

Committee to Bridge the Gap
Parents Against SSFL
Physicians for Social Responsibility-Los Angeles
Public Employees for Environmental Responsibility
Rocketdyne Cleanup Coalition
January 18, 2022

COMMENTS ON TENTATIVE NPDES PERMIT, THE BOEING COMPANY,
SANTA SUSANA FIELD LABORATORY, NPDES NO. CA0001309

Introduction

The Santa Susana Field Laboratory (SSFL), the headwaters of the LA River, is one of the most contaminated sites in the country and arguably the most polluted place within the jurisdiction of the Los Angeles Regional Water Quality Control Board (LARWQCB). We write in opposition to the woefully inadequate and non-protective proposed pollution discharge permit for The Boeing Company and SSFL.

We object to the coddling of a major polluter while failing to protect the health of impacted communities and the environment. We furthermore are concerned about a process that effectively prevents true transparency and opportunity for meaningful public input, while at the same time secret negotiations are occurring between Board staff and Boeing to help the latter evade its legally binding cleanup obligations for the site. We call on the Members of this Board to take aggressive action to address fundamental underlying systemic problems that have been brought to light by the handling of the Boeing matter.

Summary of Major Concerns

1. **90% of the contaminants that Boeing and DTSC have identified as detected at SSFL are exempt from any limits whatsoever in the Tentative Permit.** Boeing and DTSC identified ~314 contaminants at SSFL;¹ the permit provides limits for only 33 of these distinct chemicals. The other 280 (~90%) are allowed to be released at unlimited levels, which is wholly unacceptable from a public health and environmental perspective.

¹ [SRAM 2 Addendum](#), prepared by Boeing and approved by DTSC in August 2014; see "List of Chemicals Historically Detected at the SSFL - by Media" (PDF pp. 1408-1412), included as an attachment to these comments. We have highlighted (yellow) those constituents that are included as limits in the Tentative Permit compared to the great majority for which there are no limits included. [See also the similar number of toxic chemicals for which Risk Based Screening Levels (RBSLs) for soil contamination have been put forward for human health, SRAM, PDF pp. 1071-1073, and ecological receptors, SRAM, PDF pp. 1589-1597.]

2. Of the limits that are in the existing permit, nearly one quarter are proposed to be changed in the new permit.² **Of those proposed changes, 95% either weaken or fully eliminate the limits in the existing permit.**³

3. **Two of the primary outfalls (001 and 002) have no enforceable numeric limits whatsoever.** Instead, “benchmarks” apply, the breach of which does not constitute a violation and for which no fines can be issued. One of these outfalls (002) with no enforceable limits is the location of the largest number of exceedances in the last several years. (The benchmarks are identical numerically to the enforceable limits, but don’t trigger violations or fines.)

4. **Even though the Reasonable Potential Analysis (RPA) identified seven unique chemicals that should be added to the permit (for a total of ten new limits given their presence at multiple groups of outfalls), the Tentative Permit fails to add them.** [Although the Tentative Permit (F-34) claims that the reasons for refusing to add the new toxic constituents found by the RPA is detailed in Section 4.4, there is no such discussion found therein.]

Outfalls	Constituents Triggering Reasonable Potential	RPA Result - Need Limit?	Water Board Establishes Limit?
001, 002, 011, 018	Benzidine	Yes	No
	3,3'- Dichlorobenzidine	Yes	No
	4,4'-DDE	Yes	No
003, 004, 005, 006, 007, 009, 010	Selenium	Yes	No
	Asbestos	Yes	No
	Pentachlorophenol	Yes	No
008	Arsenic	Yes	No
	Benzidine	Yes	No
	3,3'-Dichlorobenzidine	Yes	No
	4,4'-DDE	Yes	No

Citation: SSFL Tentative RPA Analysis, Outfalls 001, 002, 011, 018, pages 9-12. Tentative RPA Analysis, Outfalls 003, 004, 005, 006, 007, 009, 010, pages 9-12. Tentative RPA Analysis, Outfall 008, pages 9-12. (RPA Analyses provided by LARWQB staff member Doung Trinh, on Friday, Jan. 14, 2022, in response to a request by Alex Dodd on Jan. 12)

See also Tentative NPDES Permit, Attachment F, pages F-34 - 35

² [Final Limits Comparison Table](#), released by Board staff in early January 2022 upon request by Melissa Bumstead for identification of changes proposed in the Tentative Permit. (This is based on counting the same chemical multiple times if there is a limit for it at different groups of outfalls and/or if there is a limit both for concentration and for lbs/day.)

³ *ibid.*

5. **The Board staff, without opportunity for public comment, waived virtually all of Boeing's fines for its violations of permit limits after the 2018 Woolsey Fire,** arguing that it was an act of God and Boeing and the other SSFL RPs had no responsibility for the violations. However, had Boeing lived up to its obligations under the cleanup agreement to complete soil cleanup by 2017 (which it hasn't even begun), there would have been no violations in 2018. Furthermore, had the fire station that had long been located within a few hundred feet of the starting place for the fire not been torn down and nearby fire hydrants and piping not removed before the fire, and had Boeing's remaining ancient fire engine at the site entrance not broken down before getting to the fire, the fire may never have spread beyond an acre.⁴
6. **The Tentative Permit fails to disclose a scandalous aspect of a major action by Boeing, allowed by Board staff, that re-routes much of the contaminated surface water flow at the site to unlined ponds such as the Silvernale Reservoir, where contaminated water infiltrates into the groundwater, contaminating it further.** While some of the polluted water in the unlined ponds is removed to prevent overflow and partially treated for release down surface drainages, much of the contaminated water remains in the unlined ponds and pollutants thus seep into the aquifer. [Also of concern is that the partial treatment for what water is taken out of the pond(s) appears not capable of removing most of the toxic chemicals that have been detected at SSFL.] Trying to reduce Boeing fines for surface water contamination discharges by instead allowing it to discharge into and further pollute groundwater is deeply troubling.
7. **The Tentative Permit removes a series of "dry weather" limits,** asserting that dry weather discharges will now be prohibited because Boeing intends to reinject water from the Groundwater Extraction Treatment System (GETS) rather than release it into drainages. However, the Tentative Permit (pp. 10, 17) defines "wet weather" as "days when the maximum daily flow in the Los Angeles River is equal to or greater than 500 cubic feet per second (cfs)." As best as can be determined from the permit, however, Boeing, during periods that don't meet that definition, removes some of the water from the unlined Silvernale Reservoir (and perhaps other ponds as well) and releases it into surface drainages leading to outfalls so as to keep the ponds having a capacity to receive additional water during subsequent times when there may be heavy rains. **The removal of the dry weather limits is thus inappropriate.**
8. **Filtering samples is apparently allowed for many constituents, which can artificially reduce the measured values. A great many of the potential pollutants**

⁴ See Hirsch, Caine, and Ford, "The Santa Susana Field Laboratory and the Woolsey Fire: Migration of Contaminants" and Hirsch, Pomerantz, and Caine, "The Santa Susana Field Laboratory and the Woolsey Fire: Could the Fire Spread Have Been Prevented?", both January 8, 2020, attached hereto.

are not required to be measured at all, and the monitoring frequency for many pollutants is a single sample per year, grossly inadequate.

9. **The Tentative Permit does not disclose that Regional Board staff have been engaged in secret negotiations with Boeing and DTSC over Boeing's desire to walk away from much of its obligations to clean up the contaminated soil and its objections to restoring the contaminated groundwater.** Those entities with an interest in and long history of trying to assure the cleanup agreements are carried out, such as the Counties of Ventura and Los Angeles, the City of Los Angeles, and groups such as ours are frozen out of these secret negotiations aimed at gutting cleanup requirements.

10. **At the core of all of this is that there are legally binding cleanup agreements that require a full cleanup of the contaminated soil and a permanent remedy in place to restore the contaminated aquifer, and the Responsible Parties (RPs) have failed to carry out their obligations.** The entire issue of pollution discharge limits being violated would not be occurring if the source of the contamination had been cleaned up by 2017 as promised. The Board should make clear it strongly supports those clean up agreements, will not tolerate any action that further delays or weakens those obligations, and will vigorously use its authority to issue fines and take other actions to enforce pollution limits. Further weakening the permit, as proposed here, can only remove incentives for Boeing to comply with the cleanup agreements, and the public and environment will remain perpetually at risk. *The Regional Board should pass a resolution directly calling on DTSC to rigorously and completely enforce the 2007 and 2010 agreements, end the long delays, and for the RPs to stop resisting their cleanup commitments.*

Background⁵

A former nuclear reactor testing facility, SSFL housed ten reactors, a plutonium fuel fabrication facility, and a "hot lab" for dismantling highly irradiated nuclear fuel shipped in from around the country. At least four of those reactors suffered accidents, including a partial nuclear meltdown in 1959 that released radioactivity into the environment for weeks. None of the reactors had a containment structure, as required for modern reactors to prevent radioactive releases in case of accident. Plutonium was released from the fuel fabrication facility into the environment, and there were radioactive fires in the hot lab that similarly released radioactivity. Radioactive wastes were illegally burned for decades in open-air "burn pits," with clouds of contamination released into the air and falling out on the ground over a wide area, and contaminated water released down surface water drainages into the children's camp below.

⁵ For more detail about the contaminated SSFL site, Board Members are strongly urged to review the excerpts from the December 14, 2017, comments made by the Natural Resources Defense Council and the Committee to Bridge the Gap on DTSC's Draft Programmatic EIR, attached hereto.

SSFL was also used for decades to conduct approximately 30,000 rocket and nuclear missile tests, often using exotic and very toxic rocket fuels. Rocket engines after test firings were routinely flushed with TCE, a very toxic solvent, which was then allowed to percolate into soil and groundwater. Half a million gallons of TCE are estimated to be in the soil and groundwater. A witches' brew of other toxic chemicals also contaminates soil, groundwater and surface water, including PCBs, dioxins and furans, perchlorate (a very toxic solid rocket fuel component), VOCs, SVOCs, heavy metals, etc. For decades scores of barrels of toxic wastes were brought to a second open-air burnpit and ignited by firing at them with rifles, with huge toxic clouds rising high in the air and then falling out over the site and offsite as well.

SSFL consists of 2850 acres located on the Los Angeles/Ventura County line, in hills overlooking the West San Fernando Valley, Simi Valley, Westlake Village, and Thousand Oaks. Because it is elevated above the surrounding areas, contamination from SSFL migrates downhill to the neighboring communities. Of particular relevance to the matter before the Board, because SSFL is elevated above the surrounding communities, rainwater landing on the contaminated soil picks up the pollutants and carries them downstream in surface water runoff leaving the site. Groundwater at SSFL is also heavily contaminated, and the plume has already migrated offsite. More than 700,000 people live within ten miles of SSFL.

[Federally-funded studies](#) by the UCLA School of Public Health found significantly elevated death rates from cancers particularly sensitive to radiation and toxic chemicals among workers at the site associated with their exposures. A subsequent [study](#) by UCLA found contamination from the site had migrated offsite at levels in excess of EPA levels of concern. An additional [study](#) by the University of Michigan found a [greater than 60% increased incidence of key cancers](#) in the nearby community associated with their proximity to SSFL. Both of these research endeavors were also federally-funded.

60% of the surface runoff from SSFL leaves the site to the south via entry into Bell Creek, which recharges groundwater in the region and which drains into the LA River. Other contaminated surface water leaves SSFL via Dayton Creek, which also recharges groundwater basins and drains thereafter into the LA River. Astronomical concentrations of perchlorate (62,000 parts per million) were found in the Dayton Creek sediment in Dayton Canyon in 2005, 1.5 miles downstream from the SSFL boundary. Perchlorate contamination had previously been found at SSFL near where Dayton Creek originates and had also been found in surface water at that outfall.

Additionally, surface water leaves SSFL from a number of outfalls to the north, leading through the children's camp at Brandeis Bardin Camp Institute and from there into the Arroyo Simi, which then leads to the Calleguas Creek and eventually discharges into the ocean at Oxnard. The Arroyo Simi is the main waterway in Simi Valley, and contaminated water from SSFL that enters it from the surface drainages on the northern boundary of SSFL can percolate into Simi Valley groundwater. A [study](#) by the late Dr. Ali Tabidian of Cal State Northridge had predicted that perchlorate leaving SSFL by surface runoff and entering the Arroyo Simi could result in perchlorate contamination in Simi groundwater, and numerous wells near the Arroyo Simi have

been found to have perchlorate in them. A substantial portion of water used in Simi Valley comes from groundwater.

There are three “Responsible Parties” for the contamination at SSFL and its cleanup—the U.S. Department of Energy (DOE, successor to the Atomic Energy Commission), NASA, and the Boeing Company, which owns most of the site. In 2007, the three RPs executed a [Consent Order for Corrective Action](#) with the California Department of Toxic Substances Control (DTSC), which requires soil cleanup to be completed by 2017 and the permanent groundwater remedy to be in place by that time as well. In 2010, [DOE](#) and [NASA](#) entered into Administrative Orders on Consent (AOCs) with DTSC including radioactive contamination in the cleanup requirements, further refining them to be cleanup to background (restoration of the site to the condition it was in before they contaminated it), and maintaining the deadline of 2017.

However, since that time, all three RPs have strenuously resisted the obligations of the legally binding cleanup agreements and DTSC has failed to enforce them. We are five years beyond the deadline, and the required cleanup of soil has not only not been completed, it has not even begun.⁶ [We note that the tentative permit grossly misstates the situation with regards the status of cleanup, asserting falsely that it “is progressing.” (Fact Sheet p. F-34). It is highly inappropriate for Board staff to not put the Board Members on notice that the deadline for cleanup was 2017 and the required soil cleanup pursuant to those agreements has not even begun and is years away from starting.]

Eleven mayors, County Supervisors, and City Councilmembers wrote CalEPA expressing concern about the failure to meet the deadlines in the 2007 and 2010 cleanup agreements and about reports of the secret negotiations between Boeing and DTSC (in which Board staff are also participating) that could further weaken and delay the cleanup. At the same time, Senator Padilla and four Congressmembers wrote to CalEPA expressing similar concerns. Both letters are attached.

The proposal to markedly weaken the NPDES permit would undercut efforts to get the promised cleanup back on track.

A Failure of Transparency and Meaningful Opportunity for Public Review and Input

The email transmitting the “Request for Comments” was sent in December 2021 by Bronwyn Kelly of the Board staff, and was addressed only to Steve Shestag of Boeing. It was not addressed to any of the concerned public groups; a few were cc’d. Since it was addressed to Shestag at Boeing, the subject line requesting comment on the draft permit appeared to be requesting that Boeing comment. The text of the email itself put no one from the public, who might by chance have been cc’d on it, on notice that there was a public comment solicitation,

⁶ There have been years ago a few “interim measures,” e.g., the ISRA, but those were not the cleanup required by the Consent Order or AOCs and have resulted in a tiny fraction of the required cleanup being conducted.

deadline, hearing, or anything else involving public input. The message in the email, addressed as said above to Steve Shestag of Boeing, stated in its entirety:

Please find the attached correspondence from the California Regional Water Quality Control Board, Los Angeles Region (Los Angeles Water Board).

The Los Angeles Water Board Watershed Regulatory Section sends our correspondence with PDF format through email. If you are no longer a responsible party, nor interested in receiving correspondence regarding the subject facility, please kindly reply to this email and we'll remove you from the cc list. The attached document is in Adobe Acrobat PDF format. You can obtain an Acrobat Reader free of charge at <http://www.adobe.com/products/acrobat/readstep2.html>

Even if the interested members of the public and organizations involved with SSFL had been among the cc's—and the vast majority were not—nothing from the email would put them on notice that it was other than what it said it was: a request to Boeing for it to comment on a draft permit. No email was sent out to the concerned public requesting their comments.

The letter says the only public notice was a posting on the Regional Board's website; but even that isn't public notice—the link provided is merely to a page that, in two lines apiece, lists two tentative waste discharge requirements and tentative permits, one of which is for Boeing.⁷

If one goes to the main Board webpage, there is no place with public notices soliciting comments. There is no way for the public to truly be informed, even if they checked the Board's webpage every two weeks for the last seven years, which is unreasonable to ask of them in any case.

No public meetings were held by Board staff in the community to alert them to the matter and solicit input from the public before the Board staff closed on the drafts; they only interacted with the polluter, Boeing.

Furthermore, the comment period identified in the December letter put most of the time for the public—even if they magically got notice—over the holidays. This does not seem to be an accident, for precisely the same thing happened the last time the Boeing permit was up for consideration.⁸ The four business day extension that was granted when a key group concerned with SSFL complained is grossly insufficient.

The staff apparently met or otherwise interacted secretly with Boeing over a period of two years to allow Boeing to privately push for the weakening of the permit and for the staff to accept, it

⁷ https://www.waterboards.ca.gov/losangeles/board_decisions/tentative_orders/#1

⁸ In 2014, the Board staff sent the request for comments to Boeing with a “public notice” in December, with comments due January 8, 2015.

appears, virtually every weakening Boeing proposed. The affected public was excluded from those discussions, and then, after the deal had already been struck between the Board staff and Boeing, received almost no public notice, with the comment period occurring primarily over the holidays. The appearance this conduct suggests is troubling.

LA Water Board staff have, alas, appeared to work hard to prevent transparency, genuine public notice, and a real opportunity for involvement and meaningful review and comment.

Failure to Timely Provide the Public—Or the Board—Identification of the Major Proposed Changes in the Permit and the Reasonable Potential Analyses Upon Which They are Based

Even if members of the public were to miraculously learn of the tentative permit and somehow, over the holidays, be able to review the lengthy document and appendices, the Board staff did not include an identification of the major changes proposed—and they are major. Neither the public nor the Board itself would be readily able to ascertain the extent of the gutting of the already weak permit, because the changes were not called out in a document identifying them.⁹

Only after receiving a request from a member of the public did Board staff, on January 5, produce a summary of the proposed changes to the permit. But despite a request for extension of the public comment period (in part due to having it occur largely over the holidays), the Board staff only extended the comment period by four business days, to January 18, giving little time to review the proposed changes, even if the public were made aware of the new document.

Similarly, the tentative permit relies heavily upon a troubling Reasonable Potential Analysis that wasn't made public with the tentative permit, but only summarized therein. Only when individuals requested access were those individuals provided it, but not the public generally; and again, the deadline for comments remains just a few days after those documents were released to requesters.

⁹ There is, buried deep in an Appendix, more than 100 pages into the overall document, a table with some changes to (weakening of) numeric limits followed by an (unconvincing) effort to explain away why the weakening does not violate the anti-degradation and anti-backsliding requirements of law. But changes to benchmarks are not identified, nor other changes to the permit. No decision-maker such as the Board Members, nor members of affected public, would be put on sufficient notice thus of the significant changes proposed.

The Most Recent Monitoring Data Have Not Been Made Available to the Public—or to the Board: the Hearing Should be Put off Until the Data Are Available, and a New Comment Period Provided

The Tentative Permit relies heavily on a very outdated Reasonable Potential Analysis, based on data solely from April 2015 to April 2020. It is thus nearly two years old, and much of it occurred during a period of drought, when there would be minimal releases. The last quarter of 2021, however, had very heavy rains. Boeing plans to release data from that quarter only a week after the scheduled hearing, and weeks after public comments are due.

We recommend that the Board put off the scheduled hearing, insist on data from at least the last quarter of last year and preferably for the first quarter of this year as well (i.e., the rainy season), and the proposed permit not be voted on at this time. Instead, permit a genuine public comment period, this time with adequate public notice.

Conclusion

For the reasons stated herein:

1. The Board should reject the proposals to weaken the existing permit.
2. The Board should instead direct that the permit be markedly strengthened, along the lines identified in these comments.
3. The Board should send a letter to DTSC and the Responsible Parties calling for full compliance with the 2007 and 2010 cleanup agreements and an end to further delays.

Documentation cited in these comments are incorporated herein by reference. Several documents are provided as exhibits hereto in PDF form. Other documents cited in these comments by URL can be provided in hard copy (or PDF) upon request if desired.