LLNL S300 2022 - BAAQMD

General Information

Primary Responsible Person	**Wai-Man So**
Email	**so5@llnl.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*	**9257248040**

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 2022 through August 2022**
Ignition start and end times*	**9 AM** to **3:30 PM**
Expected Duration of Project (hours or days)*	Ignition: **4 Hours** Combustion: **1 Hour** Burndown: **1 Hour**

Review Burn Blocks

Project 16 (Plot 16W)

Acreage and Fuels Information

Name	Acres	Unit Type	Fuel Condition
Project 16 (Plot 16W)	**132**	**Broadcast**	**This plot is characterized as ungrazed perennial (native) grassland, with natural standing. The average height of the grass is less than 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 17 (Plot 11)

Acreage and Fuels Information

Name	Acres	Unit Type	Fuel Condition

Project 17 (Plot 11)	**8**	**Broadcast**	**This plot is characterized as ungrazed perennial (native) grassland, with natural standing. The average height of the grass is less than 12-16 inches.**

Location Information				
Legal Description	Latitude*	Longitude*	Mean Elevation (ft)*	County
Plot 11	**37.640086**	**-121.580060**	**750**	**Alameda**

Fuel and PM10 Emissions Information						
Vegetation	% Consumption	Acres	Fuel Loading	Total Tonnage	PM10 per Ton	PM10 per Type
Grass/Forb	**100**	**8**	**1**	**8**	**0.007**	**0.06**
Totals	--	**8**	--	**8**	--	**0.06**

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 Public Affairs Office (PAO) 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?

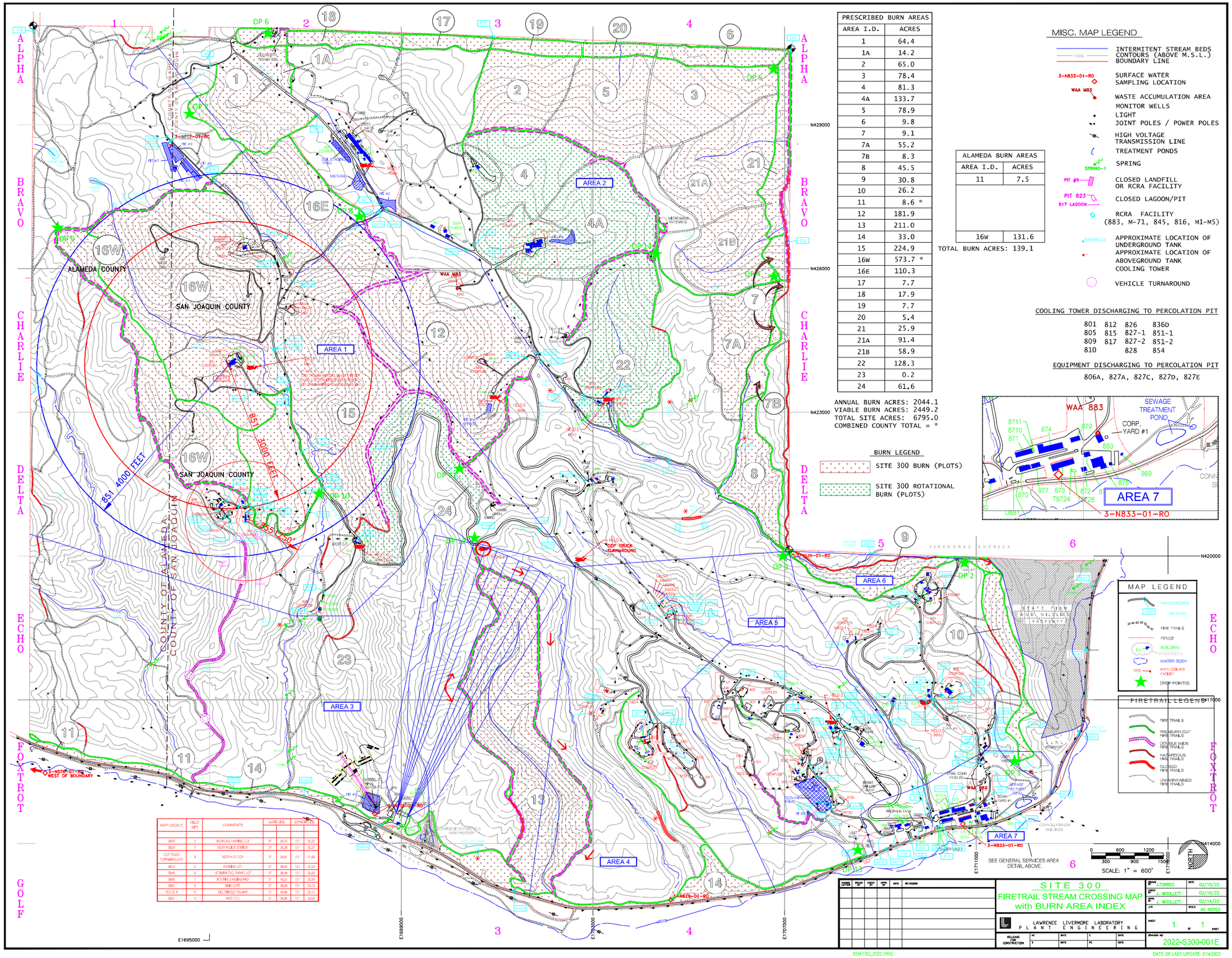
X	Halt ignition, except as needed to maintain control of fire
	Allow fire to burn to contingency control lines
X	Suppress fire
	Begin immediate mop up
	Begin mop up within hours of problem identification
	Complete mop up within hours of initiation
	Discontinue mop up if favorable conditions return
X	Other (explain) **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 area of greater smoke production.**

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)

Smoke Management Plan History

Submitted by:	**Wai-Man So**
Date Submitted:	**Thu Apr 07, 2022 @ 12:58 PM**
Returned by:	**Duc Nguyen**
Date returned:	**Thu Apr 07, 2022 @ 2:42 PM**
Air District name:	**Bay Area AQMD**
Comment(s):	**Return for edits per email on Apr. 7, 2022.**
Submitted by:	**Wai-Man So**
Date Submitted:	**Fri Apr 08, 2022 @ 7:58 AM**
Returned by:	**Duc Nguyen**
Date returned:	**Fri Apr 08, 2022 @ 10:57 AM**
Air District name:	**Bay Area AQMD**
Comment(s):	**Please remove the copy of the SMP from the "Project Maps and Document".**
Submitted by:	**Wai-Man So**
Date Submitted:	**Fri Apr 08, 2022 @ 11:08 AM**
Approved by:	**Linda Carey**
Date approved:	**Wed Apr 13, 2022 @ 2:37 PM**
Air District name:	**Bay Area AQMD**
Comment(s):	**Approval Letter Pkg. with new PFIRS instructions**
Approval letter:	



PRESCRIBED BURN AREAS	
AREA I.D.	ACRES
1	64.4
1A	14.2
2	65.0
3	78.4
4	81.3
4A	133.7
5	78.9
6	9.8
7	9.1
7A	55.2
7B	8.3
8	45.5
9	30.8
10	26.2
11	8.6 *
12	181.9
13	211.0
14	33.0
15	224.9
16W	573.7 *
16E	110.3
17	7.7
18	17.9
19	7.7
20	5.4
21	25.9
21A	91.4
21B	58.9
22	128.3
23	0.2
24	61.6

ANNUAL BURN ACRES: 2044.1
VIABLE BURN ACRES: 2449.2
TOTAL SITE ACRES: 6795.0
COMBINED COUNTY TOTAL = *

ALAMEDA BURN AREAS	
AREA I.D.	ACRES
11	7.5
16W	131.6

TOTAL BURN ACRES: 139.1

MISC. MAP LEGEND

- INTERMITENT STREAM BEDS
- CONTOURS (ABOVE M.S.L.)
- BOUNDARY LINE
- SURFACE WATER SAMPLING LOCATION
- WASTE ACCUMULATION AREA
- MONITOR WELLS
- LIGHT
- JOINT POLES / POWER POLES
- HIGH VOLTAGE TRANSMISSION LINE
- TREATMENT PONDS
- SPRING
- CLOSED LANDFILL OR RCRA FACILITY
- CLOSED LAGOON/PIT
- 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

MAP LOCALE	HELO SITE	COMMENTS	LATITUDE		LONGITUDE	
B809	2	INFRONG PARKING LOT	37	39.45	121	35.22
B400	3	NEAR POLICE STATION	37	39.28	121	35.27
COP TRUCK TURNAROUND	4	NORTH OF COP	37	39.37	121	35.46
B812	5	PARKING LOT	37	39.42	121	37.33
B845	6	HEIBURN FAC. PARKING LOT	37	39.49	121	37.20
B816	7	BOLTING LANDING PAD	37	46.21	121	39.04
B401	8	MAIN GATE	37	39.29	121	33.73
ROSTER 4	9	SEE TRIBUTE ON MAP	37	39.06	121	35.13
B401	10	WEST GATE	37	39.06	121	37.58