



Via FedEx and Email

December 6, 2019

In reply, refer to SHEA-116151

Meredith Williams, Ph.D.  
Acting Director  
Department of Toxic Substances Control  
1001 I Street, PO Box 806  
Sacramento CA 95812-0806  
(916) 322-3804  
*Meredith.Williams@dtsc.ca.gov*

RE: Dispute Regarding DTSC's November 19, 2019 Directive Regarding Groundwater Corrective Measures Studies and Risk Assessments at SSFL

Dear Dr. Williams:

The Boeing Company ("Boeing") received the Department of Toxic Substances Control ("DTSC") letter dated November 19, 2019 ("Letter"), in which DTSC provides "additional direction and guidance" relating to the preparation of Groundwater Corrective Measures Study Reports and Groundwater Risk Assessments at the Santa Susana Field Lab ("Site").

Boeing concurs with the portions of the Letter that restate the requirements for corrective action as reflected in the 2007 Consent Order for Corrective Action (Docket No. P3-07/08-003) ("Consent Order") and applicable law and policy. Boeing does not dispute that it is required to prepare a Groundwater Corrective Measures Study ("CMS") report and Groundwater Risk Assessments associated with the Resource Conservation and Recovery Act ("RCRA") Facility Investigation ("RFI"), or that the final remedy for the Site should meet performance standards including protection of human health and the environment, achievement of media cleanup objectives, and remediation of release sources. Boeing does not concur, however, with the portions of the Letter that prescribe standards not required as part of a risk-based corrective action.

On November 25, 2019, Boeing provided DTSC with verbal notice pursuant to Section 4.19.1.2 of the Consent Order that Boeing objects to this written decision as it applies to work required of Boeing with respect to the portions of the Site owned by Boeing ("Boeing Property") and for which Boeing is responsible ("Boeing Areas"). In that conversation, Boeing generally explained its primary objections to the DTSC Project Coordinator in an attempt to resolve this matter informally. The parties agreed that Boeing's concerns with the Letter would not likely be resolved informally. Accordingly, this letter constitutes Boeing's formal objections to the Letter pursuant to Section 4.19.1.3 of the Consent Order.

Pursuant to the Consent Order and at DTSC's direction, Boeing has conducted extensive environmental investigations in preparation for the cleanup of the Site. Boeing looks forward to continuing to work with DTSC towards a timely cleanup that will protect human health and the environment consistent with the future use of Boeing's Property as open space habitat, and that will



December 6, 2019  
SHEA-116151  
Page 2

protect our neighbors and everyone who may visit the Boeing Property in the future for recreational use.

This letter sets forth specific points of dispute and summarizes Boeing's basis for objection:<sup>1</sup>

- **The Letter ignores and is contrary to the outcome of Boeing and DTSC's prior dispute resolution proceedings that commenced in January 2018 and concluded in May 2018 regarding the exposure scenarios that Boeing must include in the Standardized Risk Assessment Methodology ("SRAM") Workplan.** The Letter directs Boeing to utilize the Final SRAM Revision 2 Addendum (MWH, 2014) ("SRAM Rev. 2") as the assessment methodology for groundwater studies, and to evaluate hazards for a "suburban resident" receptor in connection with cleanup of the Site. The Letter fails to acknowledge that prior dispute resolution proceedings between Boeing and DTSC resolved that Boeing would include in a revised SRAM only an evaluation of exposures to potential future recreators or workers at the Boeing Property, along with applicable offsite receptors<sup>2</sup> Pursuant to DTSC's December 9, 2016 letter directing Boeing to update SRAM Rev. 2<sup>3</sup> and the mutual agreement between DTSC and Boeing that resolved the January 2018 dispute, Boeing submitted SRAM Rev. 3 to DTSC on July 24, 2018.<sup>4</sup> DTSC has provided no response to Boeing regarding SRAM Rev. 3 and the Letter makes no mention of its pendency, notwithstanding numerous attempts by Boeing, both verbally and in writing, to obtain DTSC's approval of SRAM Rev. 3 so that Boeing could submit its Risk Assessment

---

<sup>1</sup> This letter only provides a summary of Boeing's objections to the Letter only and does not comprehensively detail Boeing's legal position on each disputed issue.

<sup>2</sup> Boeing and DTSC engaged in informal dispute resolution discussions regarding the SRAM between January and June 2018. On January 16, 2018, DTSC issued a written decision disapproving Boeing's proposed SRAM Rev. 3, in part for failure to include a residential with backyard garden exposure scenario. Following extensions and a face-to-face meeting between Boeing and DTSC on February 21, 2018, Boeing submitted written objections to DTSC's decision in a letter to DTSC's SSFL Project Coordinator on March 15, 2018. On April 5, 2018, Boeing met again in person with DTSC, and later that day, DTSC determined in writing to "work towards finalizing the SRAM with other minor technical revisions" and agreed with the exclusion of suburban residential and backyard garden exposure scenarios in the SRAM. Boeing and DTSC concluded informal dispute resolution on the referenced, unrelated four minor technical issues on May 23, 2018, and on July 26, 2018, Boeing submitted to DTSC an updated SRAM Rev. 3, on which DTSC has not yet acted. DTSC's attempt to circumvent the 2018 settlement abrogates DTSC's responsibility under the settlement. Boeing hereby restates and incorporates by reference each of its objections raised during the prior dispute resolution process, and expects that DTSC will act consistent with the 2018 settlement.

<sup>3</sup> DTSC required that the SRAM Rev. 2 be updated by letter from Roger N. Paulson, DTSC Chief of the SSFL Project Support Unit, to Mike Bower dated December 9, 2016. See DTSC, Human Health Risk Assessments, Santa Susana Field Laboratory, Ventura County, California (Dec. 9, 2016) (requiring an "update (addendum) to the Santa Susana Field Laboratory (SSFL) Standardized Risk Assessment Methodology (SRAM), Revision 2" and directing that "[r]isk assessment reports shall be submitted under separate cover after final input parameters are established and a SRAM Rev. 2 Addendum is approved by DTSC").

<sup>4</sup> SRAM Rev. 3 covers risk assessment methodology for all media, including groundwater, for all potential receptors, onsite and offsite.

Reports.<sup>5</sup> If DTSC believes this Letter has the effect of disapproving the July 2018 SRAM Rev. 3, Boeing also disputes that decision. Any implied rejection of SRAM Rev. 3 would be contrary to the settlement that resolved the prior dispute resolution proceedings between Boeing and DTSC.

- **The Letter includes requirements to study incomplete and legally impermissible exposure scenarios that cannot be compelled as part of the risk-based cleanup.** Even if Boeing and DTSC had not already agreed in May 2018 that Boeing would revise SRAM Rev. 3 to include only evaluation of exposure to a potential future recreator and worker on the Boeing Property and other applicable offsite receptors, any requirement for Boeing to study legally impermissible exposure scenarios exceeds the scope of DTSC's authority to enforce a risk-based cleanup under the Consent Order. (Consent Order §§ 3.2.1, 3.4.2, and 3.5.2) ("The Surficial OU Reports shall be developed in a manner consistent with the approved workplans, workplan amendments, and approved Standardized Risk Assessment Methodology Work Plan (Rev. 2) **and future amendments.**" (emphasis added)). Indeed, the 2014 SRAM Rev. 2 noted in the Letter is an amendment to the 2005 SRAM referenced in the Consent Order.

A risk-based cleanup requires DTSC to consider site-specific factors. The level of risk depends on the current and reasonably foreseeable future use of the property.<sup>6</sup> In accordance with this legal requirement, Consent Order Sections 2.4.1 and 2.5 provide respectively that "[r]emediation of chemically contaminated soils [should use] the Standardized Risk Assessment Methodology (SRAM) Workplan (Rev. 2)" and that the exposure scenarios to be included in the SRAM are based on "[a] generalized conceptual site model (CSM) of potential exposure pathways at SSFL . . . based on field observations, **current and future site use scenarios**, and data collected during the investigations at the SSFL." (emphasis added). As DTSC is aware, a Conservation Easement has been recorded upon the Boeing Property that ensures that Boeing's Property will be preserved as open habitat forever, and that no residential or agricultural development or use, and no consumption of groundwater, will ever occur at the Boeing Property. These uses are expressly prohibited by the Conservation Easement, which runs with the land in perpetuity

---

<sup>5</sup> Boeing sent letters to DTSC on November 29, 2018 and June 16, 2019, called the DTSC Project Coordinator on several occasions, and discussed in an in person meeting on February 12, 2019 with you and Project Coordinator Grant Cope, the importance and need for approval of SRAM Rev. 3 to avoid further delay and allow Boeing to submit its already drafted Risk Assessment Reports prepared in compliance with the technical direction in DTSC's January 16, 2018 letter to Boeing and DTSC's agreement on the two exposure scenarios that Boeing would include in the SRAM for all media, including groundwater.

<sup>6</sup> See, e.g., DTSC, Corporate Pointe at West Hills, West Hills, CA, CAD0411692124; Status of DTSC Investigation and Remediation (Feb. 11, 2009) (stating DTSC's goal to ensure that remedy selection "protect[s] public health and the environment for the reasonably anticipated future land use," and further that a proposed zone change would "have no effect on the remediation standards"); U.S. EPA, Final Remedy Selection for Results-Based RCRA Corrective Action, Fact Sheet #3 (Mar. 2000) (stating that RCRA corrective action cleanups are risk-based and site-specific such that cleanup must "protect human health and the environment based on reasonably anticipated land use(s), both now and in the future"). Additional authority for the proposition that corrective action requires a human health risk-based cleanup may be found in Boeing's December 7, 2017 comments on the Draft Programmatic EIR for the Site.



and is enforceable by the Attorney General, among others. (Conservation Easement §§ 4.1, 4.2, 4.5, 4.6, 4.7, 19.13). SRAM Rev. 2 was prepared in 2005 and most recently updated in 2014 before the Conservation Easement was recorded over the Boeing Property, and thus its assumption that the Boeing Property may be developed in the future for residential use is no longer true. In recognition that the reasonably foreseeable future land uses at the Boeing Property cannot include residential or agricultural uses, and extraction of groundwater for consumption is prohibited, DTSC cannot compel Boeing to study these uses as part of the groundwater risk assessment, corrective measures study or cleanup objectives.<sup>7</sup>

- **“Aquifer restoration” is not a discrete, applicable, or appropriate cleanup objective.** While the purpose of corrective action is to protect human health, the Letter seeks specifically to require groundwater cleanup to achieve “aquifer restoration.” DTSC cites several State Water Resources Control Board (“State Board”) policies and the Water Quality Control Plan for the Los Angeles Region Basin (“Basin Plan”), but these authorities do not support imposition of aquifer restoration as a remedial goal at the Site. To the extent State Board policies apply, they require remedial goal setting to balance environmental, economic, and social values so as to preserve beneficial use of water. These policies also recognize technical and economic feasibility as constraints.<sup>8</sup> DTSC cannot use State Board policies to force cleanup based on exposure to a “suburban resident” or to higher and more environmentally restorative levels than are required to meet State Board standards. Boeing is committed to working with the DTSC to remediate groundwater and protect the surrounding basins, however, the parameters stated in DTSC’s Letter are neither supportable nor acceptable.
- **The State Board’s Sources of Drinking Water Policy, Res. No. 88-63, is inapplicable because the Site is not currently or potentially a source of drinking water and is not designated for municipal use in the Basin Plan.** The Letter obligates Boeing to consider the State Board’s Sources of Drinking Water policy when setting groundwater cleanup goals, despite the fact that groundwater at the Boeing Property is not currently a drinking

---

<sup>7</sup> The Letter references “final groundwater cleanup goals” for the Site, and states that such final cleanup goals will be based on a combination of MCLs, cumulative health risk, ecological risk, and background concentrations. In support of this requirement, DTSC cites SRAM Rev. 2, Attachment 1, Table 3.1: Groundwater Comparison Concentrations for Metals and Selected Inorganic Compounds. Boeing has made it clear that the concentrations used in Table 3.1 are for the purposes of completing the investigation, we do not agree that the levels in this table are representative of background groundwater concentrations, nor should this table be misconstrued as presenting “groundwater cleanup goals.”

<sup>8</sup> See, e.g., Basin Plan at 2-3 (“Beneficial uses form the cornerstone of water quality protection under the Basin Plan. Once beneficial uses are designated, appropriate water quality objectives can be established and programs that maintain or enhance water quality can be implemented to ensure the protection of beneficial uses. The designated beneficial uses, together with water quality objectives (referred to as criteria in federal regulations), form water quality standards.”); State Board, Res. No. 68-16, Statement of Policy with respect to Maintaining High Quality Waters in California (requiring the maintenance of “high quality waters” to the extent required to preserve such waters for the “maximum benefit to the people of the State”); State Board, Res. No. 92-49, Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304 (requiring cleanup and abatement to achieve the “best water quality which is reasonable . . . considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible”).

water source and, under the Conservation Easement, Boeing's Property never will become a source of drinking water. As the State Board's policy recites, "sources of drinking water" are defined by the Basin Plan, and include "those water bodies with beneficial uses designated as suitable, or potentially suitable, for municipal or domestic water supply." (State Board, Res. No. 88-63 at 1). There are no drinking water wells at the Site. (Consent Order § 2.10). The Site does not overlie a groundwater basin recognized by the California Department of Water Resources ("DWR"). The Basin Plan, updated as of May 2019, has established no actual or potential beneficial uses for groundwater underlying the Site, including no designation for municipal use, and establishes no water quality objectives for groundwater at the Site. (See Basin Plan at Ch. 2 & Table 2-2). Further, available hydrogeologic evidence shows that contaminants in groundwater at the Site have remained in place without migration to offsite groundwater basins designated under the Basin Plan for municipal use, such as the Simi Valley Groundwater Basin or the San Fernando Valley Groundwater Basin.<sup>9</sup> Accordingly, the State Board's Sources of Drinking Water Policy is not applicable to the Site, and a requirement to consider this policy in setting groundwater cleanup goals is inappropriate.

- **Applicable cleanup standards do not require analysis of Maximum Contaminant Levels ("MCLs") or 1/1,000,000 cancer risks to set groundwater cleanup goals because the groundwater cannot be used for domestic or municipal purposes and is not so designated in the Basin Plan.** The Letter states that "each site-specific groundwater risk assessment must evaluate cleanup to MCLs" and must "determine the required cleanup levels . . . to achieve a cumulative lifetime cancer risk of equal to or less than one in one million and a hazard index of 1. As discussed above and as resolved during prior dispute resolution proceedings between Boeing and DTSC, the Consent Order and applicable law requires a human health risk-based cleanup that takes into account the reasonably foreseeable future land use at the Site.<sup>10</sup> MCLs are primary drinking water quality standards promulgated under authority of the federal and state Safe Drinking Water Acts, and are not appropriate standards where, as here, groundwater is not actually or legally designated as a current or potential source of drinking water. Moreover, there is no risk to be assessed because there is no exposure pathway, given that groundwater extraction for drinking water at the Boeing Property is expressly prohibited by the Conservation Easement. Requiring facility operators like Boeing to achieve excess cancer-based cleanup levels for groundwater at sites where no drinking water sources are designated or possible would also set a difficult precedent for the implementation of State programs that regularly authorize discharges at levels in excess of such cancer-based

---

<sup>9</sup> See, e.g., MWH, Offsite Data Evaluation Report Santa Susana Field Laboratory Ventura County, California at 3-26 (Dec. 2007) ("[A]nalysis of available data including the offsite sampling results presented in this report indicates that contaminants in groundwater have only migrated offsite in the northeast portion of the SSFL which is an area of extensive, ongoing investigations. . . . [O]ther offsite sampling results indicate that the groundwater flow system has not transported contaminants from beneath the SSFL to offsite locations.")

<sup>10</sup> See U.S. EPA, Final Remedy Selection for Results-Based RCRA Corrective Action, Fact Sheet #3 (Mar. 2000) (stating that media cleanup levels, points of compliance, and remediation time frames should be addressed in such a manner to achieve cleanup objectives that are "appropriate to the assumptions regarding current and reasonably anticipated land use(s) and current and potential beneficial uses of water resources").





December 6, 2019  
SHEA-116151  
Page 6

standards, such as the Industrial Stormwater Program and reinjection-related Waste Discharge Requirements. Therefore, the requirement to evaluate cleanup to levels at least as stringent as MCLs, if not more stringent to achieve one in one million excess cancer risk, is overly prescriptive and not consistent with applicable law.

For all of the reasons summarized above, Boeing disputes DTSC's new directives and guidance under the Letter. To the extent that DTSC seeks to utilize this guidance to force risk assessment, corrective measures study, or groundwater or soil cleanup to levels that exceed legally applicable standards required to complete human health risk-based corrective action based on the reasonably foreseeable future use of the Boeing Areas, Boeing believes such requirements are arbitrary and capricious, unreasonable, and inconsistent with the Consent Order and applicable law.

Boeing appreciates DTSC granting Boeing's request to extend the timeframe for submittal of the instant letter under Section 4.19.1.3 of the Consent Order to December 6, in consideration of the holidays last week. Boeing also appreciates DTSC's agreement to extend the period of formal dispute resolution in Section 4.19.1.4 of the Consent Order to January 17, 2020, both in recognition of the winter holidays and the need for additional time for the parties to have meaningful discussions regarding the dispute.

Boeing remains hopeful that we can work with DTSC to address our concerns so that the CMS can be completed in a timely manner and the final cleanup of the Boeing Areas is not further delayed. Please contact me by phone at 818-466-8733 or via email at [David.W.Dassler@boeing.com](mailto:David.W.Dassler@boeing.com) so that we may discuss this matter further and hopefully reach a resolution that appropriately reflects the points outlined above.

Sincerely,

A handwritten signature in black ink, appearing to read "David W. Dassler".

David W. Dassler  
Boeing SSFL Project Coordinator

cc: Grant Cope, DTSC SSFL Project Coordinator (email only)  
John Jones, DOE SSFL Project Coordinator (email only)  
Peter Zorba, NASA SSFL Project Coordinator (email only)