

SMOKE MANAGEMENT PLAN APPLICATION FOR BURN PERMIT

In accordance with the Air District's Smoke Management Program, this Smoke Management Plan (SMP) serves as a permit application that is to be completed by the applicant and submitted to the Air District officials. This SMP application consists of three sections, a Project Description section, and sections A and B. **ALL APPLICANTS MUST COMPLETE THE PROJECT DESCRIPTION SECTION (pages 4 and 5).** Both sections A and B of the SMP may need to be completed depending on the burn's potential to impact smoke sensitive areas and the size of the burn. Once approved by the Air District, this SMP serves as a conditional permit to burn, when combined with the district's permit to burn.

General Information and Requirements regarding this SMP are provided on

pages 1 and 2. Terms used in this form have the same meaning as those defined in the Air District's open burning regulation definition or the California Code of Regulations, Title 17, Section 80101. Where differences occur, the Air District's definitions apply. **Emission Factors** to assist with calculating burn particulate matter emissions are provided on **pages 12 and 13**. Contact the Air District if you have questions or need assistance with making these calculations.

The **District Review (page 3)** is for Air District use only, but must be kept in tact with the Project Description section. The **Project Description section (pages 4 and 5)** requests general information and identifies conditions for all prescribed burn projects. It identifies the permittee and relevant contact information, who the land owner is, the project name, project location, burn size, purpose of the burn, type of fuel to be burned, and estimated emissions from the burn. It provides a checklist of additional sections of the SMP that may be filled out and attached. Finally, it requests the preparer's signature, the name of the permittee or authorized representative, and the permittee or authorized representative's signature.

Section A (pages 6 - 8), must be completed and attached to the Project Description section if the burn has the potential to result in impacts to smoke sensitive areas. Smoke sensitive areas are defined as "populated areas and other areas where a district determines that smoke and air pollutants can adversely affect public health or welfare." Such areas can include, but are not limited to, towns and villages, campgrounds, trails, populated recreational areas, hospitals, nursing homes, schools, roads, airports, public events, shopping centers, and Class I Areas (areas that are mandatory visibility protection areas designated pursuant to section 169A of the federal Clean Air Act). The Air District can tell you if you are in a Class I Area.

Section B (pages 9 and 10), is a form that must be completed and attached to the Project Description section if the burn will be greater than 100 acres or will produce more than ten tons of particulate matter. Section B identifies meteorological conditions necessary for ignition, contingency actions that will be taken if smoke impacts begin to occur from the burn, and information on consideration and use of alternatives to burning. A **Post-Burn Evaluation** form is provided on **page 11**. This form is to be used for burns greater than 250 acres or for burns that result in impacts to smoke sensitive areas.

Information may need to be extracted from the project burn plan (if available) to supplement the SMP. Air District review of the burn plan is for informational purposes only. When the burn plan is reviewed, the Air District assumes no approval authority or liability for approving the burn plan. The permittee is responsible for assuring firefighter and public safety, which is not the intent of the information included on this form.

General Information and Requirements

SMP Conditions Must Be Met on the Day of the Burn (CCR section 80160(j))

The land manager or his/her designee conducting a prescribed burn is required to ensure that all conditions and requirements stated in the smoke management plan are met on the day of the burn event and prior to ignition. Ignition of a burn project will not occur unless the Air District has authorized the burn on the day of the burn.*

Conditions of Vegetative Material to be Burned (CCR section 80160 (m – p))

Material should be:

- ◆ in a condition that will minimize the smoke emitted during combustion when feasible, considering fire safety and other factors;
- ◆ piled where possible, unless good silvicultural practices or ecological goals dictate otherwise; and
- ◆ prepared so that it will burn with a minimum of smoke.

Description of Burn Types

Forest Management Burning is the use of open fires, as part of a forest management practice, to remove forest debris or for forest management practices which include timber operations, silvicultural practices, or forest protection practices.

Range Improvement Burning is the use of outdoor fires to:

- ◆ remove vegetation for wildlife or game habitat;
- ◆ remove vegetation for livestock habitat; and
- ◆ remove vegetation for the initial establishment of an agricultural practice on previously uncultivated land.

Wildland Vegetation Management Burning is the 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 predominantly covered with chaparral (as defined in Title 14, California Code of Regulations, section 1561.1), trees, grass, or standing brush.

Determination of Smoke Sensitive Areas

Smoke sensitive areas are defined as “populated areas and other areas where an Air District determines that smoke and air pollutants can adversely affect public health or welfare.” Such areas can include, but are not limited to, towns and villages, campgrounds, trails, populated recreational areas, hospitals, nursing homes, schools, roads, airports, public events, shopping centers, and Class I Areas (areas that are mandatory visibility protection areas designated pursuant to section 169A of the federal Clean Air Act. Your Air District can tell you if your burn is in a Class I Area. If a burn is near a populated area, has potential for substantial emissions, has a long duration, or has the potential for poor smoke dispersion, a smoke sensitive area could be impacted and Section A of the SMP should be completed. Burners may obtain Air District assistance in determining if Section A should be completed.

* CCR 80120(e) provides that an Air District may, by special permit, authorize agricultural burning, including prescribed burning, on days designated by the ARB as no-burn days if the denial of such permit would threaten imminent and substantial economic loss.

Procedures for Permittees to Report Public Smoke Complaints to Air Districts to Address Smoke Management Guidelines section 80160(l)

1. The permittee shall immediately report any air quality smoke complaints received about this burn project to the Air District with jurisdiction over the burn. A phone call to the District during normal seasonal business hours will suffice. During non-business hours a fax or voicemail message will suffice.
2. The complaint report shall include the following: the location of the smoke impact, a short description of the smoke behavior including wind direction and speed, visibility, and public safety impacts if available from the complainant.
3. The permittee shall inform the complainant that he or she may also contact the District directly and shall provide the District name, telephone number and address.
4. The permittee shall, in coordination with the Air District, seek resolution for all complaints, as necessary.

Natural Ignition on a No-burn Day (CCR section 80160(h))

When a natural ignition occurs on a no-burn day, the initial "go/no-go" decision to manage the fire for resource benefit will be a "no-go" unless:

1. After consultation with your Air District, the Air District decides, for smoke management purposes, that the burn can be managed for resource benefit;
2. For periods of less than 24 hours, a reasonable effort has been made to contact the Air District, or if the Air District is not available, the Air Resources Board (ARB); or
3. After 24 hours, the Air District has been contacted, or if the Air District is not available, ARB has been contacted and concurs that the burn can be managed for resource benefit. A "no-go" decision does not necessarily mean that the fire must be extinguished, but that the fire cannot be considered as a prescribed fire.

DISTRICT REVIEW
(For District Use Only)

I have reviewed and approved this SMP as a conditional burn permit to be combined with agricultural burn/air pollution permit number _____, which expires on _____.

This burn project is greater than 250 acres and/or is a multi-day burn which requires ARB consultation prior to final approval pursuant to CCR 80160(g)).

Date ARB Notified: _____ Date ARB approval received: _____

Smoke from this fire is expected to travel into the following non-attainment or maintenance areas:

Name: _____

Signature: _____

Agency : _____

Date: _____

SMP Project Description (Complete This Section for ALL PRESCRIBED BURNS)*

1.1 Project Name:	Project Location: (Report at least one of the following location descriptions. Provide attachment as needed.)
1.2 Permittee Name:	1.8a Legal: T _____ R _____ S _____ M&B _____
1.3 Permittee Address:	1.8b Lat/Long: Lat _____ (deg.) _____ (min) _____ (sec) Long _____ (deg.) _____ (min) _____ (sec)
Street:	1.8c UTM: Zone: _____ N _____ m, E _____ m
City:	1.9 Project Elevation (msl feet): Top: _____ Bottom: _____
State: _____ Zip: _____	1.10 Land Owner Name: Street: _____ City: _____ State: _____ Zip: _____
1.4 Permittee/Field Contact:	1.11 Anticipated Time of Year for Burn (Month/Year): _____
1.5 24-hour Phone/Pager:	1.12a Is the Primary Purpose of the Burn for Fire Hazard Reduction? _____
1.6 Project Location (Counties): _____ _____ _____	1.12b Burn Type (Check one): _____ Forest Management: _____ Range Improvement _____ Wildland Vegetation Management _____ Natural Ignition (see General Information on page 1 for description of these burn types)
1.7 Nearest Town: _____ _____ _____	1.13 For Range Improvement Burns, Check Vegetation Management Objective: _____ Wildlife or Game Habitat Improvement _____ Livestock Habitat Improvement _____ Initial Establishment of an Agricultural Practice on Previously Uncultivated Land

1.11 Anticipated Time of Year for Burn (Month/Year): _____

1.12a Is the Primary Purpose of the Burn for Fire Hazard Reduction? _____

1.12b Burn Type (Check one): _____ Forest Management: _____ Range Improvement
_____ Wildland Vegetation Management _____ Natural Ignition
(see General Information on page 1 for description of these burn types)

1.13 For Range Improvement Burns, Check Vegetation Management Objective:
_____ Wildlife or Game Habitat Improvement _____ Livestock Habitat Improvement
_____ Initial Establishment of an Agricultural Practice on Previously Uncultivated
Land

1.14 Vegetation Type (Percentage): _____ Brush _____ Grass _____ Timber Litter
_____ Timber Slash _____ Other (Describe): _____

1.15 Vegetation Condition: _____ Machine Pile Burn _____ Hand Pile Burn
_____ Understory _____ Landing Pile Burn _____ Broadcast

1.16 Project Area: _____ (acres) 1.17 Number of Piles: _____

1.18 Average Pile Size: _____

1.19 Total Project Fuel Loading: _____ (tons vegetation)

1.20 Particulate Matter Emissions: _____ (tons PM10)
(Use Emissions Factors Tables on pages 12-13 for assistance with emissions calculation)

1.21 Emission Factor Table Used or EPA-Approved Calculation Method:

* If your burn is less than 10 acres with less than one ton particulate matter emissions, and your burn will not impact any smoke sensitive areas, you may complete only this page. Attach appropriate SMP sections for all other burns.

1.22 Preferred Ignition Hours for the Fire: _____

1.23 Expected Burn Duration (ignition to complete extinction):
Total Time: _____ (hours or days)

1.24 Fuel Drying Time and Conditions Prior to Ignition: _____

1.25 Limitations on Pile Size, Pile Number, and/or Acreage Limitations to Minimize Smoke (complete as appropriate):

It is the responsibility of the permittee to ensure that conditions of the SMP are met on the day of the burn. The permittee will obtain authorization to burn from the Air District contact listed below no more than 24 hours prior to ignition.**

1.26 Air District Name:	1.28 Contact:
1.27 Address:	1.29 24-hour Telephone:
	1.30 Fax:
	1.31 Email:

The permittee will report public smoke complaints to the Air District per the procedures described in the General Information section of this SMP on pages 1 and 2.

Check as Applicable:

- This burn could have an impact on smoke sensitive areas – I have filled out and attached all of Section A.
- This burn could have an impact on smoke sensitive areas and Air District policies require that information on meteorological conditions for ignition and contingency planning be provided – I have filled out and attached line items B.1 and B.2 of Section B.
- This burn is greater than 100 acres (or is estimated to produce greater than 10 tons of particulate matter) – I have filled out and attached all of Section B.

Preparer's Statement: To the best of my knowledge the information submitted in this application is complete and accurate.

SMP Preparation Date: _____

Preparer's Name/Title (print): _____

Preparer's Phone: (_____) _____ - _____

Preparer's Signature: _____

Name of Authorized Representative in Control of the Property (if applicable):

Permittee or Authorized Representative Signature:

Signature Date: _____

** Burner/Air District burn authorization coordination to be determined by the Air District.

SECTION A: AS REQUIRED BY TITLE 17 AND AIR DISTRICT POLICIES, THIS SECTION APPLIES TO ALL BURNS WITH THE POTENTIAL TO IMPACT SMOKE SENSITIVE AREAS (SSAs) *

A.1. Describe locations of SSAs and distances from burn site (miles) – (Also the attached Map# _____ shows SSAs)

A.2 The attached map# _____ provides smoke travel projections for:
_____ Day _____ Night _____ Topographical considerations.

A.3 Has prescribed burning historically occurred in this area? _____ Yes _____ No
_____ Don't Know

A.4 If yes, were there impacts to smoke sensitive areas? _____ Yes _____ No
_____ Don't Know

A.5 If yes, please describe impacts:

A.6 For burns that will occur past daylight hours and/or for more than one day, please provide Air District contact information and a description of contact procedures that will be used to affirm that the burn project remains within the conditions specified in this SMP, and/or whether contingency actions are necessary. The permittee will follow any instructions by the Air District to communicate directly with ARB when necessary. Air District contact (or designee)

A.7a Telephone: (_____) _____ - _____

A.7b 24-hour Pager (_____) _____ - _____

A.7c Fax: (_____) _____ - _____

A.7d E-mail: _____

A.8 The permittee will use the frequency and method of contact described below:

The permittee will monitor the burn project for meteorological conditions and smoke behavior before, during, and after the burn using the following techniques and timing:

A.9 Weather Observation (Wind Direction, Wind Speed, and Temperature):

<u>Method</u>	<u>Details</u>		
<input type="checkbox"/> Belt Weather Kit	Location	Beginning	Interval Ending
<input type="checkbox"/> RAWS	Location	Beginning	Interval Ending
<input type="checkbox"/> Aircraft	Location	Beginning	Interval Ending
<input type="checkbox"/> Other	Location	Beginning	Interval Ending
<input type="checkbox"/> Additional Requirements:			

A.10 Smoke Behavior Observations:

<u>Method</u>	<u>Details</u>		
<input type="checkbox"/> Visual**	Location	Beginning	Interval Ending
<input type="checkbox"/> Test Fire	Location	Beginning	Interval Ending
<input type="checkbox"/> Balloon	Location	Beginning	Interval Ending
<input type="checkbox"/> Aircraft	Location	Beginning	Interval Ending
<input type="checkbox"/> PM Monitoring Inst	Location	Beginning	Interval Ending
<input type="checkbox"/> Additional Requirements:			

A.11a The permittee shall begin public notification before the day of burning. The notification shall be on-going until the end of burning. Check which of the following procedures will be used to notify and educate the public about this burn project. Television Radio Newspaper Posters/fliers Telephone calls Other (Explained in A.11b below)

A.11b The specifics of the notification procedure(s) checked above are as follows:

A.12 The permittee will place appropriate signage at or near burn sites to identify the burn project to the public as noted on the attached map# _____.

Adjacent Air Districts and neighboring state Air Districts which may potentially be impacted by smoke travel or which have previously been impacted by smoke from similar burn projects are listed below.

A.13 Air District Name: _____

A.14 Contact: _____

A.15 Address: _____

A.16 24-hour Telephone: _____

A.17 Fax: _____

A.18 Air District Name: _____

A.19 Contact: _____

A.20 Address: _____

A.21 24-hour Telephone: _____

A.22 Fax: _____

23 Neighboring State Air District Name: _____

A.24 Contact: _____

A.25 Address: _____

A.26 24-hour _____

Telephone: _____

A.27 Fax: _____

* See General Information on page 1 for determining if your burn has the potential to impact a smoke sensitive area.

** Visual smoke observation refers to observations made through the eyes of designated individuals.

SECTION B: AS REQUIRED BY TITLE 17 AND AIR DISTRICT POLICIES, THIS SECTION APPLIES TO ALL BURN PROJECTS GREATER THAN 100 ACRES OR PRODUCING MORE THAN 10 TONS OF PARTICULATE MATTER

B.1. Meteorological Conditions for Ignition

Source of Meteorological Information: _____

Surface Wind Direction:

Ideal: _____ Acceptable Range: _____ (degrees)

Surface Wind Speed:

Ideal: _____ Maximum: _____ Minimum: _____ (mph)

Transport Wind Direction:

Ideal: _____ Acceptable Range: _____ (degrees)

Relative Humidity:

Ideal: _____ Maximum: _____ Minimum: _____ (%)

Target Mixing Height Parameters: _____

Acceptable Temperature Range: _____ (degrees)

Other Considerations to Assure Acceptable Smoke Dispersion:

B.2a Describe contingency actions/methods/procedures permittee will take in the event that serious smoke impacts begin to occur or meteorological conditions deviate from those specified in this SMP (for example: stop ignitions, initiate mop-up, conduct fire suppression – describe in detail):

B.2b Describe any applicable interior unit contingency cutoff lines (refer to map# _____ as appropriate):

B.3 An evaluation of alternatives to burning is described below:

_____ It is a part of the environmental documentation required for the burn project pursuant to the National Environmental Policy Act or the California Environmental Quality Act and is either attached to this SMP, is on file with the Air District, or is provided for as agreed to by the Air District. Document location:

_____ Neither a National Environmental Policy Act or the California Environmental Quality Act assessment of alternatives has been performed. Alternatives to reduce fuel load are described in section B.4 – B.9 below.

B.4 Alternatives Considered:

B.5 Alternatives Rejected and Reasons for Rejection:

B.6 Alternatives Used, and Tons of Vegetative Material Treated With Each Alternative:

B.7 Particulate Reduction for Each Alternative Used (tons):

B.8 Total Particulate Reductions from Alternatives Used:

B.9 If this project is greater than 250 acres or smoke impacts occur, the permittee will provide a completed Post Burn Evaluation Form (see page 11) to the Air District within 30 days of project completion.

B.10 For burns greater than 250 acres, Sections A.9 and A.10 describe the site monitoring requirements.