



Department of Toxic Substances Control Public Input Meeting for Santa Susana Field Laboratory (SSFL) Boeing – Area I Burn Pit Removal Action Work Plan (AIBP RAW)

PATRICK MOVLAY – SENIOR ENVIRONMENTAL SCIENTIST / PROJECT MANAGER, DTSC

BRIAN FAULKNER, Ph.D. – SENIOR TOXICOLOGIST, DTSC

DONALD GREENLEE, Ph.D. – STAFF TOXICOLOGIST, DTSC

JOHN FASSELL, CHP – CHIEF, INSPECTION, COMPLIANCE AND ENFORCEMENT PROGRAM, CDPH

BRADLEY LOOMIS – SENIOR HEALTH PHYSICIST, RADIOLOGIC HEALTH BRANCH, CA DEPT OF PUBLIC HEALTH

VALERIE CHENOWETH – SENIOR HEALTH PHYSICIST, DTSC

JAMIE SLAUGHTER, DM – SENIOR PUBLIC PARTICIPATION SPECIALIST, DTSC

Online Zoom Meeting: November 9, 2023, from 6:00pm – 8:00pm

If you have difficulty accessing any material presented, please contact us by email, mail, or telephone, and we will work with you to make the information available.

For email Requests: accessibility@dtsc.ca.gov

For written requests: The Office of Civil Rights, Department of Toxic Substances Control, P.O. Box 806
Sacramento, CA 95812-0806

Telephone: +1 916 324-3095 or +1 800 728-6942 (Toll free)

DTSC Overview



The Department of Toxic Substances Control's (DTSC) mission is to protect California's people, communities, and environment from toxic substances, to enhance economic vitality by restoring contaminated land, and to compel manufacturers to make safer consumer products.

Meeting Agenda

- Meeting Purpose & Agreements
- DTSC & SSFL Overview
- Presentation: SSFL Area I Burn Pit RAW (Patrick Movlay)
- Q&A and Input
- Public Input Next Steps



Meeting Purpose

Meeting Purpose

- Review the AIBP RAW
- Answer questions so stakeholders can provide informed input
- Explain how to access the draft documents
- Explain how to provide input

How To Provide Input

- **Input Period** (October 10 – November 15)
- **Input Form:** https://dtsc.ca.gov/santa_susana_field_lab/
- **Email:** DTSC_SSFL@DTSC.CA.Gov
- **Mail:** DTSC, SSFL AIBP RAW Input, 9211 Oakdale Ave., Chatsworth, CA 91311
- Verbal input at meeting

DTSC Review

- Review all questions and input
- DTSC will respond to questions requiring clarification on the RAW that is necessary to provide informed input
- RAW revised based on input if necessary
 - Revisions made based on input will be noted in the DTSC approval letter
- Work Notices distributed before RAW is implemented

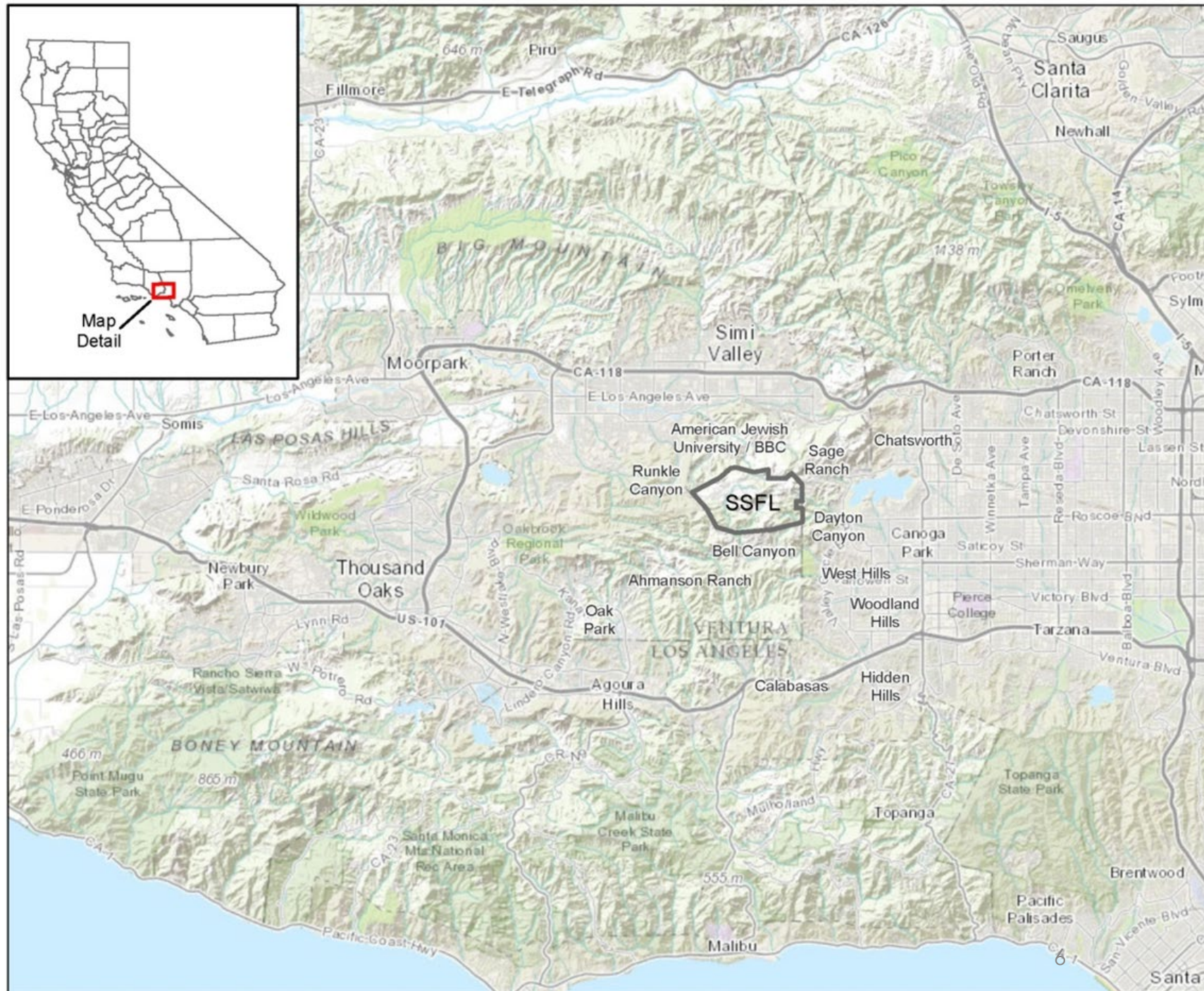


Meeting Agreements

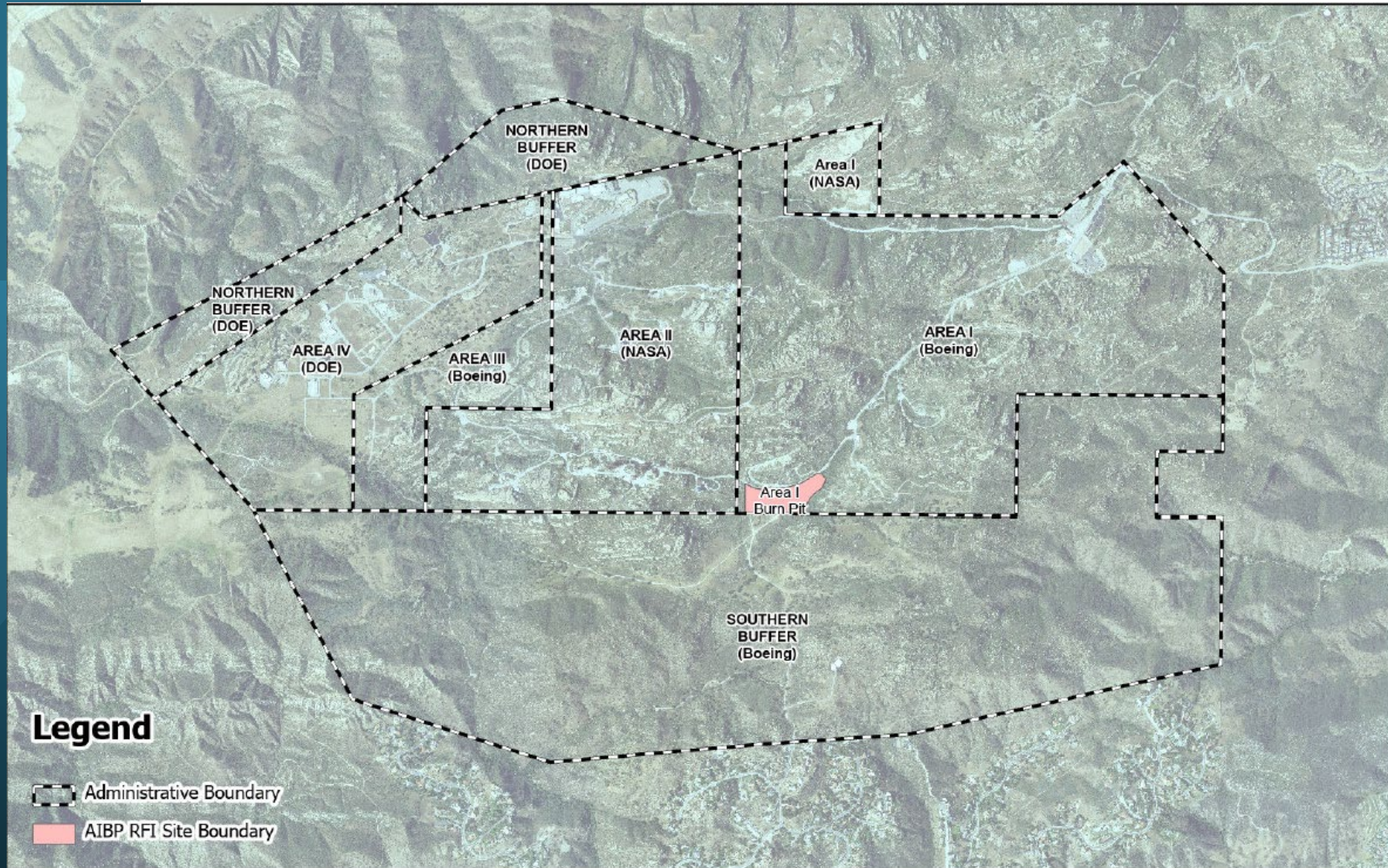


- Please be courteous to your fellow meeting attendees
- By participating in this meeting, you understand this meeting is recorded and you may be muted (Zoom)
- Speak clearly and at an even pace to ensure that all meeting participants receive the same information
- Use the Q&A section to type questions throughout the presentation (Zoom)
- Please adhere to the question/input allotted time (one question/input)

SSFL Site Location



SSFL Site Overview



Acronyms

AIBP	Area I Burn Pit
BGS	Below Ground Surface
CEQA	California Environmental Quality Act
CDPH	California Department of Public Health
CMS	Corrective Measures Study
EAA	Early Action Area
EcoRBSLs	Ecological Risk Based Screening Levels
ESA	Environmentally Sensitive Area
IS&E	Imminent and Substantial Endangerment
LDA	Lay Down Area
LUTVs	Lookup Table Values
mg/kg	milligram/kilogram
Nal	Sodium Iodide
PCBs	Polychlorinated Biphenyls
pCi/g	picocuries/gram
RAW	Removal Action Workplan
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
RP	Responsible Party
RWQCB	Regional Water Quality Control Board
SSFL	Santa Susana Field Laboratory
TTF	Thermal Treatment Facility
VCAPCD	Ventura County Air Pollution Control District
VOCs	Volatile Organic Compounds



Background

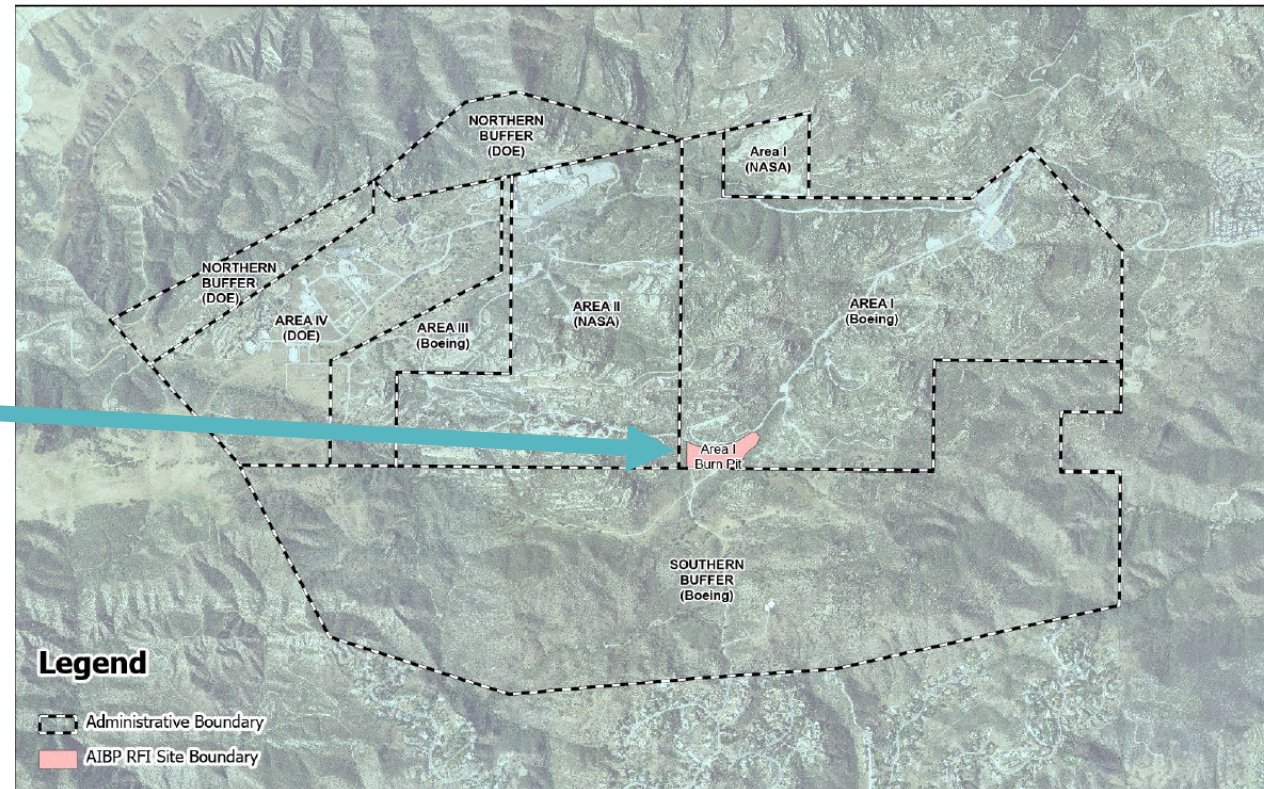




Area I Burn Pit: Current Conditions



2022 Imminent and Substantial Endangerment Determination and Consent Order (ISE Order)











Removal Action Objectives

- Excavation of Radionuclides concentrations in soil in excess of LUTVs.
- Protection of ecological receptors.
- Stabilization of the AIBP RFI Site.

BASEMAP LEGEND

-  Boeing RFI Site
-  Area I Burn Pit RFI Site Reporting Area
-  Drainage Channel
-  Top of Bank of Drainage Channel
-  Pond
-  Early Action Area

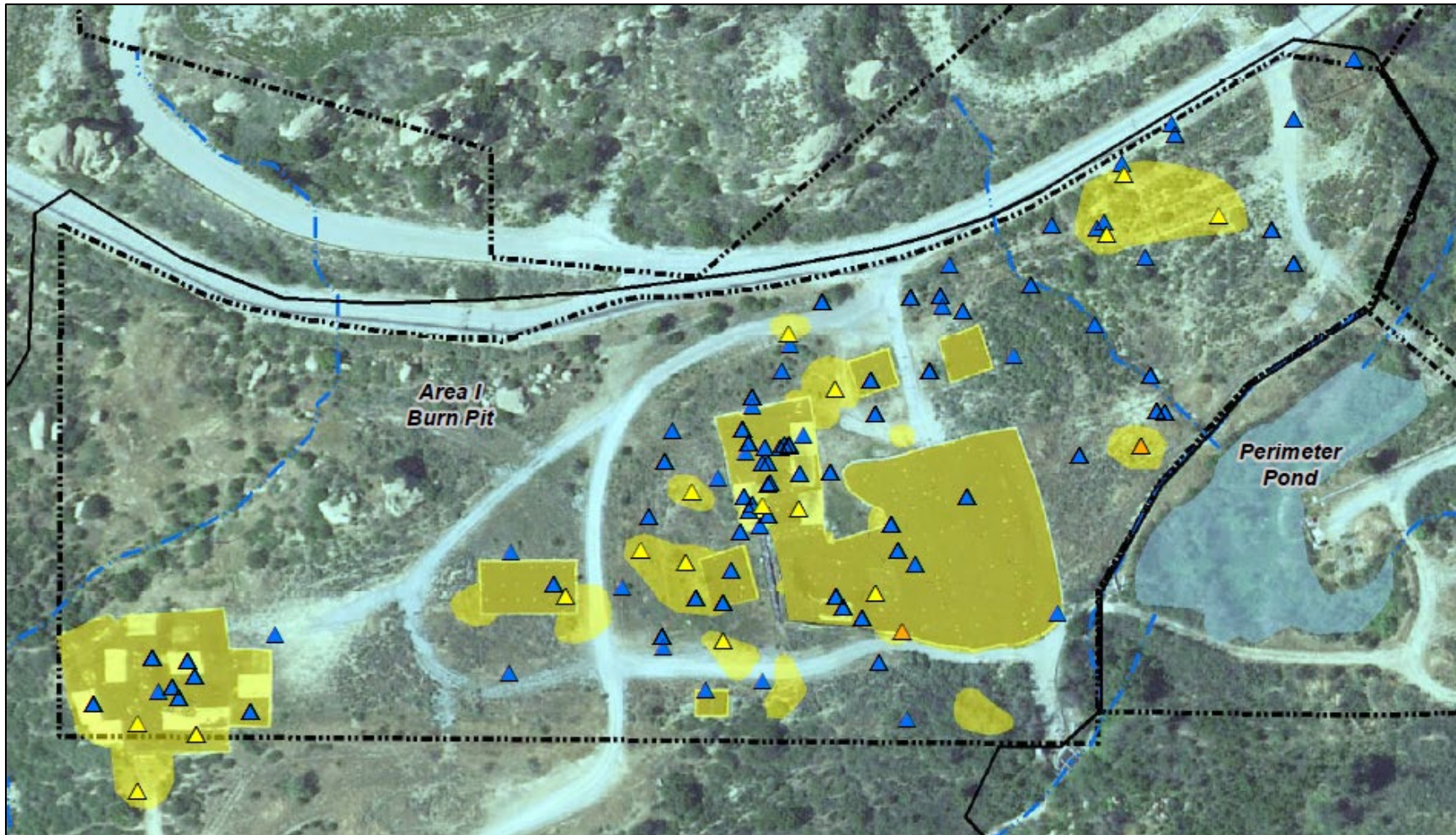
Sensitive Plant Species Plant

-  Coast Live Oak
-  Santa Susana Tarplant
-  Santa Susana Tarplant
-  Sensitive Plant Species Buffer
-  Biological Survey Area
-  Utility Pole

Protection of Natural and Cultural Resources



Removal Action in the Early Action Areas (EAAs)



Immediate threats from contaminants of concern:

- Metals
- Polychlorinated Biphenyls (PCBs)
- Dioxins
- Pentachlorophenol
- Trichloroethene (TCE)
- Radionuclides above LUTVs*

*Based on the January 2013 Radiological Draft Provisional Lookup Table Values

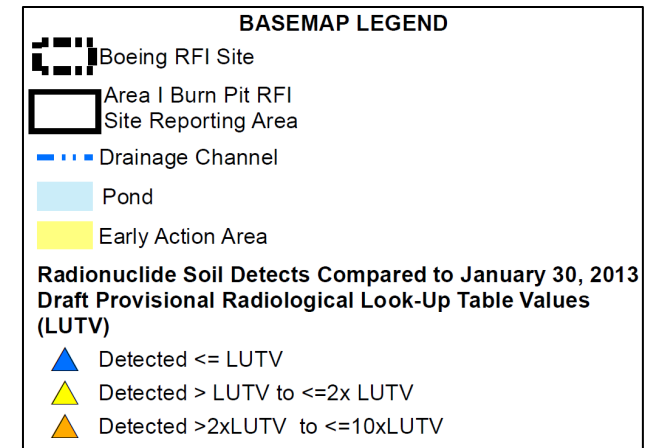


Table 3. Soil Remedial Goals Located in the RAW

Soil Remedial Goals

Table 3. Soil Remedial Goals

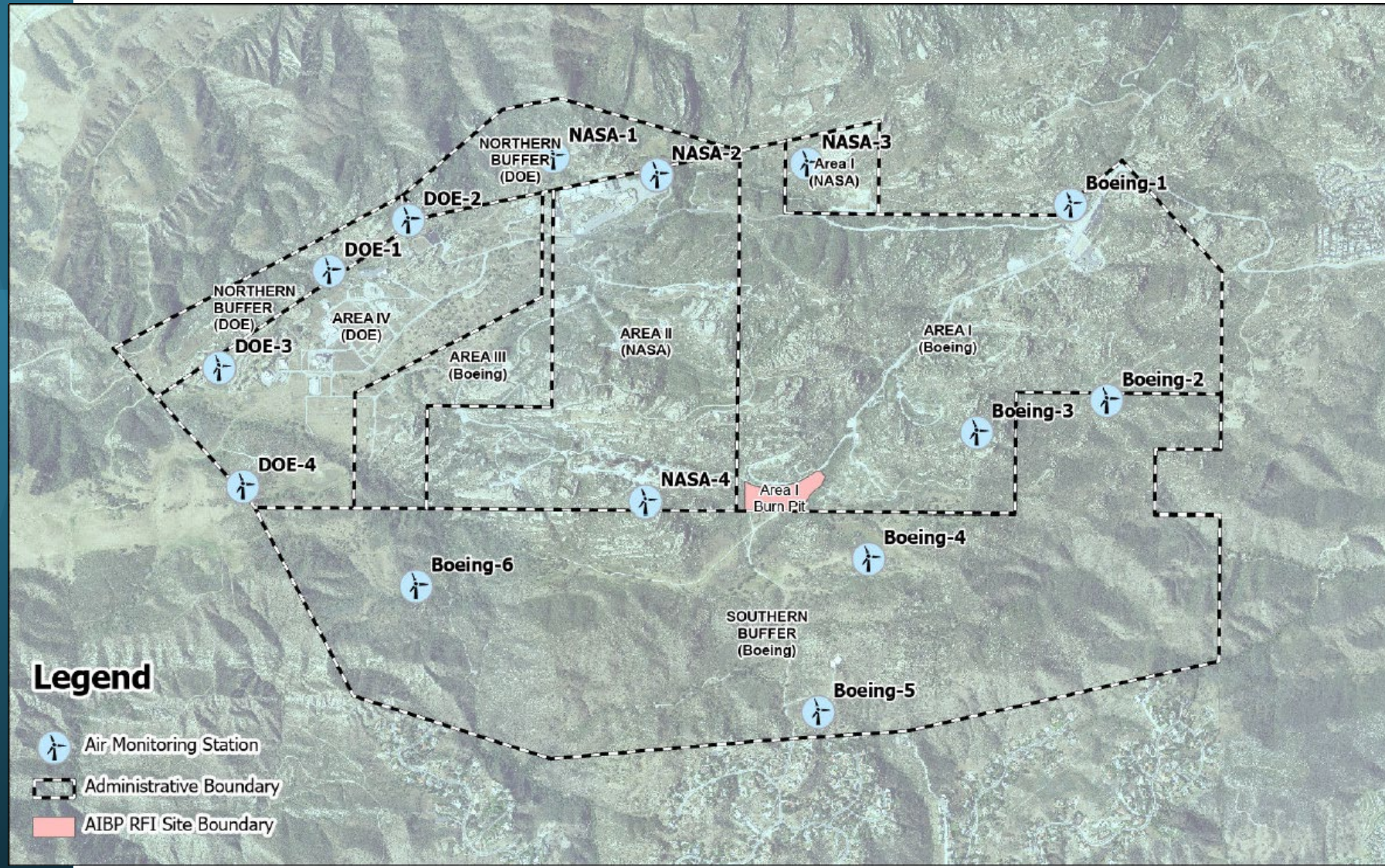
Analytical Group	Analyte	CAS	Remedial Goal	Units	Source
Dioxin	2,3,7,8-TCDD_TEQ_Bird	1746016-TEQ_Bird	0.000057	mg/kg	High EcoRBSL (hermit thrush)
Dioxin	2,3,7,8-TCDD_TEQ_Mammal	1746016-TEQ_Mammal	0.000005	mg/kg	High EcoRBSL (deer mouse)
Metal	Cadmium	7440439	0.56	mg/kg	High EcoRBSL (deer mouse)
Metal	Mercury	7439976	0.29	mg/kg	High EcoRBSL (hermit thrush)
Metal	Molybdenum	7439987	39	mg/kg	10X High EcoRBSL (deer mouse)
Metal	Nickel	7440020	840	mg/kg	10X High EcoRBSL (deer mouse)
Metal	Zinc	7440666	930	mg/kg	10X High EcoRBSL (hermit thrush)
PCB	Aroclor-1248	12672296	0.64	mg/kg	10X High EcoRBSL (deer mouse)
PCB	Aroclor-1254	11097691	3.9	mg/kg	10X High EcoRBSL (deer mouse)
VOC	Pentachlorophenol	87865	10	mg/kg	High EcoRBSL (deer mouse)
VOC	Trichloroethene	79016	18	mg/kg	High EcoRBSL (deer mouse)
VOC	1,1-Dichloroethene	75354	18	mg/kg	High EcoRBSL (deer mouse)
Radiological	Europium-152	14683239	0.0739	pCi/g	LUTV
Radiological	Plutonium-238	13981163	0.0254	pCi/g	LUTV
Radiological	Plutonium-239/240	E-13207	0.023	pCi/g	LUTV
Radiological	Thorium-230	14269637	2.38	pCi/g	LUTV
Radiological	Thorium-232	7440291-R	3.44	pCi/g	LUTV
Radiological	Uranium-233/234	E-13230	2.18	pCi/g	LUTV
Radiological	Uranium-235/236	E-16045	0.152	pCi/g	LUTV for Uranium-235
Radiological	Uranium-238	7440611-R	1.96	pCi/g	LUTV

LUTVs are January 20, 2013 Provisional Look-Up Table Values from EPA Lab B.

EcoRBSLs are Ecological Risk Based Screening Levels of March 18, 2022, Attachment 3 of Exhibit 5 to the Settlement Agreement (DTSC-Boeing 2022)



Sitewide Air Monitoring Program





Construction Air Monitoring and Dust Mitigation

- Personal Air Monitoring
 - Volatile Organic Compounds
 - Combustible Gas
 - Carbon Monoxide
 - Dust Monitor
 - Personnel Particulate Exposure
- AIBP Perimeter Monitoring
 - Particulate Monitoring
 - Wind Monitoring
- Dust Mitigation Measures



On-Site Radionuclide Monitoring



Personal Air Sampling



Occupational Radionuclide Occupational Dose

Internal Monitoring

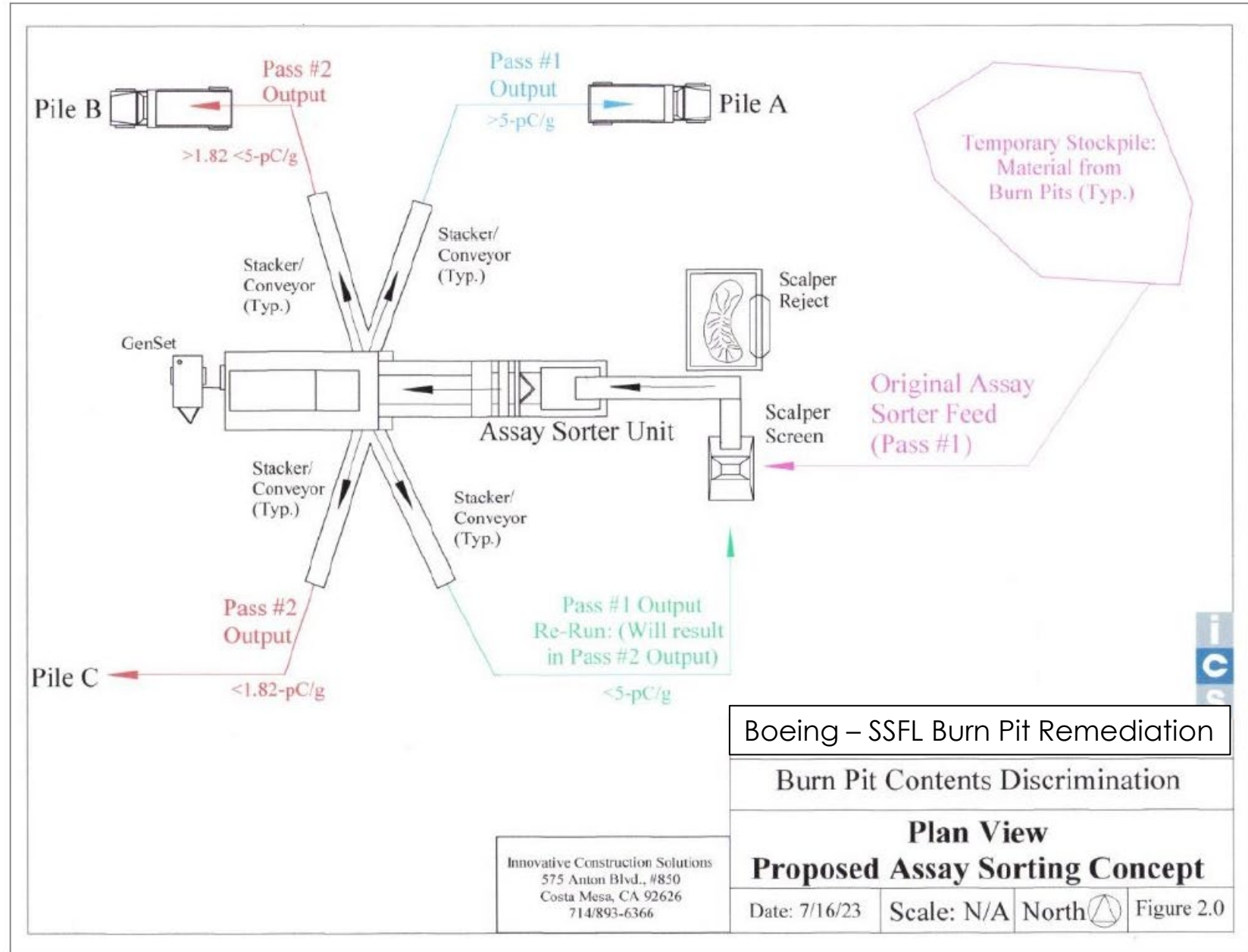
External Monitoring

Particulate Monitoring

Figure 4.2 Proposed Assay Sorting Process

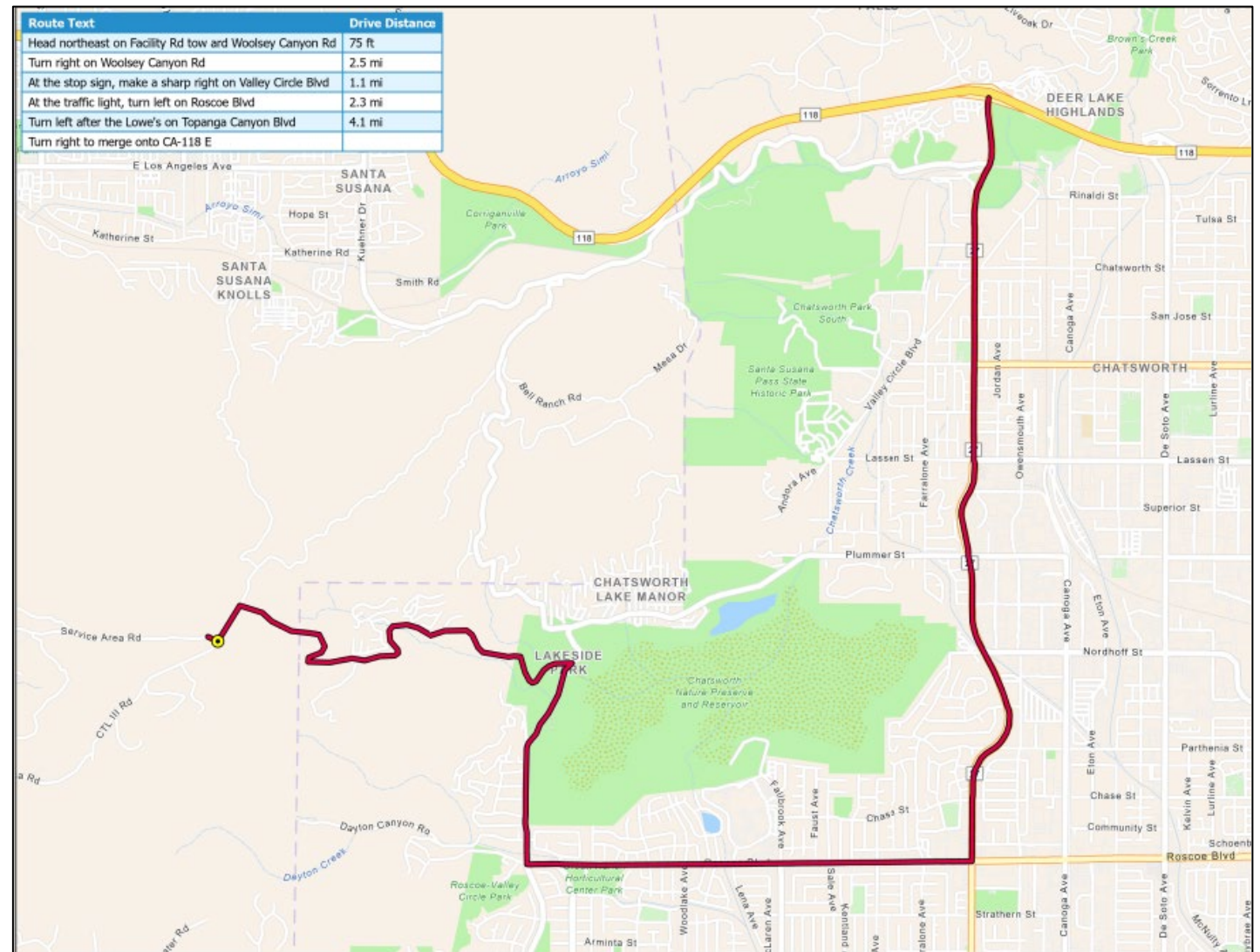
Located in the Area I Burn Pit Project Execution Plan

ISO-Pacific Soil Sorting System



Soil Transportation and Disposal

- 15000 cubic yards/1000 truckloads
- Nonhazardous Facility (outside of Simi Valley)
- RCRA and Non-RCRA Hazardous Facilities
 - Clean Harbors Buttonwillow Landfill, CA
 - Waste Management Kettleman Hills Landfill, CA
 - US Ecology, Beatty, Nevada
- Radioactive Waste Facilities
 - US Ecology Beatty, NV
 - US Ecology, Grandview, UT
 - Energy Solutions, Clive, UT
 - Waste Control Specialties, TX



Legend

- SSFL Facility
- Transportation Route



Trucks & Equipment Decontamination

- Equipment Decontamination
 - Tools
 - Small on-site dump trucks
 - Excavators
 - Heavy trucks
 - Radionuclide monitoring
- Radiation Detector
- Decontamination of any radiological contamination shall only be performed by trained Radiation Safety staff

Figure 6. AIBP RAW Action Schedule
Located in the RAW

AIBP Anticipated Removal Action Schedule

Figure 6. Area I Burn Pit Removal Action Schedule

Task Name	Start	Finish	2022 Q4	2023 Q1	2023 Q2	2023 Q3	2023 Q4	2024 Q1	2024 Q2	2024 Q3	2024 Q4
Removal Action Work Plan /Removal Action Implementation Plan	10/14/22	9/18/23									
Submit Draft RAW/RAWIP	10/14/22	10/14/22									
DTSC Review and Comment	10/17/22	4/4/23									
Address DTSC comments on Draft RAW/RAWIP	4/4/23	8/18/23									
Submit Final RAW/RAWIP to DTSC	8/18/23	8/18/23									
DTSC review of Final RAW/RAWIP	8/18/23	9/19/23									
DTSC conditional approve of Final RAW/RAWIP	9/19/23	9/19/23									
DTSC Starts Public Input Period	10/10/23	10/10/23									
DTSC Holds Public Input Meeting	11/9/23	11/9/23									
DTSC Ends Public Input Period	11/15/23	11/15/23									
DTSC approves of Final RAW/RAWIP, if no changes are warranted	11/20/23	11/20/23									
Permitting	8/18/23	10/6/23									
Grading and Construction Permit Review/Approval	8/18/23	10/6/23									
Excavation Activities	8/18/23	8/8/24									
Pre-Excavation Field Activities	8/18/23	2/2/24									
Procurement Activities	8/18/23	1/8/24									
Expert Panel Site Visit to Confirm the SWPPP	12/1/23	1/15/24									
Pre-excavation Biological Survey	12/1/23	1/15/24									
Pre-excavation Cultural Resource Survey	12/1/23	1/15/24									
Vegetation Clearance	12/1/23	1/19/24									
Field Preparation	1/19/24	2/2/24									
Excavation	2/5/24	6/10/24									
Profiling	2/19/24	7/1/24									
Offsite Disposal	4/4/24	8/8/24									
Confirmation Sampling and Data Validation	2/19/24	6/24/24									
Site Restoration	6/10/24	6/20/24									
Post-excavation Cultural and Biological Survey	6/20/24	6/27/24									
Removal Action Implementation Report	6/27/24	12/23/24									
Prepare Draft Removal Action Implementation Report	6/27/24	8/23/24									
Submit Draft RA Implementation Report	8/23/24	8/23/24									
DTSC Review and Comment	8/23/24	10/24/24									
Address Comments on Draft Implementation Report	10/24/24	11/21/24									
Submit Final Removal Action Implementation Report	11/22/24	11/22/24									
DTSC review of Final Implementation Report	11/22/24	12/23/24									
DTSC approval of Final Implementation Report	12/23/24	12/23/24									



Next Steps

How To Provide Input

- **Input Period** (October 10 – November 15)
- **Input Form:** <https://tinyurl.com/AIBPRawInputForm>
- **Email:** DTSC_SSFL@DTSC.CA.Gov
- **Mail:** DTSC, SSFL AIBP RAW Input, 9211 Oakdale Ave., Chatsworth, CA 91311

DTSC Review

- Review all questions and input
- DTSC will respond to questions requiring clarification on the RAW that is necessary to provide informed input
- RAW revised based on input if necessary
 - Revisions made based on input will be noted in the DTSC approval letter
- Work Notices distributed before the RAW is implemented



SANTA SUSANA FIELD LABORATORY -BOEING-CORRECTIVE ACTION (80001713)

[SIGN UP FOR EMAIL ALERTS](#)

SIMI VALLEY, CA 960630000
VENTURA COUNTY
SITE TYPE: CORRECTIVE ACTION

PROJECT MANAGER: [PATRICK MOVLAY](#)
SUPERVISOR: [MINDY MATHIAS](#)
OFFICE: NORTHERN CALIFORNIA SCHOOLS & SANTA SUSANA
PUBLIC PARTICIPATION SPECIALIST: [JAMIE SLAUGHTER](#)
PRESS CONTACT: [ELIZABETH LESLIE-GASSAWAY](#)
CENSUS TRACT: 6111007511
CALENVIROSCREEN PERCENTILE SCORE:30-35%

[Summary](#)
[Land Use Restrictions](#)
[Activities](#)
[Community Involvement](#)
[Site/Facility Docs](#)
[Sub-Areas](#)
[Map](#)
[Related Sites](#)
[CalEnviroScreen](#)
[Permitting](#)
[Enforcement / Inspections](#)

Site Information

CLEANUP STATUS
ACTIVE AS OF 1/1/2008

SITE TYPE: CORRECTIVE ACTION
NATIONAL PRIORITIES LIST: NO
ACRES: 2950 ACRES
APN: NONE SPECIFIED
CLEANUP OVERSIGHT AGENCIES:
DTSC - SITE CLEANUP PROGRAM

ENVIROSTOR ID: 80001713
SITE CODE: 300232, 530033
SPECIAL PROGRAM:
FUNDING: RESPONSIBLE PARTY
ASSEMBLY DISTRICT: 42
SENATE DISTRICT: 27

https://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=80001713

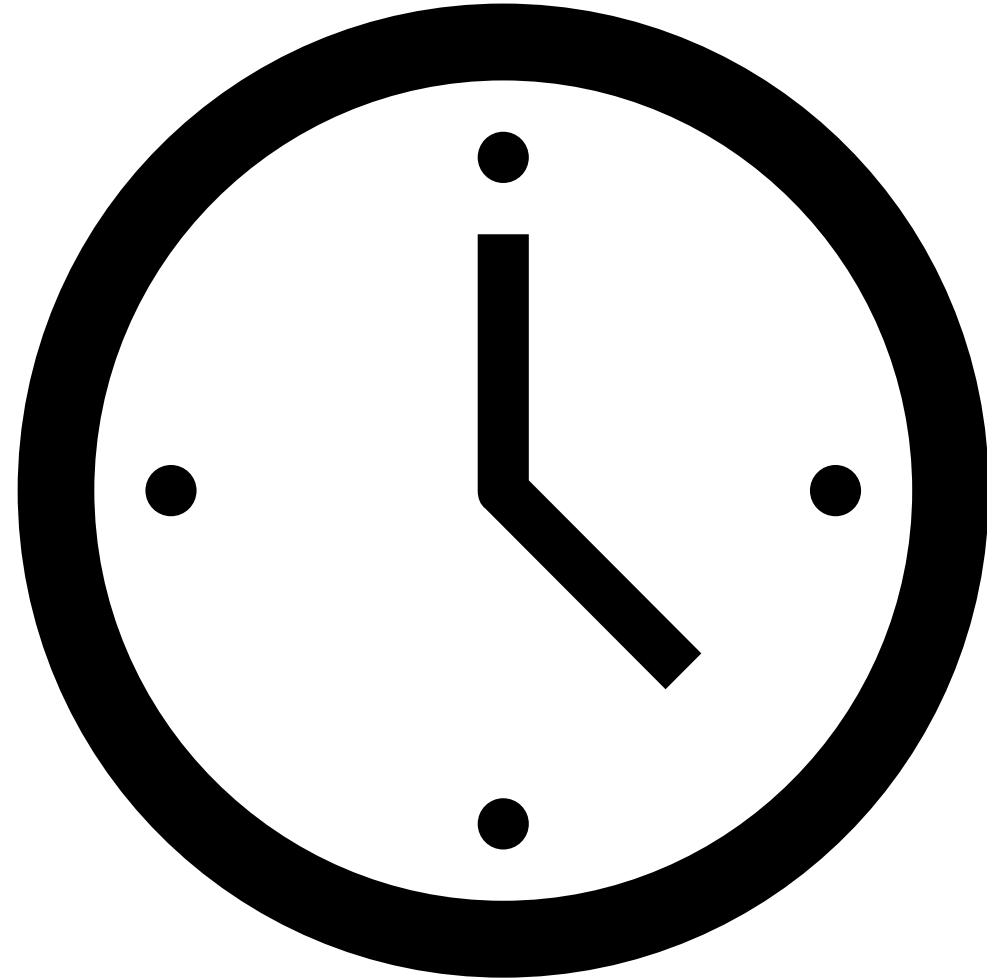


<https://tinyurl.com/AIBPRAWDocument>

Document
Review
and More
Information



Q&A and Public Input



5 – Minute Intermission



Meeting Agreements



- Please be courteous to your fellow meeting attendees
- By participating in this meeting, you understand this meeting is recorded and you may be muted (Zoom)
- Speak clearly and at an even pace to ensure that all meeting participants receive the same information
- Use the Q&A section to type questions throughout the presentation (Zoom)
- Please adhere to the question/input allotted time (one question/input)

Q&A and Input Instructions

- Please raise your hand or enter your input in the Q&A section

When called on from raised hands:

- Please unmute yourself
- State your name and affiliation
- Please ask your question or provide your input (2-minutes)
- Submit one question or one input at a time

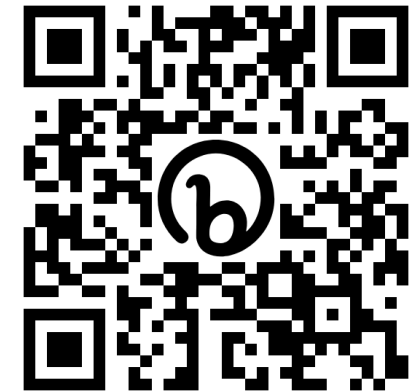


Stay Connected



SSFL Webpage

https://dtsc.ca.gov/santa_susana_field_lab/



SSFL E-List

<https://dtsc.ca.gov/dtsc-e-lists/>

How To Provide Input on the AIBP RAW



Input Period (October 10 – November 15, 2023)

How To Provide Input After The Public Meeting

- **Input Form:**
https://dtsc.ca.gov/santa_susana_field_lab/
- **Email:** DTSC_SSFL@DTSC.CA.Gov
- **Mail:** DTSC, SSFL AIBP RAW Input, 9211 Oakdale Ave., Chatsworth, CA 91311

Project Contacts and Information

- **AIBP Project Management Inquiries:** Patrick Movlay, Senior Environmental Scientist / Project Manager, Patrick.Movlay@dtsc.ca.gov
- **Public Participation Inquiries:** Jamie Slaughter, Senior Public Participation Specialist, Jamie.Slaughter@dtsc.ca.gov
- **Media Inquiries:** Elizabeth Leslie-Gassaway, Information

References



California Environmental Protection Agency, Department of Toxic Substances Control (DTSC). 2013. Radiological Lookup Table Values (LUTVs). Draft Provisional. January 30. https://www.dtsc-ssfl.com/files/lib_lookuptables/radiological/66513_65861_Draft_Provisional_Radiological_Look-Up_Table_Values_1-30-13.pdf

California Environmental Protection Agency, Department of Toxic Substances Control (DTSC). 2022a. Imminent and Substantial Endangerment Determination and Consent Order, Santa Susana Field Laboratory, Area I Burn Pit Area, Simi Valley, Ventura County, California, The Boeing Company (Respondent). Docket No. HSA-FY21/22-148. May 9. https://www.dtsc-ssfl.com/files/lib_correspond/is_e_orders_area1bp/orders/69661_2022_05_09_SSFL_Area_I_Burn_Pit_ISE_Consent_Order_Final_.pdf

CH2M HILL, Inc. (CH2M). 2021. RCRA Facility Investigation, Data Summary and Findings Report, Area I Burn Pit RFI Site, Boeing RFI Subarea 1B Southwest, Santa Susana Field Laboratory, Ventura County, California (DSFR). Final. March. https://www.dtsc-ssfl.com/files/lib_rcra_soils/boeingsubarea1bsw/final_rfi_rpts/2021.03.31_3_1b_sw_dsfr_aibp_final_todtsc_forcd_2021.pdf

Jacobs. 2022b. RCRA Facility Investigation Ecological Risk Assessment Report, Area I Burn Pit, Boeing RFI Subarea 1B Southwest, Santa Susana Field Laboratory, Ventura County, California (2022 AIBP ERA). https://www.dtsc-ssfl.com/files/lib_correspond/is_e_orders_area1bp/reports/69667_2022_07_06_SSFL_AIBP_ERA.pdf

Jacobs. 2023. Risk Assessment Report, Boeing RFI Subarea 1B Southwest, Santa Susana Field Laboratory, Ventura County, California. Final. May 26. [https://www.dtsc-ssfl.com/files/lib_risk_assess/reports/70083_1BSW_Final_RiskAssessmentReport_20230525_\(1\).pdf](https://www.dtsc-ssfl.com/files/lib_risk_assess/reports/70083_1BSW_Final_RiskAssessmentReport_20230525_(1).pdf)



Thank You