Santa Susana Field Laboratory (SSFL) Site:

FAQs for Memorandum of Understanding (MOU) Between the California Regional Water Quality Control Board, Los Angeles Region (Los Angeles Water Board) and The Boeing Company (Boeing)

General Questions re MOU

1. Why is the MOU necessary now instead of being addressed after the Department of Toxic Substances Control (DTSC) soil cleanup is done?

The MOU is necessary for several reasons. The MOU provides a comprehensive framework and incentive to Boeing to agree to a stringent cleanup that addresses not only soil and groundwater concerns (overseen by DTSC), but also cleans up industrial pollution from all stormwater discharges (overseen by Los Angeles Water Board) in the Boeing areas of responsibility (Boeing Area), to facilitate long term compliance with surface water quality standards after completion of its soil cleanup. The comprehensive framework of the MOU and the DTSC Settlement Agreement establishes a streamlined path for a stringent soil cleanup that is protective of human health, groundwater, surface water and the environment. In addition, the MOU provides agreement regarding the substantive requirements that Boeing must satisfy before a future board will consider whether to relieve Boeing of its National Pollutant Discharge Elimination System (NPDES) permit requirements so there will not be disputes later.

2. What exactly does the MOU do, and how does it hold Boeing accountable for ensuring its stormwater discharges from the Boeing Area are clean?

The draft MOU sets forth the procedures and conditions that Boeing must satisfy after cleanup is done and before the Los Angeles Water Board will consider relieving the company of its obligations under the NPDES permit in the future. Specifically, the MOU ensures that Boeing must demonstrate, by first conducting modeling and then several years of confirmation monitoring and sampling, that stormwater runoff from the Boeing areas of responsibility (Boeing Area) at the former Santa Susana Field Laboratory site (SSFL or site) will be protective of human health, groundwater, surface water and the environment. In addition, DOE and NASA must have permits under the NPDES program so that there is no gap in permit coverage for industrial stormwater discharges from the site. Only after these conditions are satisfied may Boeing submit an application to the Board to terminate its coverage under the NPDES permit. The draft MOU does not restrict the Board’s authority or ability to make an independent decision about the potential release of Boeing’s obligations under the NPDES permit.

3. Has the Los Angeles Water Board made it easier for Boeing to be released from the NPDES permit when the cleanup is complete?

No. The conditions that must be met for the Board to consider terminating Boeing’s permit are stricter than those applied to other industrial stormwater NPDES permits. The Board is requiring that Boeing first demonstrate through predictive computer modeling, that stormwater will meet water quality standards or be at background or non-industrial levels after soil cleanup. Then,
Boeing must conduct post-cleanup monitoring of at least 12 storms, including two substantial storms, to confirm that stormwater meets water quality standards or is at background or non-industrial levels after cleanup. Monitoring will include chemicals, radionuclides, and aquatic toxicity. After post-cleanup stormwater monitoring has been completed, Boeing will then be required to use the sampling results to conduct a human health risk assessment (HHRA) to confirm stormwater from the site will not impact human health. Finally, DOE and NASA will each need to hold NPDES permits for their respective areas of responsibility at SSFL if the cleanup in those areas has not been completed. Only after all of these conditions are met, will the Board consider releasing Boeing from its permit obligations after engaging in the standard public process that is required for all permitting decisions.

4. What advantages does the Los Angeles Water Board see to this MOU, and what does the Board get out of the MOU that it wouldn’t have achieved anyway through its regulatory process?

The draft MOU supports DTSC’s settlement agreement and together, these documents establish an accelerated, streamlined path for a stringent soil cleanup that is protective of human health, groundwater, surface water and the environment. Specifically, the DTSC-Boeing Settlement Agreement avoids future disputes with Boeing concerning the levels of cleanup necessary to remediate the soil in the Boeing Area. Then, once the soil cleanup is complete, and the conditions set forth in the draft MOU are satisfied, the stormwater runoff from the Boeing Area will no longer be contaminated from past industrial activity. Therefore, the draft MOU works together with the DTSC settlement agreement to ensure the State’s regulatory goal is achieved: a robust, expedited cleanup of the site, and protection of human health and ecological resources from potential exposure to contaminated soil, groundwater and stormwater from the Boeing Area.

5. What happens if the Los Angeles Water Board does not approve the MOU?

If the Los Angeles Water Board fails to approve the draft MOU, then the settlement agreement that Boeing has reached with DTSC will not go into effect. If that happens, then it is possible that DTSC and Boeing would rekindle their dispute and the accelerated timeline for cleanup of the Boeing Area of the SSFL site, and the streamlined processes therein, would not occur. Cleanup of the Boeing Area would take longer, and the efficient, streamlined processes for cleanup in that agreement would not take place. Perhaps most importantly, however, the path established in the DTSC/Boeing settlement agreement for a stringent soil cleanup and the potential for a cleanup standard that allows people to live on site and consume produce from a backyard garden would likely be contested by Boeing in court, causing both delay in the cleanup and uncertainty as to whether the same range of cleanup standards, including a potential residential with backyard garden cleanup standard, would be achieved.

The failure to approve the draft MOU would have no impact on Boeing’s current NPDES permit. However, it is very likely that, once Boeing cleans up to the standard DTSC requires, it would petition the Los Angeles Water Board to remove its NPDES permit. Without the modeling and confirmation sampling required in the draft MOU, it would be harder to ensure that stormwater runoff will be safe for human health and the environment. Although nothing prohibits the Los Angeles Water Board from imposing these requirements on Boeing anyway, this could lead to litigation between Boeing and the Board. If approved, the MOU would ensure that the appropriate modeling and confirmation sampling will occur.
6. Why aren’t NASA and/or DOE named dischargers on the current stormwater permit?

For many years, Boeing was the only named permittee because it both owned part of the SSFL site and, as DOE’s and NASA’s remediation contractor, it was the only operator on the site after all industrial activity ceased at SSFL. Although both NASA and DOE have different remediation contractors now, both have agreements with Boeing that indicate that NASA and DOE will comply with the terms of Boeing’s NPDES permit.

7. Why do NASA and/or DOE have to be named if there is one permit for the whole site held by Boeing?

It is not necessary to name NASA and DOE at this time, but it will be necessary to do so if and when Boeing’s soil cleanup is complete and if NASA and DOE are still discharging stormwater from areas where their cleanup is not complete.

8. If NASA and/or DOE finish cleaning up soil in their areas of responsibility at the SSFL site prior to the time Boeing finishes its soil cleanup, will Boeing be able to satisfy its obligations under the MOU?

Yes. One of the purposes of the MOU is to ensure that NASA and DOE have NPDES permit coverage for stormwater discharges at the Site during their soil cleanups and prior to the Los Angeles Water Board considering termination of Boeing’s NPDES Permit to ensure there is no gap in permit coverage at the Site. Once DOE and NASA are finished conducting soil remediation activities, and DTSC has determined that their respective soil cleanups are complete and no longer discharge pollutants offsite in surface water, the Los Angeles Water Board does not anticipate that the federal entities will need NPDES permits. Assuming that is the case, and if Boeing has met its other obligations under the MOU, then Boeing may ask the Los Angeles Water Board to consider terminating its permit under the MOU, notwithstanding the fact that the federal entities do not have NPDES permits.

Questions re the NPDES Permit and Termination of the Permit

9. Why would the Los Angeles Water Board consider terminating the NPDES permit if Boeing doesn’t clean up to background?

The standard for permit termination does not involve cleaning up to background. The Clean Water Act (CWA) requires NPDES permits for industrial stormwater when there are areas where industrial activity has taken place in the past and significant materials (e.g., impacted soils) from the past industrial activity are exposed to stormwater. Under the CWA, a permit for a site like this one, at which industrial activity used to occur but is no longer occurring, may be terminated after the Los Angeles Water Board determines there are no longer any significant materials from past industrial activity that may impact stormwater. The standards built into the MOU ensure that the permit will remain in effect until stormwater data from the Boeing areas clearly indicate that significant materials are not contributing to stormwater pollution, and that animals and human health are protected for the long term.
10. Has the Los Angeles Water Board ever terminated an NPDES permit before?

The Board regularly terminates NPDES permits. This permit, however, will not be considered for termination by the Los Angeles Water Board unless and until (a) the Boeing Area has been cleaned up to the satisfaction of DTSC; and (b) stormwater runoff from the SSFL site is shown not to be polluted, and that it will not impact human health.

11. Does the MOU restrict Boeing’s ability to seek permit modifications prior to its completion of soil cleanup at SSFL?

No. The permitting process will continue as normal. And if, through that process, Boeing requests a change to the permit, the Board will review that request following its standard processes.

12. What happens after Boeing is released from its NPDES permit obligations?

DOE and NASA will have NPDES permit coverage for their respective areas of responsibility at the site if the soil cleanup in those areas has not been completed.

13. What is the status of Boeing’s NPDES permit renewal?

The hearing on the NPDES permit renewal began on February 10, 2022. At the end of the day on February 10, 2022, the board closed the public hearing and continued it to a future date. Initially, the board was scheduled to continue the hearing on February 17, 2022. However, the board postponed the scheduled February 17 continuation of the hearing to a future date. This allows time to consider additional monitoring data from the stormwater runoff gathered in the last 3 months of 2021, and which was submitted to the Los Angeles Water Board on February 15, 2022. Further notification will be provided when the continuation of the public hearing is rescheduled. There will be additional opportunity for community input before the Los Angeles Water Board acts on the permit renewal. In the meantime, the existing permit (Order No. R4-2015-0033) and all its requirements remain in effect.

Offsite Impacts of Stormwater

14. How will Boeing stop contamination in stormwater from leaving the site during the cleanup, and what onsite control measures to prevent contamination from leaving the site will be used?

The existing NPDES permit will remain in effect during cleanup, and it contains restrictive limits on pollutants in stormwater runoff and requires rigorous controls for stormwater runoff. The Los Angeles Water Board will require additional measures in an NPDES permit that address the construction and remediation activity.

15. Will the SSFL Surface Water Expert Panel have a role in advising Boeing on best management practices (BMPs) for controlling contaminated soil from moving offsite during the cleanup when it rains?

Yes. As reflected in the MOU, the Los Angeles Water Board will continue to require that the Expert Panel advise Boeing on the operation and maintenance of the advanced treatment systems and BMPs to control stormwater runoff from the site.
16. What onsite stormwater control measures will Boeing be required to use to prevent contamination from leaving the site during its soil cleanup?

The stormwater runoff control measures currently in place as required by the existing sitewide NPDES permit will remain in place during cleanup. There are two advanced stormwater treatment systems that include a multi-step filtration process to remove solids, metals, and dissolved organic compounds. In addition, there are best management practices (BMPs) distributed throughout the site, including culvert modifications, biofilters, and erosion control measures. Once Boeing begins its soil cleanup, additional permit controls will be required, such as erosion controls, sediment retention, dust suppression, and minimization and containment of spills and leaks.

Questions re monitoring and sampling plans in the MOU

17. What are stormwater “background levels” and “non-industrial levels,” and why do they matter?

Stormwater background levels are the concentrations of pollutants that are measured in stormwater in natural, undeveloped areas. Stormwater non-industrial levels are the levels of pollutants measured in developed areas with no industrial activities or materials.

One of the conditions that Boeing must meet before the Los Angeles Water Board will consider termination of Boeing’s responsibilities under the NPDES permit is to show that pollutant levels in the runoff from the Boeing Area meet water quality standards or are at background or non-industrial levels after Boeing completes its soil cleanup.

18. Explain the modeling and monitoring requirements in the MOU and why they are important. What purpose do they serve?

The modeling will be conducted now, and it will predict whether stormwater quality from Boeing’s portion of the site will meet water quality standards or be at background or non-industrial levels after soil cleanup. The modeling work plan is part of the MOU. Under the oversight of the Los Angeles Water Board and with the assistance of the SSFL Surface Water Expert Panel, Boeing will commence developing, calibrating and running the model later this year. The model being used is well-known and well-established, and will be tailored to fit the unique conditions of the SSFL Site. Regardless of what the model shows, post-cleanup stormwater monitoring is required, and it must show that concentrations of pollutants in stormwater runoff will meet water quality standards or background or non-industrial levels.

19. How does the Los Angeles Water Board decide when the post-cleanup monitoring is complete?

The MOU requires that the number of storms and years of post-cleanup confirmation monitoring reflect a range of storm conditions, including large, intense storms that would produce sufficient runoff from the site, to ensure that stormwater will meet water quality standards or be at background or non-industrial levels after cleanup. When these conditions are satisfied and the post-cleanup monitoring results show that there are no violations of water quality standards attributable to Boeing’s prior industrial activity at the site, the post-cleanup monitoring will be complete.
20. Will the public be safe from stormwater running off the site after the cleanup is complete?

Yes. The post-cleanup stormwater monitoring data will be compared with water quality standards as incorporated into the NPDES permit (which are established to prevent negative health impacts to humans). Furthermore, the data obtained from the post-cleanup monitoring will be used in a site-specific human health risk assessment to confirm that stormwater runoff from the site meets levels that protect human health.

21. With climate change, if rainfall is more variable or extreme (e.g., drier droughts and bigger, wetter storms) than it was historically, how will we know if Boeing’s soil cleanup is protective of stormwater?

The stormwater modeling that is a required condition of the MOU will result in prediction of stormwater quality for a wide range of future rainfall conditions. Following cleanup, the modeling results and effectiveness of the soil cleanup will be verified by a comprehensive stormwater monitoring plan. Any increased variability in precipitation resulting from climate change will be accounted for because Boeing must conduct monitoring for a range of storm conditions, including large, intense storms after cleanup is complete.

22. What does the term “HHRA” stand for, what does an HHRA do, and what data will be used in the HHRA described in the MOU?

An HHRA is a human health risk assessment. It is used to evaluate risks to human health from exposure to pollutants (here, in stormwater) and is based on site-specific monitoring data and potential exposure to stormwater (for example, physical contact with stormwater coming off the site after it rains). Under the MOU, the HHRA will be based on data collected from stormwater runoff after the site is cleaned up, and must show that stormwater runoff will not harm human health. This HHRA is one of many prerequisites that the Los Angeles Water Board will require of Boeing prior to the time the Los Angeles Water Board considers whether to release Boeing from its obligations under the NPDES permit.

23. Has the Los Angeles Water Board committed to terminating Boeing’s NPDES Permit under the MOU?

No. The MOU does not commit the Los Angeles Water Board to any particular future decision.

24. Does the Los Angeles Water Board retain the discretion or authority under the MOU to deny termination of the NPDES permit?

Yes. The Los Angeles Water Board retains its full authority and discretion to make whatever decision is appropriate based on the facts, and following its normal public process.

25. Explain when the public can provide input into whether the Los Angeles Water Board should relieve Boeing of its obligations under the NPDES permit?

As with any permit decision, the public will have an opportunity to review and provide comments prior to the hearing both in writing and at any public workshops, and during a public hearing where the Los Angeles Water Board will consider whether to relieve Boeing of its obligations under the NPDES permit. This hearing will not occur for many years, because
Boeing will first have to clean up soil in the Boeing Area and satisfy the conditions set forth in the MOU before the Los Angeles Water Board will consider any such action.

**Questions re mediation and mediation process**

26. **What was the role of the Los Angeles Water Board in the DTSC-Boeing Settlement Agreement?**

The Los Angeles Water Board’s role in the DTSC-Boeing Settlement Agreement was to advise DTSC on the Water Boards’ laws, policies and regulations governing the protection of groundwater. In this regard, DTSC has identified the State Water Resources Control Board’s Resolution No. 92-49, *Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304*, which governs soil and groundwater cleanup, as an “applicable or relevant and appropriate requirement” (ARAR) for the cleanup of the site. As such, the Los Angeles Water Board will continue to advise DTSC on the application of Resolution 92-49 as DTSC oversees Boeing’s cleanup of the Boeing Area to protect groundwater.

**Confidentiality / Dispute Resolution**

27. **Why was the MOU negotiated in a confidential mediation?**

DTSC and Boeing were in a dispute that may have led to years of litigation and cleanup delay. In order to avoid further delay and expedite Boeing’s cleanup, the parties agreed to enter into confidential mediation. The Los Angeles Water Board joined the mediation at the request of CalEPA, DTSC and Boeing, given its jurisdiction over surface water quality at the site under the NPDES permitting program and its role in advising DTSC on the Water Boards’ laws, policies and regulations regarding groundwater protection. All mediation participants, including the Los Angeles Water Board, were subject to a confidentiality agreement that covered everything negotiated and discussed in the mediation, including the MOU.

As the courts have explained, confidentiality is considered essential to effective mediation and is routinely used because it allows for frank and candid discussions by the parties. One of the Legislature's fundamental means of encouraging mediation has been the enactment of mediation confidentiality provisions. To ensure confidentiality, the statutory scheme bars disclosure of specified communications and writings associated with a mediation absent an express statutory exception. See Evidence Code sections 1115-1129.

28. **Why was the Los Angeles Water Board involved in the mediation? Does it have any ongoing disputes with Boeing?**

The Los Angeles Water Board has no ongoing dispute with Boeing. The Los Angeles Water Board joined the mediation at the request of CalEPA, DTSC and Boeing, given its jurisdiction over surface water quality at the site under the NPDES permitting program and its role in advising DTSC on the State Water Boards’ laws, policies, and regulations regarding groundwater protection. The Los Angeles Water Board shares the goal of achieving a comprehensive cleanup at the site without further delays for the protection of both surface water and groundwater quality and, therefore, wished to engage in whatever way it could within the scope of its authorities to achieve this goal.
29. What happens if Boeing fails to meet any condition of the MOU?

If Boeing fails to meet any condition of the MOU, then the Los Angeles Water Board would have no obligation to publicly notice a hearing to consider relieving Boeing of its permit obligations. If there is a disagreement between the Los Angeles Water Board and Boeing over the satisfaction of the MOU’s conditions, the MOU contains a dispute resolution process that lays out the steps to resolve any disagreements. The MOU requires the parties to resolve disputes through a specific process before seeking relief in court. The Los Angeles Water Board would first attempt to resolve the dispute through informal dispute resolution, involving senior officials. If the parties are unable to come to agreement, the Los Angeles Water Board will place the dispute on the agenda for the next regularly scheduled Board meeting. The Los Angeles Water Board will make its decision on the dispute within 30 days of the meeting. If Boeing disagrees with the Los Angeles Water Board’s decision, it may petition for review by the State Water Board. If the dispute remains thereafter, Boeing may seek judicial review of the Board’s decision.