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|  | |  |  | | --- | --- | | BAY AREA  AIRQYALITY  MANAGEMENT  DISTRICT | PRESCRIBED BURNING SMOKE MANAGEMENT PLAN  Provide All of The Following Information Using the Attached Instructions  GENERAL INFORMATION | |

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| --- |
| PREPARER'S NAME & ADDRESS (street, city, zip) DATE |

PREPARER'S AFFILIATION: PHONE #

Jared Childress Aldrich / Smoke plan Coordinator (510) 499-1496

PRIMARY RESPONSIBLE PERSON: PHONE #

Ben Jacobs/ Burn Boss (707) 732-1586

LAND OWNER(S) & MAILING ADDRESS (street, city, zip): PHONE #

Rick Kavinoky, 7899 St. Helena Rd., Santa Rosa., 95404 (707) 328-9346

FIELD CONTACT NAME & 24-HOUR PHONE/PAGER # (during burn).

Sasha Berlman/ Firing Boss (707) 732-1586

# PROJECT DESCRIPTION

1. LOCATION:

7899 St. Helena Rd., Santa Rosa., 95404. Lat 38°32'17.27"N Lon 122°35'56.08"W The site is within the Mark West Watershed. Elevation of unit: 1700-2200 feet.

1. OBJECTIVES:

To burn and clear out pre-treated ladder and ground fuels, for the purpose of forest health and the creation of defensible, shaded-fuel-breaks.

1. PROJECTED ACREAGE:

20.9 acres

1. PROJECTED TONNAGE:

0.5 (1 hr fuel) and 1.5 (10 hr fuel) tons/acre \* 20.9 acres = 41.8 tons fuel present

1. TYPE(S) AND ARRANGEMENT OF VEGETATION TO BE BURNED:

Douglas fir saplings and Tan oak saplings, lopped and scattered evenly across the unit, below knee height.

1. FUEL CONDITION:

Lopped and scattered target vegetation is completely cured, dried and available.

1. COMBUSTION:

Expected combustion efficiency: 90%

Expected percentage of the total amount of material to be burned: 60-90%

1. PROJECTED BURN SCHEDULE:

Starting 11/3/18 to 12/31/18, weekends, weather permitting, starting at 9:30 am.

1. EXPECTED DURATION OF PROJECT (a) IGNITION: 3 hrs (b) COMBUSTION: 1 hrs

(c) BURN DOWN: 3 hrs

# SMOKE MANAGEMENT COMPONENTS

1. DIRECTIONS AND DISTANCES TO NEARBY SENSITIVE RECEPTOR AREAS:

Calistoga is 4 miles to the NE and Rincon Valley is 4.6 miles to the Southwest; both have multiple schools but no other sensitive receptors.

1. METEOROLOGICAL PRESCRIPTION:

Temp: 50-85 F.

RH: 20-70%.

1hr fuel moisture: 7-15%

10hr fuel moisture: 9-20%

Wind speed: 2-15, 5-12 optimal.

Wind Direction: light winds of any direction can be acceptable, but ideally Northwest, North or Northeast.

A minimum of a 20 on the dispersal index is desired. A mixing height of 1500 ft or higher is optimal. High mixing is optimal.

1. SPECIFICATIONS FOR MONITORING AND VERIFICATION OF METEOROLOGICAL CONDITIONS AND SMOKE BEHAVIOR BEFORE AND DURING THE BURN:

A calibrated kestrel 5500 will be used before, during and after the burn to verify on site meteorological conditions and logs will be taken on these and smoke behavior details to be submitted back to BAAQMD after the burn.

1. SPECIFICATIONS FOR DISSEMINATING PROJECT INFORMATION TO PUBLIC:

Neighbors will be notified and invited to attend/observe if desired. Due to the rural location of the project area and low impact potential, no further public notifications will be made beyond medical/dispatch and fire agencies and AQ.

1. WHAT CONTINGENCY ACTIONS WILL BE TAKEN DURING THE BURN TO REDUCE EXPOSURE IF SMOKE INTRUSIONS IMPACT ANY SENSITIVE RECEPTOR AREA:

Smoke intrusions to sensitive receptor areas are not anticipated and are estimated to be highly unlikely. However, any such intrusions will be taken very seriously and all reasonable actions to mitigate the problem will be taken in a timely manner, including:

1. The halting of all ignitions (except where needed to control the fire).
2. The suppression of active fire with on-site hand crews, two type III fire engines (Ricon Valley FD and Mountain VFD) and 2000’ of pre-plumbed hose lines.
3. Mop up will be initiated immediately following the suppression of active fire.
4. Mop up will be discontinued if favorable conditions return.
5. ATTACH A COPY OF THE ENVIRONMENTAL IMPACT ANALYSIS PREPARED FOR THE BURN PLAN THAT INCLUDES AN EVALUATION OF ALTERNATIVES TO BURNING, IF SUCH AN ANALYSIS IS REQUIRED BY STATE OR FEDERAL LAW OR STATUTE: N/A
6. PROJECT FUEL LOADING ESTIMATE (TONS VEGETATION/ACRE) BY VEGETATION TYPE(S) AND A DESCRIPTION OF THE CALCULATION METHOD

Project fuel loading is estimated at 41.8 tons total (2 tons/acres based on published “Standard Fire Behavior Fuel Model” for Small downed log (TL4) by Joe H. Scott Robert and E. Burgan, multiplied by 20.9 acres)

1. PARTICULATE MATTER EMISSIONS ESTIMATE INCLUDING REFERENCED EMISSION FACTOR(S) AND A DESCRIPTION OF THE CALCULATION METHOD USED:

20.9 acres \* 2 tons/acre= 41.8 tons \* 20.5 lbs/ton (USDA table 8 “mixed conifer”) = 856.9 lbs of PM10 Emissions.

# CERTIFICATION

1. I HEREBY CERTIFY, AS A QUALIFIED PROFESSIONAL RESOURCE ECOLOGIST, BIOLOGIST, OR FORESTER, THAT THE PROPOSED BURNING DESCRIBED ABOVE IS NECESSARY TO

ACHIEVE THE SPECIFIC MANAGEMENT OBJECTIVE(S) OF THE SMOKE MANAGEMENT PLAN PREPARED FOR THIS PROJECT.

Signature: Date: 10/21/18

Name (print): Jared Childress Aldrich

Title (print): Prescribed Fire Specialist, Audubon Canyon Ranch

(6/2016)

BAAQMD REGULATION 5: OPEN BURNING



INSTRUCTIONS FOR COMPLETING A PRESCRIBED BURNING