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October 30, 2025

VIA E-MAIL AND U.S. MAIL

Ms. Julie Lincoln
Department of Toxic Substances Control
SSFL Boeing Draft SMOU CMS/DTSC Draft SMOU
Statement of Basis Public Comment
8800 Cal Center Drive, Sacramento, CA 95826
Email: DTSC_SSFLPublicComments@dtsc.ca.gov

Re: Comment Letter Regarding Boeing Final RCRA SMOU Corrective Measures Study for DTSC Draft Statement of Basis for SMOU, and DTSC Draft Post-Closure Permit, Santa Susana Field Laboratory, Ventura County, California

Dear Ms. Lincoln:

This firm represents the City of Los Angeles, the City of Simi Valley, the County of Los Angeles, and the County of Ventura (collectively, the Local Jurisdictions), and submits these comments to the California Department of Toxic Substances Control (DTSC) on their behalf regarding (1) the Draft Boeing Final RCRA Corrective Measures Study Report for the Surficial Media Operable Unit (SMOU CMS); (2) the DTSC Draft Statement of Basis for the Surficial Media Operable Unit and Proposed Remedy Selection in the Boeing Areas of Responsibility (SMOU Statement of Basis); and (3) DTSC Draft Post-Closure Permit for Boeing Areas I and III (Post-Closure Permit), for the Boeing-administered portion of Santa Susana Field Laboratory (SSFL), Ventura County, California.

The Local Jurisdictions, with technical assistance from their consultant, Formation Environmental, LLC (Formation), have reviewed the potential cleanup methods evaluated in the SMOU CMS and DTSC's proposed remedy outlined in the SMOU Statement of Basis, as well as the Post-Closure Permit for the impoundments. The Local Jurisdictions appreciate the opportunity to provide meaningful input and to work with DTSC to approve cleanup plans for SSFL. At the outset, the Local Jurisdictions express their support for DTSC's continued oversight and enforcement of the 2007 Consent Order for Corrective Action, Health and Safety Code Section 25187, Docket No. P3-07108-003 (2007 Consent Order). The Local Jurisdictions understand that DTSC contends that the 2022 Settlement Agreement between Boeing and DTSC (2022 Settlement Agreement) is intended to facilitate and expedite cleanup under the 2007 Consent Order. The Local Jurisdictions also support Los Angeles Regional Water Quality Control Board's (LARWQCB) oversight and enforcement

of the Memorandum of Understanding between Boeing and the LARWQCB approved by LARWQCB in August 2022 (MOU), the most recent National Pollutant Discharge Elimination System (NPDES) permit (Order Number R4-2023-0359) adopted by LARWQCB and effective on January 1, 2024, as well as State Water Resources Control Board (SWRCB) Resolution No. 92-49. The Local Jurisdictions further support prompt and thorough cleanup of the SSFL site, with full protections for the surrounding community. Any deviation from the requirements in the 2007 Consent Order, 2022 Settlement Agreement, MOU, NPDES permit, and/or the SWRCB Resolution No. 92-49 would constitute a violation of their terms and obligations.

The Local Jurisdictions understand that Boeing has proposed dividing its area of responsibility into two operable units—the SMOU and the Chatsworth Formation Operable Unit (CFOU)—and will evaluate cleanup remedies for each unit separately. The SMOU CMS identifies and evaluates corrective measure alternatives to facilitate selection and implementation of appropriate corrective measures for surficial media. A separate CMS Report will be prepared for the CFOU, addressing near-surface groundwater, seeps and springs, and unsaturated and saturated unweathered bedrock for the Boeing areas. DTSC anticipates releasing the Statement of Basis for the CFOU for public review and comment in the winter of 2026. The Local Jurisdictions are concerned that this two-remedy approach may result in gaps or inconsistencies in selection and implementation of remedies for areas where contamination overlaps between the SMOU and CFOU.

DTSC plans to issue a Final Statement of Basis for the Boeing SMOU remedy, which will adopt a final environmental cleanup decision for soil and soil vapor at SMOU, after considering comments submitted by the public on DTSC's draft SMOU Statement of Basis and Boeing's SMOU CMS. DTSC published the draft SMOU Statement of Basis and SMOU CMS for public comment per DTSC's obligations under the Resources Conservation and Recovery Act (RCRA), as delegated to DTSC under state law.

Furthermore, DTSC indicates that the SMOU Statement of Basis for the Boeing SMOU remedy under the SSFL cleanup project is an activity consistent within the scope of the 2023 Program Environmental Impact Report (PEIR), and that it will issue a Notice of Determination (NOD) pursuant to the California Environmental Quality Act (CEQA). It is anticipated that this would be DTSC's first approval of a cleanup plan for SSFL under the PEIR for the SSFL remedial activities. However, DTSC did not include any draft CEQA findings or other discussion of the CEQA process with the draft SMOU Statement of Basis. The Local Jurisdictions assume that DTSC intends to rely on the PEIR in making its final cleanup decision for the SMOU remedy. However, with no draft CEQA findings or NOD to review, it is unclear how DTSC intends to demonstrate that the final SMOU remedy falls within the PEIR and that its actions comply with CEQA.

This uncertainty is compounded by the nature of dividing the site into two operable units: one for surficial material and one for groundwater remediation at the Boeing site. Because DTSC does not plan to approve a cleanup plan for the groundwater at Boeing's site at this

time, there is no decision on final cleanup criteria for Boeing SSFL groundwater. As a result, the Local Jurisdictions and public cannot determine whether the approach proposed in the SMOU CMS and SMOU Statement of Basis will ultimately comply with the cleanup standards in the 2007 Consent Order, 2022 Settlement Agreement, MOU, NPDES permit, and/or the SWRCB Resolution No. 92-49 for Boeing's groundwater remediation. By the same measure, the Local Jurisdictions also cannot evaluate whether the proposed remedy for the SMOU represents significant changes from the Project as described in the PEIR certified by DTSC in 2023, or whether it introduces new information that was not previously considered.

The Local Jurisdictions understand that DTSC is seeking public comment on the draft SMOU CMS, SMOU Statement of Basis and Post-Closure Permit primarily under RCRA, not CEQA, and that these uncertainties will be addressed by DTSC in the future. Accordingly, the Local Jurisdictions reserve their rights to provide comments on DTSC's CEQA determination and final SMOU remedy. To the extent the Local Jurisdictions may be required to exhaust administrative remedies at this stage,¹ the Local Jurisdictions submit this comment letter that outlines their preliminary CEQA concerns and substantive questions and comments on the Boeing's SMOU CMS and DTSC's draft SMOU Statement of Basis and Post-Closure Permit.

Background

In 2007, Boeing, the Department of Energy (DOE), and NASA (collectively, Responsible Parties) entered into a Consent Order with DTSC for Corrective Action at SSFL. The 2007 Consent Order is the initial agreement that DTSC and the Responsible Parties entered into to define the requirements for investigating contaminated soil and groundwater, and to implement the cleanup at SSFL.

In 2022, DTSC and Boeing executed a Settlement Agreement that amends the 2007 Consent Order, only as it applies to Boeing, establishing protocols that require Boeing and DTSC to follow the US EPA RCRA Facilities Investigation Remedy Selection Tract (RCRA FIRST) to expedite cleanup remedy determinations. Thus, Boeing's cleanup remains subject to regulation under the 2007 Consent Order, while the 2022 Settlement Agreement serves only to establish the framework and timelines for implementing that cleanup.

¹ In January 2024, although DTSC publicly stated that no statute of limitations was triggered by the certification of the PEIR, the Local Jurisdictions—out of an abundance of caution—entered into a tolling agreement with DTSC, Boeing, NASA, and the DOE. As to any potential CEQA petitioner, the agreement (1) tolls any statute of limitations that may have been triggered by DTSC's certification of the PEIR, if any; and (2) tolls any statute of limitations to each DTSC approval of individual cleanup plans until DTSC adopts the final clean-up plan for the site.

The 2007 Consent Order requires the Responsible Parties to prepare a Corrective Measures Study that provides DTSC with sufficient information to select corrective measures to remedy the contamination at the site. Specifically, the 2007 Consent Order requires,

3.5.2. The CMS work plans shall detail the methodology for developing and evaluating potential corrective measures to remedy chemical contamination at the Facility.... Potential groundwater corrective measures shall evaluate all state-of-the-art remedial technologies including but not limited to the following: TCE Oxidation using Potassium - or Sodium-Permanganate; Nanoscale Zero-Valent Iron Particle Technology; Radio Frequency Heating; Blast-Fractured Enhanced Permeability Remediation; Steam Injection; and Enhanced Bioremediation.

3.6.1. At a minimum, DTSC shall provide the public with an opportunity to review and comment on the final draft of the CMS Reports, DTSC's proposed corrective measures for the Facility, and DTSC's justification for selection of such corrective measures. DTSC shall conduct a public hearing to obtain comments.

3.6.2. Following the public comment period, DTSC may select final corrective measures or require [Responsible Parties] to revise the CMS Reports and/or perform additional corrective measures studies.

3.6.3. DTSC shall notify [Responsible Parties] of the final corrective measures selected by DTSC in the Final Decision and Response to Comments. The notification shall include DTSC's reasons for selecting the corrective measures.

3.8. CEQA. [Responsible Parties] shall provide all information necessary to facilitate DTSC's preparation of a CEQA analysis, including a Facility-wide Environmental Impact Report (EIR). (2007 Consent Order, pp. 21, 23.)

On July 19, 2023, DTSC certified a PEIR for the cleanup program of potential remediation activities to address soil and groundwater contamination and the removal of structures at SSFL. At the time DTSC certified the PEIR, it stated:

At this time, DTSC is not filing a notice of determination (NOD) or approving a project, as those terms are defined in CEQA. Per CEQA Guidelines § 15094, DTSC will file a NOD with the Office of Planning and Research within five days of

deciding to approve individual decision documents for remediation plans. Under CEQA, the act of certifying the Final PEIR does not constitute approval of any project. The remediation technologies and corrective actions evaluated in the PEIR are based on available investigation and characterization documents that have been prepared to date. After completion of the investigation and characterization documents and treatability studies, each responsible party will prepare draft cleanup decision documents and propose specific corrective actions for their respective areas of responsibility. DTSC will file a separate NOD for each decision document. As such, DTSC believes that any legal challenges to the validity of the PEIR would not be ripe until such time as a NOD is filed. (DTSC Certification of Final PEIR for the Santa Susana Field Laboratory Site Remediation Program, at 1.)

The PEIR states “[i]f it is determined that subsequent project-level details would include new information that was not examined in the PEIR, further environmental review may be required pursuant to CEQA.” (PEIR, p. P-12.) When an agency has prepared a program EIR and a further discretionary approval is necessary, a subsequent or supplemental EIR is required where the later activity would have effects that were not examined in the program EIR. (CEQA Guidelines,² § 15168.)

SWRCB Resolution No. 92-49, which applies to SSFL, requires that the Regional Water Board, or DTSC where it is providing regulatory oversight, shall “[e]nsure that dischargers are required to clean up and abate the effects of discharges in a manner that promotes attainment of either background water quality, or the best water quality which is reasonable...” (SWRCB Resolution No. 92-49, Section III.G.) To the extent that the SMOU addresses saturated soils, shallow groundwater, and groundwater within weathered bedrock, the SMOU Statement of Basis must demonstrate how the proposed remedy complies with SWRCB Resolution No. 92-49.

CEQA Analysis

As stated above, it is not clear what DTSC’s final SMOU remedy will be (and how it relates to the cleanup of the Boeing site as a whole), and how DTSC intends to ensure compliance with CEQA. While DTSC states it plans to issue a NOD, it does not explain whether it will prepare any further environmental documentation or make any specific findings as to the PEIR or CEQA, generally. Moving forward with a remedy before completing the necessary CEQA review would violate state environmental regulations and undermine public transparency and input on potential impacts. A full and transparent CEQA process is

² Cal. Code Regulations, title 14.

essential before initiating any SMOU CMS and SMOU Statement of Basis cleanup activities to ensure informed decision-making and environmental protection.

To that end, the Local Jurisdictions urge DTSC to address all potential issues under Public Resources Code, section 21166 and CEQA Guidelines, sections 15162-15164, among other legal requirements, before adopting the final SMOU Statement of Basis. This includes ensuring that the following issues are fully addressed:

- **Change in Project Scope or Commitments:** If DTSC approves a SMOU Statement of Basis, SMOU CMS and Post-Closure Permit that imposes a less stringent cleanup standard than previously committed to in the 2007 Consent Order, 2022 Settlement Agreement, MOU, NPDES permit, and/or the SWRCB Resolution No. 92-49, this would be a fundamental change in the project description and cleanup approach from that analyzed in the PEIR. In such case, DTSC must prepare further environmental documentation under CEQA before approving the final SMOU remedy.
- **New or Substantially More Severe Environmental Impacts:** If DTSC approves a SMOU Statement of Basis, SMOU CMS and Post-Closure Permit with alternatives that extend beyond the PEIR's projected 10-15 years of cleanup timeframe, it may pose greater long-term risks to human health and the environment. This is particularly true if the remedy involves an increased footprint or elevated concentrations of contaminated soils and/or weathered bedrock that were not analyzed in the PEIR, which assumed a more thorough remediation consistent with the 2007 Consent Order and with SWRCB Resolution No. 92-49. Additionally, PFAS contamination present at the site was not evaluated in the PEIR. The presence of these legacy contaminants will likely extend the timeframe required to complete the SMOU cleanup in a manner consistent with the 2007 Consent Order and with SWRCB Resolution No. 92-49. Again, in such case, DTSC must prepare further environmental documentation under CEQA before approving the final SMOU remedy.
- **New Information or Changed Circumstances:** Since the PEIR was certified in 2023, there have been significant physical changes in the environment, including, but not limited to, the occurrence of wildfires, changes in available backfill sources, and the capacity of waste disposal sites. In addition, there have been advancements in technology and scientific understanding of contaminant migration through different environmental media. These changes represent new information and changed circumstances requiring reassessment under CEQA Guidelines, § 15162(a)(3). DTSC must address these issues in the appropriate CEQA documentation before approving the final SMOU remedy.
- **Recirculation:** The Final PEIR that was certified by DTSC in 2023 contained significant new information as compared to the Draft PEIR released in 2017. The changes and new information were so that the PEIR includes a separate section on

project updates and changed circumstances for the SSFL cleanup. (See, e.g., PEIR, pp. P-1 to P-43.) DTSC's decision not to recirculate the PEIR with these major additions undermines its commitment to the transparent public process and conflicts with CEQA's mandatory requirements for recirculation. (CEQA Guidelines, § 15088.5.) These changes do not even account for the increased proposed surface area and larger total volume of soil proposed to be excavated in the SMOU. As discussed above, the PEIR does not account for impacts associated with the remediation of PFAS-impacted media. DTSC must address these fundamental issues with appropriate CEQA documentation before approving the final SMOU remedy, which would be the first approval by DTSC under the PEIR.

- **Inconsistency with the PEIR's Mitigation and Cleanup Objectives:** The PEIR was predicated on achieving a level of cleanup consistent with the 2007 Consent Order, 2022 Settlement Agreement, MOU, NPDES permit, and/or the SWRCB Resolution No. 92-49. If DTSC approves a SMOU Statement of Basis, SMOU CMS and Post-Closure Permit with alternatives that do not meet these thresholds, it would contradict the rationale for the PEIR's approval and violate CEQA. (Pub. Res. Code, § 21081.6(a); CEQA Guidelines, §§ 15091, 15097.)

Pursuant to the 2007 Consent Order, 2022 Settlement Agreement, MOU, NPDES permit, SWRCB Resolution No. 92-49, and CEQA, DTSC must not approve a final soil and soil vapor remedy alternative for SMOU unless it ensures full compliance with CEQA. Depending upon the final approval documents, DTSC may be required to prepare a supplemental or subsequent EIR process to assess the environmental health impacts of the proposed cleanup alternatives. (Pub. Res. Code, § 21166; CEQA Guidelines, §§ 15162-15163.) Yet the draft SMOU Statement of Basis only states that DTSC intends to issue a "[NOD] for the SSFL cleanup project and the Boeing SMOU remedy." (SMOU Statement of Basis, p. 28.) The Local Jurisdictions urge DTSC to ensure that its approval of any final remedy decision for the contaminated soil and soil vapor at the Boeing portions of the SSFL fully comply with DTSC's CEQA obligations and expressly reserve the right to provide further comments on DTSC's proposed CEQA findings for the final approval of the SMOU remedy. The Local Jurisdictions further encourage DTSC to ensure that the public is fully informed of its CEQA process and has adequate opportunity to review and comment on any proposed CEQA documentation.

Technical Comments on the SMOU CMS and SMOU Statement of Basis

Please find enclosed a technical memorandum prepared by the Local Jurisdictions' consultant, Formation, incorporated by reference into this comment letter, providing detailed comments on the SMOU CMS, SMOU Statement of Basis and Post-Closure Permit. We have highlighted a few of the issues below.

Ambiguities in Media Coverage Between the SMOU and CFOU

The SMOU CMS and SMOU Statement of Basis describe the SMOU differently from the 2007 Consent Order, leading to inconsistencies in which media are included in the SMOU versus the CFOU. Specifically, there is ambiguity regarding whether saturated soils, shallow groundwater, and groundwater in weathered bedrock fall under the SMOU or CFOU. For example, Boeing states that the SMOU CMS covers both saturated and unsaturated soils, while the CFOU CMS includes saturated and unsaturated unweathered bedrock. Yet, DTSC notes that shallow groundwater should be included in the SMOU, and Boeing maintains that near-surface groundwater is part of the CFOU CMS. This creates uncertainty about how shallow groundwater is differentiated from saturated soils. DTSC should clarify whether shallow or near-surface groundwater is part of the SMOU or CFOU and ensure that each operable unit document comprehensively addresses all relevant media consistent with the 2007 Consent Order, 2022 Settlement Agreement, MOU, NPDES permit, and the SWRCB Resolution No. 92-49.

Technical and Regulatory Concerns of Bifurcating SMOU and CFOU Remedies

The bifurcation of the cleanup into separate SMOU and CFOU operable units raises significant technical and regulatory concerns. Near-surface groundwater, defined as part of the 2007 Consent Order, is excluded from the SMOU, yet all groundwater is interconnected within the geologic system. This approach creates a risk that remedies may be inconsistent or fail to address overlapping contamination. The CFOU CMS itself acknowledges the complexity of contaminant movement across fractured bedrock, unsaturated zones, and alluvial materials, noting that pilot tests cannot clearly identify the source of VOC mass removed.

Despite this interconnectedness, the SMOU CMS attributes observed contaminant rebound solely to shallow bedrock to be addressed in the CFOU, without evaluating other potential sources, such as residual soil contamination. This lack of holistic assessment raises concerns about whether the remedies will fully achieve cleanup objectives consistent with the 2007 Consent Order, 2022 Settlement Agreement, MOU, NPDES permit, and the SWRCB Resolution No. 92-49. DTSC should clarify how the remedies for both SMOU and CFOU will be coordinated and how their effectiveness will be evaluated in an integrated, site-wide context.

Coordination Between Boeing and NASA on Overlapping Contamination

The SMOU CMS identified 38 areas where Boeing's cleanup overlaps with NASA's areas. These "crossover contamination" areas were subtracted from Boeing's total soil volume calculations, and SMOU CMS footprints were refined accordingly. In the SMOU Statement of Basis, DTSC notes that Boeing and NASA will coordinate to comply with relevant consent orders and agreements ensuring that cleanup levels are met for each overlapping area. However, details on how this coordination will occur remain unclear.

Questions remain regarding which party is responsible for specific media and areas, what cleanup levels will be applied, whether NASA's MCSs are as protective as Boeing's, and whether remediation could disturb areas previously cleaned. To address these uncertainties, DTSC should provide more specific information regarding the cleanup levels that will be used for overlap areas in the SMOU Statement of Basis. DTSC should also require Boeing and NASA to clearly outline their coordination approach in a subsequent CMI Plan and NASA's forthcoming Remedial Action Implementation Plan.

Excavation and Disposal

The SMOU CMS states that for soil that does not contain radionuclides of concern above Look Up Table Values (LUTVs), "it is assumed that 85 percent will be characterized as non-hazardous and transported to one or more in-state facilities including, but not limited to, Waste Management in Azusa or Simi Valley." (Boeing SMOU CMS p. 5-4.) As identified in DTSC's comments on the draft CMS, Boeing is required to "revise this section to include supporting information regarding how the assumption was made for 85 percent being characterized as non-hazardous waste." (Response to Review Comments Draft RCRA Limited CMS Report, SMOU, Boeing RFI Subareas, p. 3.) DTSC must clarify the basis for this assumption and determine whether the projected volumes of nonhazardous and hazardous soils have changed since the PEIR, with such determinations grounded in current conditions rather than unsupported assumptions, to ensure approval of an appropriate remedy.

Another issue not discussed in the SMOU CMS or Statement of Basis is the testing of excavated soil for hazardous waste characteristics to verify toxicity and determine appropriate disposal locations. The cost estimates provided in the CMS show one sample per 10 to 15 truckloads of soil will be tested for toxicity characteristics. Such a limited sampling approach does not ensure that hazardous waste originating from the Boeing areas will be properly identified and managed in accordance with applicable law. In addition, it remains unclear whether the excavated soil will be temporarily placed in stockpiles and, if so, whether a rigorous and representative sampling protocol is contemplated for those stockpiles. DTSC and Boeing must provide additional detail and clarification regarding the proposed soil sampling methodology and management procedures to ensure compliance with the 2007 Consent Order, 2022 Settlement Agreement, MOU, NPDES permit, the SWRCB Resolution No. 92-49, and other applicable hazardous waste handling and disposal requirements.

Backfill Sources and Considerations

The SMOU Statement of Basis indicates that Boeing, NASA, and the DOE are still evaluating available backfill sources for site restoration in accordance with the Backfill and Laboratory Work Plan for Boeing Areas of Responsibility and Implementation Plan for the Laboratory Method Reporting Limits and Backfill Source Studies. DTSC indicates the results of the backfill source investigation will be submitted to DTSC. The SMOU Statement of Basis notes that if sufficient backfill of adequate quality and quantity cannot be located,

DTSC will follow the backfill decision process outlined in the 2022 Settlement Agreement. Despite the lack of final backfill data, DTSC asserts that the proposed remedy will protect human health and the environment, preserve cultural and biological resources, and provide long-term effectiveness. To ensure adequate protections for public health and ecological receptors, any adjustments to the SMOU cleanup based on backfill availability must remain consistent with Boeing's obligations under the 2007 Consent Order, 2022 Settlement Agreement, MOU, NPDES permit, and the SWRCB Resolution No. 92-49.

Risk Considerations in SMOU Cleanup

The SMOU CMS highlights inconsistencies in how risk screening criteria are applied across the site. For example, in Figure 4-3a1, cleanup areas within a roughly 15-acre section of the IEL contain over 50 individual footprints with varying criteria. This piecemeal approach raises concerns about the protectiveness and effectiveness of the cleanup. DTSC must ensure that the more conservative, risk-based criteria are consistently applied during cleanup—consistent with the 2007 Consent Order, 2022 Settlement Agreement, MOU, NPDES permit, and the SWRCB Resolution No. 92-49.

Additionally, the SMOU Statement of Basis indicates PFAS is co-located with other contaminants requiring remediation will be addressed in the cleanup. However, it remains unclear how PFAS will be managed or whether it occurs independently at levels that require remediation. DTSC must clarify the extent of PFAS contamination and any necessary future cleanup plans to protect human health and the environment, consistent with the 2007 Consent Order, 2022 Settlement Agreement, MOU, NPDES permit, and the SWRCB Resolution No. 92-49.

Conclusion

The Local Jurisdictions and their citizens affected by the SSFL site and cleanup deserve a process that upholds the environmental protection and regulatory commitments made to the community. To that end, DTSC must rigorously evaluate the groundwater alternatives proposed in the SMOU CMS to ensure that cleanup in accordance with the 2007 Consent Order, 2022 Settlement Agreement, MOU, NPDES permit, and/or the SWRCB Resolution No. 92-49 is achievable and complies with all CEQA obligations. Any deviation from those commitments must be subject to a full and transparent environmental review in accordance with CEQA, which is not currently the case.

Julie Lincoln
Department of Toxic Substances Control
October 30, 2025
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The Local Jurisdictions remain committed to a prompt and complete cleanup of SSFL that is transparent and protective of the environment and human health and safety. We would welcome the opportunity to meet with DTSC staff to discuss these items and engage in further dialogue as DTSC considers selecting a remedy to clean up the SMOU at Boeing's portions of SSFL and works to meet all of its legal obligations.

Sincerely,



Shaye Diveley

c: Elena Miller

Enclosure (Formation Technical Memorandum)

6326011.2

Formation Technical Memorandum

SANTA SUSANA FIELD LABORATORY

COMMENTS ON BOEING SURFICIAL MEDIA OPERABLE UNIT CORRECTIVE MEASURES STUDY AND STATEMENT OF BASIS

PREPARED FOR: Ms. Julie Lincoln
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DATE: October 30, 2025

1 Introduction

On behalf of the City of Los Angeles, the County of Los Angeles, the County of Ventura, and the City of Simi Valley (collectively the Local Jurisdictions), Formation Environmental (Formation) completed a high-level review of the following documents for the Santa Susana Field Laboratory (SSFL) site:

1. The Boeing Company (Boeing) Final Resource Conservation and Recovery Act (RCRA) Limited Corrective Measures Study (CMS) Report Surficial Media Operable Unit (SMOU), Boeing RCRA Facility Investigation (RFI) Subareas (SMOU CMS)¹
2. Draft Statement of Basis (SB)² prepared by the Department of Toxic Substances Control (DTSC)
3. DTSC Draft Post-Closure Permit for Boeing SSFL Areas I & III

In addition to reviewing these documents, Formation also participated in the SSFL Boeing Surficial Media and Operable Unit Corrective Measures Study and DTSC Statement of Basis Public Comment Meeting on

¹ Jacobs on behalf of The Boeing Company. (2025, April). Final RCRA Limited Corrective Measures Study Report Surficial Media Operable Unit, Boeing RFI Subareas (Boeing SMOU CMS). https://dtsc.ca.gov/wp-content/uploads/sites/31/2025/09/2025.09.01_SMOU_CMS_DTSC-Final-04102025_redacted.pdf

² California Department of Toxic Substances Control. (2025, September). Draft Statement of Basis for the Surficial Media Operable Unit (SMOU) Proposed Remedy Selection in the Boeing Areas of Responsibility at Santa Susana Field Laboratory. https://dtsc.ca.gov/wp-content/uploads/sites/31/2025/09/09.15.2025_-STATEMENT-OF-BASIS.pdf

October 7, 2025. The purpose of Formation's review and participation in the public meeting was to identify key issues relevant to the Local Jurisdictions and develop comments on their behalf.

2 Comments

1. *What the Boeing SMOU Covers*

It is Formation's understanding that the SMOU, as defined in the 2007 Consent Order,³ includes saturated and unsaturated soil, sediment, surface water, near-surface groundwater, air, biota, and weathered bedrock. Boeing's CMS and DTSC's SB both note that near-surface groundwater, including seeps and springs, for the Boeing SMOU areas of responsibility will be addressed separately under Boeing's other operable unit, the Chatsworth Formation Operable Unit (CFOU).⁴ The SMOU CMS also considers impacts to adjacent areas or parcels requiring corrective action from Boeing surficial media sources, including those offsite.⁵

While the CMS should cover all aspects of the SMOU as it is defined in the Consent Order, there has been some blurring of the lines between the two OUs. In reviewing the SMOU CMS and DTSC's SMOU SB, there are inconsistencies about which media are addressed in the respective OUs. Specifically, which of the OUs include saturated soil, shallow groundwater, and groundwater present in weathered bedrock. Examples of these inconsistencies include:

- In response to a comment on the Draft SMOU CMS, Boeing states that the SMOU CMS includes both saturated and unsaturated soil while the CFOU CMS includes saturated and unsaturated unweathered (competent) bedrock.⁶ However, in a later comment, DTSC notes that the Corrective Action Objective in Table 3-1 of the Draft SMOU CMS "should be 'groundwater,' not 'Chatsworth Formation groundwater,' to avoid excluding shallow groundwater at the site." In response, Boeing stated that "[s]hallow (near-surface) groundwater is not included in the SMOU CMS and is part of the CFOU CMS."⁷ It is not clear from this description how DTSC and Boeing are defining the difference between saturated soil and shallow groundwater in this context.
- In Section 2.4.1 of the SMOU CMS Report, Boeing references a cross-section of the SMOU and CFOU that shows shallow perched groundwater. Boeing states that "the CMS Report applies to the soil, sediment, surface water, air, biota, and weathered bedrock within the SMOU in the Boeing RFI subareas of the SSFL, except for near-surface groundwater and seeps and springs, which are addressed in a separate CMS Report for the CFOU."⁸ Figure 1 is the cross-sectional depiction of the SMOU and CFOU.⁹ The CMS language is confusing because the shallow perched groundwater is shown in the figure as part of the SMOU.

³ Consent Order for Corrective Action, The Boeing Company, U.S. Department of Energy, and U.S. National Aeronautics and Space Administration, Docket No. P3-07/08-003, August 16, 2007.

⁴ DTSC SMOU SB p. 1 footnote 1 (PDF p. 8) and Boeing SMOU CMS p. 2-4 (PDF p. 50)

⁵ Boeing SMOU CMS p. 4-1 (PDF p. 60) and shown on Figures 9 and 10 of the DTSC SMOU SB PDF pp. 103-104.

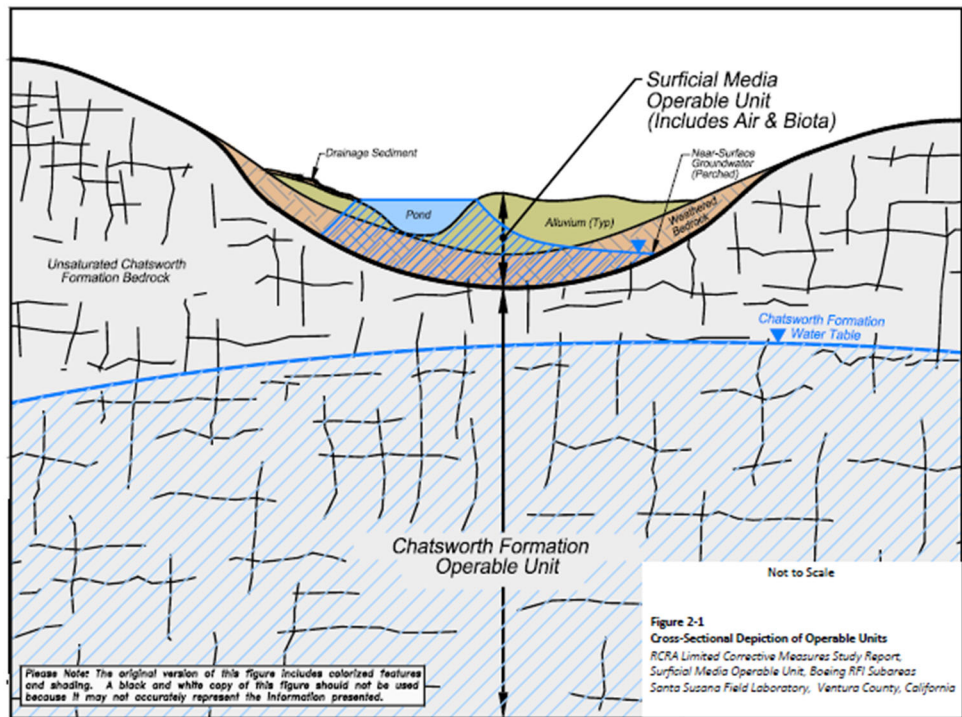
⁶ Boeing SMOU CMS p. 1 Comment 2 (PDF p. 3) (*emphasis added*)

⁷ Id. at PDF p. 14. (*emphasis added*)

⁸ Boeing SMOU CMS p. 2-4 (PDF p. 51) and Figure 2-1 (PDF p. 113)

⁹ Id. at Figure 2-1 (PDF p. 113)

Figure 1. Cross-Sectional Depiction of SMOU and CFOU



DTSC should clarify whether shallow groundwater or near-surface groundwater is covered by the SMOU or the CFOU in the Statement of Basis and ensure the respective operable unit documents address all relevant media.

2. Implications of CMS Bifurcation

As noted above, near-surface groundwater is excluded from the SMOU, even though it is part of the definition in the 2007 Consent Order. It is reasonable to address all groundwater in the same operable unit. However, because systems are interconnected and interrelated, it is important for the technical approaches to address the OUs are aligned. Notably, Boeing has engaged separate technical teams for remediating the SMOU and the CFOU. The following is an example of the necessity of this alignment.

The Draft CFOU CMS acknowledges the interconnectedness between the two OUs in their interpretation of the origin of contamination:

VOC mass that was removed during the [SMOU] pilot test is known to have been extracted via flow through the fracture network. Potential sources of the mass are the vadose zone bedrock fracture network itself, the partially saturated sandstone matrix blocks of the vadose zone bedrock, the unsaturated weathered bedrock and alluvial materials that overly the vadose zone bedrock, and the capillary fringe that underlies the vadose zone bedrock. Data collected during the test cannot discern the source(s) of the mass extracted.¹⁰

¹⁰ Stantec on behalf of The Boeing Company. (2024, June 7). Draft Boeing RCRA Corrective Measures Study Report –

In other words, groundwater and contaminants in geologic systems are not necessarily discrete or separable. Yet, in the SMOU CMS, they repeatedly discount the effectiveness of SVE due to rebounding concentrations, but leap to the conclusion that the mass is coming from shallow bedrock that will be addressed as part of the CFOU.¹¹ But there is no discussion about other potential sources that could explain that rebound or how the contamination might be more holistically characterized and cleaned up effectively. For example, there is no confirmation that the rebound is not caused by mass present in soil. DTSC should explain how the remedies will proceed and evaluations of their respective successes will be based on a holistic consideration of the site. This comment is further elucidated below in Comment 7 below.

3. *Coordination with NASA*

Of the preliminary CMS areas, 38 were identified as overlapping with National Aeronautics and Space Administration (NASA) areas.^{12,13} Areas of overlap were subtracted from Boeing's calculation of the total soil volume to be excavated from the site and the CMS area footprints were refined.¹⁴ In the SMOU SB, DTSC refers to these areas as 'crossover contamination' and explains that NASA and Boeing will coordinate to comply with the requirements of the relevant consent orders and agreements, and that DTSC will "ensure cleanup levels are met for each area with crossover contamination."¹⁵ In the public meeting on October 7, 2025, DTSC mentioned the overlapping areas of contamination and responsibility, and noted that "Boeing and NASA will have to work out who addresses remediation in these areas." No additional information was provided in the meeting.

It is unclear from the SMOU CMS and SB how this coordination between Boeing and NASA will work. Both documents indicate that NASA will perform the soil excavation/backfill in the 38 crossover contamination areas. This raises some questions, such as: Are there formal agreements in place wherein NASA acknowledges responsibility for cleanup of certain media and areas of Boeing's areas of responsibility? Which cleanup levels will be used? Are the media cleanup standards (MCSs) for NASA CMS areas as protective as MCSs for the Boeing CMS areas? Will the cleanup disturb CMS areas that have already undergone soil remediation? What will be the decision documents for these areas and how will they be approved?

DTSC should require Boeing to provide a discussion of their approach for accomplishing the coordination with NASA for these overlap areas in the SMOU CMS or the subsequent Corrective Measures Implementation (CMI) Plan. Similarly, DTSC should require NASA to provide a discussion in their forthcoming Remedial Action Implementation Plan. DTSC should also provide more specific information regarding the cleanup levels that will be used for overlap areas.

Vadose Zone Bedrock and Groundwater of the Surficial Media and Chatsworth Formation Operable Units, Santa Susana Field Laboratory. p. 6.25 (PDF p. 113)

¹¹ Boeing SMOU CMS PDF p. 37.

¹² National Aeronautics and Space Administration. (2017, February). NASA Soil Data Summary Report for Santa Susana Field Laboratory, Ventura County, California.

¹³ Appendix C of the Boeing SMOU CMS Report presents the proposed CMS areas developed for the surface impoundments (CMS Area ID denoted by "-SI-"), and the corresponding depth and volumes.

¹⁴ Boeing SMOU CMS p. 4-4 (PDF p. 63)

¹⁵ DTSC SMOU SB Table 5 (separate Excel file)

4. Cleanup of Radionuclides

In their review comments on Boeing's Draft CMS Report, DTSC notes that Boeing proposes to clean up radionuclides to 10 feet below ground surface. Once cleanup goals have been achieved, excavation areas would be backfilled with soil that meets approved backfill criteria. The objective of backfilling and regrading is to restore excavation areas to support natural drainage and to foster re-establishment of native vegetation and ecological habitat.¹⁶ DTSC contends that Boeing "will need to ensure any radionuclides left below 10 feet are covered by a full 10 feet of backfill and document that they do not pose a threat to groundwater." Additionally, any locations where radionuclides are left below 10 feet will require institutional control/land use control to prevent disturbance of soil or bedrock at depth greater than 10 feet and continuous monitoring to ensure the 10 feet of soil remains in place (and additional soil added if it falls below 10 feet of soil cover).¹⁷

In response, Boeing asserts that:

Assuming there is sufficient backfill available, Boeing will attempt to cover radionuclides above LUTVs (i.e. background) identified in soil after excavation with 10 feet of backfill, in a manner that maintains site drainage and does not create large mounds of soil. LUCs will be implemented to prevent disturbance of soil or bedrock below the backfill, and maintain required minimum soil cover.¹⁸

Backfill availability has been the subject of numerous public comments and is specifically addressed in Comment 6 below. This subject raises concerns about public health and compliance. How will DTSC ensure that if sufficient backfill is not available, post excavation conditions at the new ground surface are safe?

It should also be noted that Boeing identifies LUTVs as the standard for cleanup of radiological contaminants when in fact, it is the higher of the LUTV or lowest method reporting limit (MRL) that can be technically achieved that guide the cleanup of radionuclides. This should be corrected.¹⁹

5. Excavation and Disposal

The SMOU CMS states that for soil that does not contain radionuclides of concern above Look Up Table Values (LUTVs), "it is assumed that 85 percent will be characterized as non-hazardous and transported to one or more in-state facilities including, but not limited to, Waste Management in Azusa or Simi Valley."²⁰ However, a specific reference for the 85 percent of the soil that will be characterized as non-hazardous was not provided. Boeing made a general statement that this value was provided to DTSC for inclusion in the Programmatic Environmental Impact Report (PEIR).²¹ A review of the PEIR did not reveal the origin of the 85 percent non-hazardous waste volume.²² DTSC must clarify the origin of the assumption that "85 percent will be characterized as non-hazardous"²³ and identify where in the PEIR this assumption was

¹⁶ Boeing SMOU CMS p. 5-5 (PDF p. 73)

¹⁷ Id. at Review Comment 5 p. 1 (PDF p. 3)

¹⁸ Id. (emphasis added)

¹⁹ Id. at p. 5-5 (PDF p. 73)

²⁰ Id. at p. 5-4 (PDF p. 72)

²¹ Id. at PDF p. 5

²² California Department of Toxic Substances Control, Final Program Environmental Impact Report for the Santa Susana Field Laboratory, February 2023 (Released June 2023).

²³ Boeing SMOU CMS at (PDF p. 5)

used to evaluate impacts. Further, Boeing and DTSC should clarify if the volumes of nonhazardous and hazardous soils have changed since the PEIR in light of current conditions and remedy expectations.

Another issue that is not discussed in the SMOU CMS or SB is the testing of excavated soil for hazardous waste characteristics to verify toxicity and identify disposal location. The cost estimates for the Boeing CMS areas²⁴ that include soil excavation and disposal have a line item for waste characterization (one sample for full toxicity characteristic leaching procedure [TCLP] testing per 150 loose cubic yards of soil). Assuming a dump truck holds 10-15 cubic yards, that would be one sample per 10-15 truckloads.

DTSC should require that Boeing's CMI Work Plan specifically address soil testing (waste characterization) for toxicity prior to transport and disposal of soil in a non-hazardous landfill and should consider increasing the frequency of testing. Using limited testing of one sample per ten truckloads does not ensure that hazardous waste from the Boeing areas will be appropriately managed. Further, it is not well understood if the excavated soil will be temporarily placed in stockpiles and if there is a rigorous sampling procedure contemplated for waste stockpiles. DTSC and Boeing should provide additional context and clarify what is anticipated in that regard.

6. Backfill Sources

As DTSC noted in the SMOU SB:

Boeing is continuing to identify and evaluate available backfill sources for site restoration, and when the backfill source investigation is complete a report with the results of the backfill study will be provided to DTSC. . . If backfill sources of adequate quality (i.e., soil that meets target cleanup levels) and quantity cannot be located, DTSC will follow the backfill decision process found in Exhibit 14 (Backfill Decision Process) of the 2022 Settlement Agreement (Figure 3).^{25,26}

Despite the absence of this critical information, DTSC explains that the proposed remedy:

[P]rovides for protection of human health and the environment while also preserving cultural and biological resources. This alternative is expected to meet the corrective action standards across most of the site, provide a high degree of long-term effectiveness and reliability, be readily implementable, be protective of the community, workers, and the environment during implementation, and provide protection for cultural and biological resources.²⁷

To the extent that DTSC has to make adjustments to the cleanup based on the results of the backfill source investigation, DTSC must ensure that that the cleanup is consistent with the 2007 Consent Order and 2022 Settlement Agreement that direct Boeing's obligations at the site. This is critical for protecting public

²⁴ Boeing CMS Appendix G (PDF p. 2135)

²⁵ DTSC SMOU SB p. 24 (PDF p. 31)

²⁶ See also: Jacobs. 2023. Backfill and Laboratory Work Plan for Boeing Areas of Responsibility, Santa Susana Field Laboratory, Ventura County, California. May. https://www.dtsc-ssfl.com/files/lib_bkfstdy_mrleval/Boeing/Workplans/70084_2023.05.24_SSFL_Backfill_Lab_WP_Final.pdf

²⁷ DTSC SMOU SB p. 25 (PDF p. 32)

health and ecological receptors, and is consistent with DTSC's commitment to provide a remedy that provides adequate protections.

The SMOU CMS states that backfill soil will be obtained from two sources: the borrow areas in Boeing RFI Subarea 10 (not more than the extent permitted in the Conservation Easements) and imported topsoil. Boeing estimates that approximately 116,000 cubic yards of acceptable fill are available from these borrow areas, which are outside of surveyed biologically sensitive areas. Under these assumptions, excavation of the CMS areas would require an additional 197,000 cubic yards of clean import fill and topsoil to complete backfill and restoration. The combined 313,000 cubic yards constitute approximately 81 percent of the estimated 386,200 cubic yards excavation volume.²⁸ DTSC questioned whether soil from the on-site borrow areas is appropriate for use as backfill and requested the soil data.²⁹ In response, Boeing stated:

Surface soil and soil boring samples have been collected within and around the on-site borrow areas, as summarized in the Subarea 10 DSFR2 and Subarea 10 Risk Assessment Report.³⁰ Concentrations of analytes were all non-detect, or below background and/or RBSLs. The borrow areas are also all located outside of known or potential chemical use areas. Analytical data and site use information show that the borrow area soil is appropriate for use as backfill. No changes to the text are proposed.³¹

The Risk Assessment Report for Boeing RFI Subarea 10 states:

Using the approach described above, 18 areas in soil (5, 9, and 4 areas for the Western, Central, and Eastern Watershed Exposure Areas, respectively) up to 2 feet bgs at Boeing RFI Subarea 10 are recommended for further evaluation during the CMS based on the risk-based screening for the Resident with Garden scenario. The recommended Resident with Garden CMS areas are considered along with other risk assessment/screening specific CMS areas in deriving the final CMS areas presented in Section 7.³²

Given that Exhibit 14 laying out the backfill decision process has a specific question of "Does all Backfill or onsite soil identified for the top 2 feet meet all criteria identified above for the Resident with Garden Scenario?," the appropriateness of the material in RFI Subarea 10 for use as backfill should be further evaluated.

Considering the importance of availability of backfill for the proposed remedial approach, DTSC should also clarify if there will be opportunity for public review and comment on the backfill study.

²⁸ Id. at p. 5-6 (PDF p. 74)

²⁹ Boeing SMOU CMS Comment 15 (PDF p. 6)

³⁰ Jacobs. 2023. Risk Assessment Report, Boeing RFI Subarea 10, Santa Susana Field Laboratory, Ventura County, California. Final. September.

³¹ Boeing SMOU CMS Comment 15 (PDF p. 6)

³² Jacobs. 2023. Risk Assessment Report, Boeing RFI Subarea 10, Santa Susana Field Laboratory, Ventura County, California. Final. September. (p. 25)

7. Soil Vapor Extraction (SVE) Limitations

The 2022 Settlement Agreement³³ directs Boeing to use the U.S. Environmental Protection Agency's (EPA's) RCRA Facility Investigation First Track (FIRST) program³⁴ to streamline the CMS process and expedite cleanup. To achieve this, Boeing prepared a "Limited CMS" for its areas of responsibility³⁵ in the SMOU. Per the guidance, a Limited CMS can be used when a proposed remedy is clearly identified. As detailed in the CMS, "presumptive technologies were established for the SMOU, and therefore a full CMS was not required".³⁶ Based on preliminary technology screenings and in consultation with DTSC, two active technologies were considered for addressing surficial media: 1) excavation for chemicals and radionuclides in soil; and 2) soil vapor extraction (SVE) for soil impacted with volatile organic compounds (VOCs). Treatment in-place alternatives were eliminated for surficial media because they are not suitable for the full suite of constituents driving the risk-based cleanup, which include dioxins, polycyclic aromatic hydrocarbons (PAHs), total petroleum hydrocarbons, metals, and radionuclides.³⁷

Boeing includes a summary of the results of the SVE field-scale pilot study³⁸ in the CMS which states:

Although the preliminary findings of the SVE pilot study indicate that SVE could be implemented at the SSFL and achieve reasonable levels of performance. . . there remains uncertainty about its suitability or ability to achieve [Corrective Action Objectives] at all soil vapor Boeing CMS areas.³⁹

Importantly, uncertainties include: 1) the amount of natural attenuation that has taken place since soil vapor data were collected; 2) the long-term effectiveness due to alluvial heterogeneities and the presence of residual source mass in the shallow bedrock that would continue to diffuse into the alluvium after SVE operations cease; and 3) the inability to meet target cleanup levels for future residents.⁴⁰

In response to a comment from DTSC, Boeing states that "mass removal alone would not meet corrective action objectives."⁴¹ Mass removal may not be listed specifically as a corrective action objective in Exhibit 13 to the 2022 Settlement Agreement, but it is necessary in order to meet risk based cleanup levels at the site. In addition, as noted in Boeing's response to this comment, Exhibit 13 lists "achieving applicable cleanup standards, mass removal, and residual risk after SVE shutdown/rebound as metrics for SVE

³³ Settlement Agreement, California Department of Toxic Substances Control and The Boeing Company, May 9, 2022. https://www.dtsc-ssfl.com/files/lib_correspond/settlement_agree/2022_05_09_SSFL%20DTSC%20Boeing%20Settlement%20Agreement%20Final.pdf

³⁴ US Environmental Protection Agency (EPA). (2016, May). Resource Conservation and Recovery Act Facilities Investigation Remedy Selection Track, A Toolbox for Corrective Action. https://www.epa.gov/sites/default/files/2016-06/documents/a_toolbox_for_corrective_action_resource_conservation_and_recovery_act_facilities_investigation_remedy_selection_track_rcra_first.pdf

³⁵ Boeing SMOU CMS, Table 1-1 (PDF p. 102)

³⁶ Boeing SMOU CMS, p.2-5 (PDF p. 52).

³⁷ Boeing SMOU CMS, p. 5-1 (PDF p. 69)

³⁸ Jacobs on behalf of The Boeing Company. (2025, April 9). Soil Vapor Extraction Pilot Study Report, Instrument and Equipment Laboratory, Santa Susana Field Laboratory, Ventura County, California. https://www.dtsc-ssfl.com/files/lib_feasibilitystudy/TreatabilityReports/2025.04.09_BoeingSSFL_IEL_PilotReport.pdf

³⁹ Boeing SMOU CMS p. 5-9 (PDF p. 77)

⁴⁰ Id. at pp. 5-9 – 5-10 (PDF pp. 77-78)

⁴¹ Id. at PDF p. 7

effectiveness.”⁴² Therefore, minimizing the importance of mass removal in evaluations of where/whether to implement SVE at the site appears to be inconsistent with the Settlement Agreement. Boeing states:

Furthermore, the SVE pilot showed that, notwithstanding standing [sic] the removal of mass, operation of the system would not likely reduce risk because remaining TCE concentrations in soil would not likely meet residential standards for a future hypothetical resident scenario. And the endpoints for testing and evaluating SVE in Exhibit 13 all end at either achieving risk-based objectives, or requiring a risk management decision if they are not achieved. Therefore, SVE for mass removal alone would not meet corrective action objectives. Finally, removal of VOC mass from vadose zone bedrock is not a corrective action objective for the SMOU specified in the Settlement Agreement and is not required by the agreed upon RCRA FIRST process.⁴³

Rebound in vapor concentrations following SVE cessation is a common occurrence, especially when the system has been operated for a relatively short period of time (e.g., 6 months or less). The total duration of the active portions of the SVE pilot study was slightly longer than 5 months (167) days. However, this included phases when only one extraction well was active (for slightly more than 30 days for each well) and two step-down tests (for 17 and 18 days) when the system was operating at reduced vacuums and flowrates.⁴⁴ The test does not appear to have reached asymptotic concentrations in the extraction wells or vapor monitoring points before the test was terminated (which would not necessarily be a requirement for a pilot test). It is not surprising that rebound occurred in the vapor monitoring points after the pilot test ended given the short duration of the test and that significant mass removal was still occurring at the end of the test. Longer-term rebound can be expected if there are recalcitrant sources present, such as dense non-aqueous phase liquid (DNAPL), which can be impractical to delineate. In such circumstances, a determination that SVE mass removal alone cannot serve as an objective and cannot be made *a priori*. Mass removal and vapor capture should continue until concentrations reach applicable cleanup levels or DTSC makes a risk management decision to stop SVE and identify an alternative cleanup approach.

SVE is a proven technology, which is why it is the default remediation approach under the RCRA FIRST program. Because Boeing is not performing a full CMS for the SMOU, it is incumbent upon DTSC to ensure cleanup measures are implemented consistent with the selected technology.

8. Risk Considerations

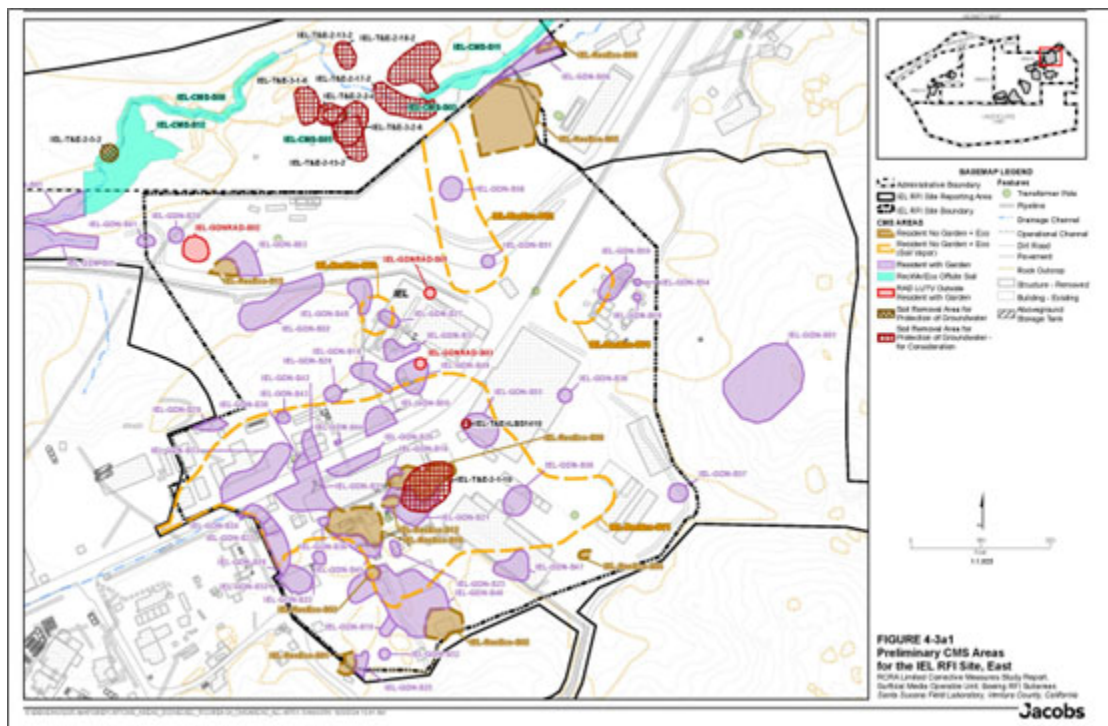
The figures provided in 4-1 through 4-22 of the SMOU CMS raise some questions about how the risk screening criteria are being applied across each RFI. For example, Figure 4-3a1 (excerpted as Figure 2 below) shows the proposed cleanup areas in the Offsite Instrument and Equipment Laboratory (IEL) area and the varying criteria that apply. This represents approximately 15 acres and within that area, there are over 50 footprints where remedial action is expected. As the figure shows, there are numerous footprints where the cleanup criteria are “Resident with Garden” that are immediately adjacent to, or within 100 feet of, footprints where the cleanup criteria are “Resident no Garden”.

⁴² Id. (emphasis added)

⁴³ Id.

⁴⁴ SVE Pilot Study Report p. 6-1 (PDF p. 26)

Figure 2. Excerpted Figure 4-3a1 from SMOU CMS⁴⁵



This patchwork approach to cleanup raises questions about the protectiveness of the cleanup and the expected outcome. This was also raised in the October 7, 2025 public meeting where one community member roughly stated:

The community is not getting a cleanup. The maps are a joke. The risk-based cleanup does not address how the land will be used. The maps show areas next to each other where the cleanup is to resident and exception areas – how will this work to protect people? The community is getting screwed with this cleanup.

In the CMS, Boeing hedges on their commitment to using risk-based criteria that anticipate residential use scenarios:

[T]he anticipated future *end state* of the Boeing property will be unimproved/undeveloped open space to comply with the Conservation Easement. The current potential human receptors are current site workers and trespassers. Notwithstanding the property development and use restrictions in the Conservation Easement, Boeing agreed in the Settlement Agreement to update the human health CSM in the SRAM Rev. 2 Addendum (2022) to *include an evaluation* of the following exposure scenarios, (1) hypothetical future recreators, (2) hypothetical future site workers; (3) hypothetical future residents without gardens, and (4) hypothetical future residents with garden.⁴⁶

⁴⁵ Boeing SMOU CMS PDF p. 120

⁴⁶ Id. at p. 2-8 (PDF p. 55) (emphasis added)

It will be important for DTSC to ensure that the use of these more conservative criteria continue to be applied to the site cleanup given that Boeing implied that they are not applicable to the “end state” of the property.

9. PFAS Contamination

Although not mentioned in the SMOU CMS, DTSC noted in the SMOU SB that per- and polyfluoroalkyl substances (PFAS) have been identified in groundwater at SSFL and may be present in soils. DTSC stated that “additional PFAS characterization in soil may be required to ensure that soil excavation meets DTSC’s final cleanup standards.”⁴⁷ Based on available data, DTSC assumes that any PFAS contamination in soil will be collocated with non-PFAS constituents within the remediation footprints. DTSC stated that:

Boeing will collect confirmation samples during implementation of the remedy and will sample for PFAS at appropriate locations for characterization purposes as part of an integrated sitewide effort. If PFAS is detected in soil post remedy implementation, Boeing will work with DTSC to assess risk and design and implement required additional soil remediation.⁴⁸

In the public meeting on October 7, 2025, PFAS contamination present at the site and concern about potential exposure was raised. While the DTSC SB indicates PFAS that are co-located with contaminants that require remedy will be addressed in the cleanup, this is not a comprehensive or systematic approach to addressing that group of chemicals. It remains unclear if there are areas impacted by PFAS that do not coincide with other contaminants, or if they are present in areas at concentrations that on their own would drive remedy. DTSC should explain the nature and extent of PFAS contamination at the site and any future plans for cleanup that may be required.

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⁴⁷ DTSC SMOU SB p. 22 (PDF p. 29)

⁴⁸ Id.