the burn.

Phone in #: 1-888-844-9904 Passcode: contact district for passcode #

XI. COMPLAINT PROCEDURES

A. Any complainant must give specific information concerning smoke complaints. Refusal by the complainant to provide essential information to officials regarding smoke impacts could minimize the urgency and validity of the individual complaint. The person receiving a smoke complaint should make a good faith effort to obtain the following information:

Name, location, phone number, a short description of the situation, the areas affected by the smoke, whether people are physically suffering from smoke exposure and whether there is a public safety concern due to reduced visibility.

- B. All smoke-related complaints shall be forwarded as soon as possible to the Air District office, but no later than 24 hours after the receipt of the complaint.
- C. The Air District will forward to the appropriate burners any smoke-related complaints, which are received at the Air District office as soon as possible, but no later than 24 hours after receipt of the complaint.
- D. A log of all complaint calls related to burn projects shall be kept in the project file for a period of no less than one year after completion of the specific project.

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XII. CONTACTING RESPONSIBLE OFFICIALS

DO NOT DISPLAY PERSONAL PHONE NUMBER INFORMATION IN BURN OR SMOKE PLANS! Make available to the Air District the names of Prescribed Fire Manager/Burn Boss/Incident Commander and how they can be reached at all times (See General Information Section I.A.2). Include cell phone numbers, pager numbers, dispatch number and any other pertinent contact information. Burners are required to contact the Air District on a daily basis to verify that conditions are still favorable when implementing multi-day projects.

XIII. CERTIFICATION

If the burn project is to be implemented for wildlife and game habitat improvement, the Applicant shall file with the Air District a statement from the California Department of Fish and Game certifying that the burn is desirable and proper. The statement shall also specify if any brush treatment or other desired objective is required by the California Department of Fish and Game.

XIV. MAPS

A map must be attached to this Smoke Management Plan that identifies nearby smoke sensitive areas, burn unit perimeters, available interior control lines (if suitable for this project), and areas subject to smoke inversions due to the burn project. Also, the map must indicate estimated path of unacceptable smoke transport.

XV. REPORTS

For fires greater than 250 acres, a post-burn smoke management evaluation/summary is required to be kept in the project folder. The post burn smoke management evaluation may be subject to review by the Air District.

XVI. APPROVALS

NAME OF PROJECT _____

A. Smoke Management Plan

Submittal of this Smoke Management Plan (SMP) acknowledges that ignition of this burn project will not occur unless all conditions and requirements as stated in this SMP are met prior to ignition on the day of the burn event, the ARB and the Air District have both declared the day to be a burn day, and the Air District has authorized the burn on the day of the burn. It is the responsibility of the burner to participate in regional burn coordination. Mitigation measures as identified in Section VII shall be implemented as needed to reduce smoke impacts based on cumulative smoke levels in the region of this burn project.

1. Prepared By: _____ 2. Title _____
3. Preparer's Organization: _____
4. Preparer's Signature: _____ Date: _____

B. Air District SMP Decision

1. Air Quality Management District name: _____
2. Approved as Submitted By: _____ Date: _____
3. Approved with changes or conditions by: _____ Date: _____
4. ARB Notification by: _____ Date: _____

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5. Document Changes or Conditions: _____

6. Disapproved as Submitted by: _____ Date: _____

For the Following Reasons: _____

SMOKE MANAGEMENT PLAN NOTES and ACTION LOG

DATE

ACTION

<u>DATE</u>	<u>ACTION</u>