



# Lawrence Livermore National Laboratory

April 10, 2025

Ms. Geraldina Grunbaum  
Senior Air Quality Specialist  
Bay Area Air Quality Management District  
375 Beale Street, Suite 600  
San Francisco, CA 94105  
[ggrunbaum@baaqmd.gov](mailto:ggrunbaum@baaqmd.gov)

Subject: *Site 300 Experimental Test Site Prescribed Burning Smoke Management Plan,  
Lawrence Livermore National Laboratory*


Dear Ms. Grunbaum:

Lawrence Livermore National Laboratory (LLNL) has submitted the 2025 Prescribed Burning Smoke Management Plan (SMP) for LLNL Site 300 Experimental Test Site to Bay Area Air Quality Management District (BAAQMD) through the State's Prescribed Fire Information Reporting System (PFIRS). Enclosed with this letter is a copy of the electronic submittal.

Pursuant to Section 5-113 of BAAQMD Regulation 5 *Open Burning* (November 20, 2019), any public agency conducting a prescribed burn for the purpose of wildfire prevention is exempt from the operation fees requirements of Section 5-411 of this rule. A public agency seeking to rely on this exemption shall request that it be applicable upon submittal of the smoke management plan. As described in LLNL's 2025 SMP, one of the objectives of conducting a prescribed burn at LLN Site 300 is wildfire prevention, and therefore, LLNL respectfully requests that the prescribed burning operation fees be waived.

If you have any questions regarding this submittal or require additional information, please contact Saira Soriano of my staff at (925) 961-7952.

Sincerely,

DocuSigned by:  
 4/10/2025  
6EA10AF95384431...  
Paul Roy, Group Leader  
Waste and Air Quality Office  
Environmental Functional Area



Ms. Geraldina Grunbaum, BAAQMD  
LLNL Site 300 Experimental Test Site Prescribed Burning Smoke Management Plan

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Enclosure: PFIRS Submittal – 2025 Prescribed Burning Smoke Management Plan for LLNL  
Site 300 Experimental Test Site

Distribution w/enclosure (PDF):

Aluzzi, Gino  
Balaban, Nicholas (NNSA/LFO)  
Borrelli, Carol (NNSA/LFO)  
Castro, Miguel  
DeLeyos, Bing  
Dibley, Valerie  
Diregolo, Brian (ACFD)  
Espinoza, Mitzi  
Fechser, Matt  
Fratanduono, Meg  
Grim, Tom (NNSA/LFO)  
Heard, Marcus (NNSA/LFO)  
Mishra, Vijay (NNSA/LFO)  
Naranjo, Alberto  
Onofe, Tolu  
Roy, Paul  
Ruiz, Alex  
Rutherglen, Cory (ACFD)  
Ryza, Michelle  
Saabye, Alexandra  
Sharry, John  
So, Wai-Man  
Soriano, Saira  
Sutton, Mark  
Vaughan, Quentin  
Wilson, Scott  
Wise, Tammy (NNSA/LFO)  
Woollett, Jim

Site 300 Prescribed Burn File  
UCM: Site 300, Prescribed Burn

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LLNL Site 300 Experimental Test Site Prescribed Burning Smoke Management Plan

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## **ENCLOSURE 1**

Prescribed Fire Information Reporting System (PFIRS) Submittal –  
2025 Prescribed Burning Smoke Management Plan (SMP) for  
LLNL Site 300 Experimental Test Site

## LLNL S300 2025 - BAAQMD

### General Information

Primary Responsible Person	Saira Soriano
Email	soriano4@lnl.gov
Landowner(s) Name(s)*	US Government-Department of Energy
Landowner Mailing Address*	7000 East Ave., Livermore CA 94550
Field Contact Name*	Brian Diregolo
Field Contact 24-hour Phone/Pager*	925-961-7952

### Project Description

Description of Objectives*	Use prescribed burns to reduce the threat of unwanted fires, manage and enhance plant biodiversity and wildlife habitats, to assure minimal impacts on the environment and cultural resources, and to minimize the occurrence of unnaturally intense fires by reducing the amount of vegetation that can fuel larger, more catastrophic fires. LLNL evaluated the following burning alternatives and concluded that mowing/disking is too steep for the terrain, which is unsafe, and grazing and sterilization will cause adverse impacts to native plants onsite.
Projected Burn Schedule*	From May 2025 through August 2025
Ignition start and end times*	9 AM to 3:30 PM
Expected Duration of Project (hours or days)*	Ignition: <b>4 Hours</b> Combustion: <b>1 Hour</b> Burndown: <b>1 Hour</b>

### Review Burn Blocks

Project 17 (Plot 16W)						
Acreage and Fuels Information						
Name	Acres	Unit Type	Fuel Condition			
Project 17 (Plot 16W)	132	Broadcast	This plot is characterized as ungrazed perennial (native) grassland, with natural standing. The average height of the grass is 12-16 inches.			
Location Information						
Legal Description	Latitude*	Longitude*	Mean Elevation (ft)*	County		
Plot 16W	37.663503	-121.571637	1391	Alameda		
Fuel and PM10 Emissions Information						
Vegetation	% Consumption	Acres	Fuel Loading	Total Tonnage	PM10 per Ton	PM10 per Type
Grass/Forb	100	132	1	132	0.007	0.92
Totals	--	132	--	132	--	0.92
Ignition Prescription						
Wind Speed (mph)	Wind Direction	Mixing Height (ft)	Temperature (F)	Relative Humidity (%)		
0-20	0-360	min. 500 feet above ground level	50-100	15-75		
Smoke Sensitive Receptors						
No SSAs have been entered.						

Project 16 (Plot 11)						
Acreage and Fuels Information						
Name	Acres	Unit Type	Fuel Condition			
Project 16 (Plot 11)	7	Broadcast	This plot is characterized as ungrazed perennial (native) grassland, with natural standing. The average height of the grass is 12-16 inches.			
Location Information						
Legal Description	Latitude*	Longitude*	Mean Elevation (ft)*	County		
Plot 11	37.640086	-121.580062	750	Alameda		
Fuel and PM10 Emissions Information						
Vegetation	% Consumption	Acres	Fuel Loading	Total Tonnage	PM10 per Ton	PM10 per Type
Grass/Forb	100	7	1	7	0.007	0.05
Totals	--	7	--	7	--	0.05
Ignition Prescription						
Wind Speed (mph)	Wind Direction	Mixing Height (ft)	Temperature (F)	Relative Humidity (%)		
0-20	0-360	min. 500 feet above ground level	50-100	15-75		
Smoke Sensitive Receptors						
No SSAs have been entered.						

### Smoke Management Components

Specifications for monitoring and verification of meteorological conditions and smoke behavior before and during the burn:

All burns will be conducted with personnel and equipment as set forth in the Alameda County Policy (Site 300 Prescribed Burn). A minimum of ten chief officers, captains, and firefighters will be present at all burns. The incident Commander will manage the project in a manner that will minimize impact to sensitive areas and the public. The project size, firing tactics, and burn

duration will be adjusted to meet these goals. LLNL will submit ignition authorization request the day prior to each burn via the PFIRS. LLNL will obtain a spot weather forecast from the National Weather Service the day before any burn.

Specifications for disseminating project information to the public:

In advance of burn activities, the Office of Government and External Affairs at LLNL notifies neighbors and nearby residents of Site 300 of the intent to perform the burn projects. This notification is conducted by mail, local libraries, web using current contact information, and social media platforms such as LinkedIn, Twitter, etc. LLNL points of contact are provided along with the LLNL representative so individual questions or concerns can be addressed.

What contingency actions will be taken during the burn to reduce exposure if smoke intrusions impact any sensitive receptor areas?

X	Halt ignition, except as needed to maintain control of fire
	Allow fire to burn to contingency control lines
X	Suppress fire
	Begin immediate mop up
	Begin mop up within hours of problem identification
	Complete mop up within hours of initiation
	Discontinue mop up if favorable conditions return
X	Other (explain) <b>Reduce the size of the burn plot by developing new control lines. Initiate mop-up operations once fire is controlled. Focus suppression and mop-up operations on the area of greater smoke production.</b>

### Project Maps and Documents

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. (map opens in new tab)

View units on Google Maps: [Google Map](#)





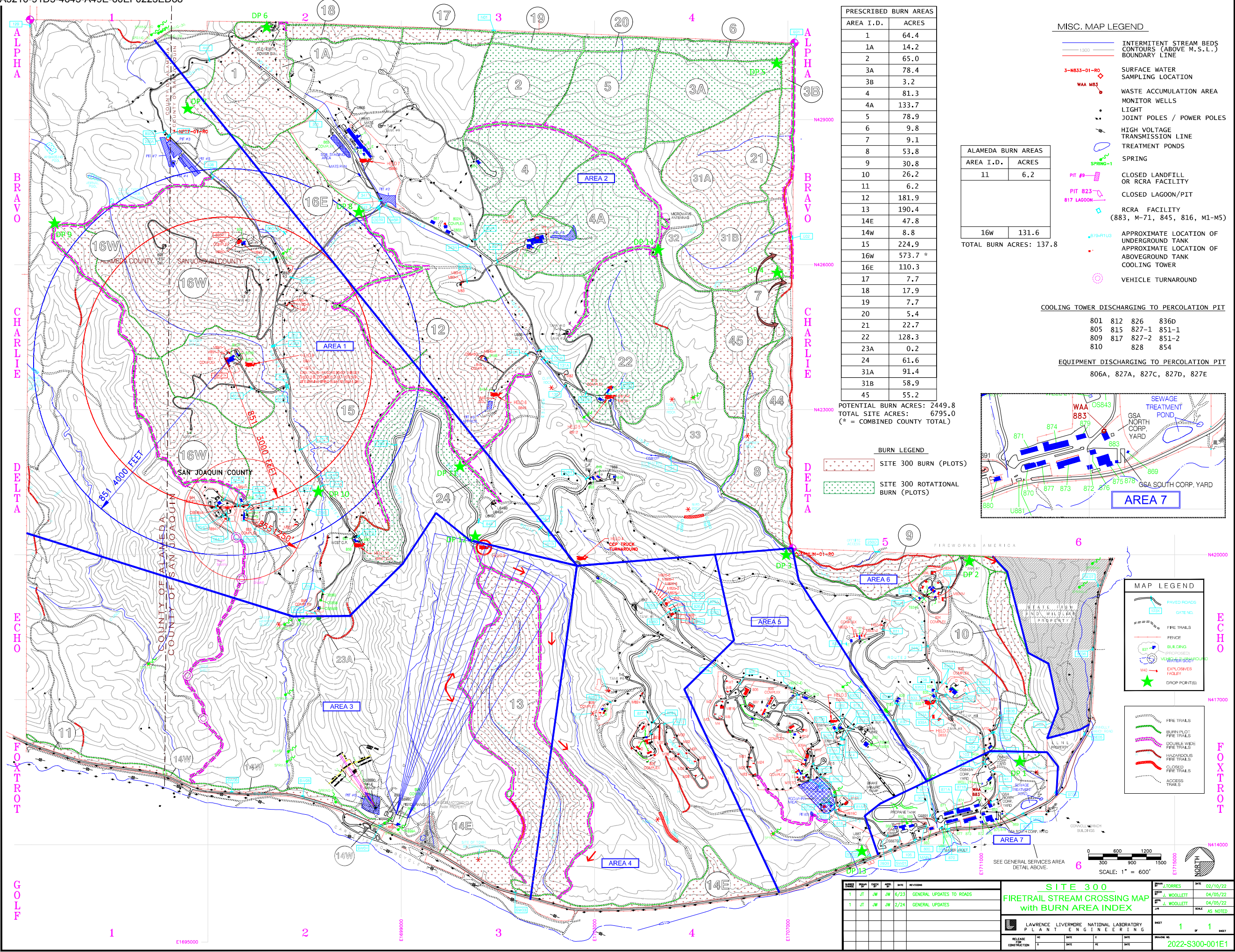
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**Smoke Management Plan History**

Approval letter:

No approval letter has been attached.

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PRESCRIBED BURN AREAS	
AREA I.D.	ACRES
1	64.4
1A	14.2
2	65.0
3A	78.4
3B	3.2
4	81.3
4A	133.7
5	78.9
6	9.8
7	9.1
8	53.8
9	30.8
10	26.2
11	6.2
12	181.9
13	190.4
14E	47.8
14W	8.8
15	224.9
16W	573.7 *
16E	110.3
17	7.7
18	17.9
19	7.7
20	5.4
21	22.7
22	128.3
23A	0.2
24	61.6
31A	91.4
31B	58.9
45	55.2

POTENTIAL BURN ACRES: 2449.8  
 TOTAL SITE ACRES: 6795.0  
 (\* = COMBINED COUNTY TOTAL)

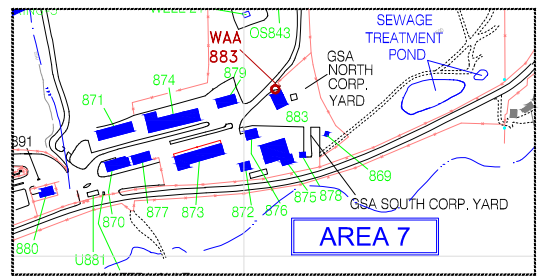
ALAMEDA BURN AREAS	
AREA I.D.	ACRES
11	6.2
16W	131.6

TOTAL BURN ACRES: 137.8

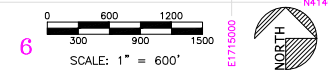
- MISC. MAP LEGEND**
- INTERMITTENT STREAM BEDS
  - CONTOURS (ABOVE M.S.L.)
  - BOUNDARY LINE
  - 3-NB33-01-RO SURFACE WATER SAMPLING LOCATION
  - WAA MBS WASTE ACCUMULATION AREA MONITOR WELLS
  - LIGHT
  - JOINT POLES / POWER POLES
  - HIGH VOLTAGE TRANSMISSION LINE
  - TREATMENT PONDS
  - SPRING
  - PIT #9 CLOSED LANDFILL OR RCRA FACILITY
  - PIT #233 CLOSED LAGOON/PIT
  - 817 LAGOON RCRA FACILITY (883, M-71, 845, 816, M1-M5)
  - APPROXIMATE LOCATION OF UNDERGROUND TANK
  - APPROXIMATE LOCATION OF ABOVEGROUND TANK
  - COOLING TOWER
  - VEHICLE TURNAROUND

- COOLING TOWER DISCHARGING TO PERCOLATION PIT**
- 801 812 826 836D
  - 805 815 827-1 851-1
  - 809 817 827-2 851-2
  - 810 828 854
- EQUIPMENT DISCHARGING TO PERCOLATION PIT**
- 806A, 827A, 827C, 827D, 827E

- BURN LEGEND**
- SITE 300 BURN (PLOTS)
  - SITE 300 ROTATIONAL BURN (PLOTS)



- MAP LEGEND**
- PAVED ROADS
  - GATE NO.
  - FIRE TRAILS
  - FENCE
  - BUILDING
  - VEHICLE TURNAROUND
  - EXPLOSIVES FACILITY
  - DROP POINT(S)
  - FIRE TRAILS
  - BURN PLOT FIRE TRAILS
  - DOUBLE WIDE FIRE TRAILS
  - HAZARDOUS FIRE TRAILS
  - CLOSED FIRE TRAILS
  - ACCESS TRAILS



NO.	DATE	BY	REVISION
1	02/10/22	JT	GENERAL UPDATES TO ROADS
2	04/05/22	JW	GENERAL UPDATES
3	04/05/22	JW	GENERAL UPDATES

**SITE 300 FIRETRAIL STREAM CROSSING MAP with BURN AREA INDEX**

LAWRENCE LIVERMORE NATIONAL LABORATORY PLANT ENGINEERING

DATE OF LAST UPDATE: 2/15/2024