Background

In 2014, NASA conducted an environmental review and prepared a Final Environmental Impact Statement (EIS) for NASA’s Demolition and Clean-up Activities at Santa Susana Field Laboratory (SSFL). Following release of the EIS, NASA issued a Record of Decision (ROD) to proceed with the demolition of facilities at SSFL. A decision was made at that time to defer issuing RODs for the cleanup of soil and groundwater until further analysis and planning was complete. Following the completion of extensive soil and groundwater investigations, treatability studies, and additional surveys of natural and cultural resources, NASA issued a groundwater ROD in October 2018. To move forward with soil cleanup, NASA has released a Draft Supplemental Environmental Impact Statement (SEIS) for soils at SSFL.

What is an Environmental Impact Statement and a Supplemental Environmental Impact Statement?

An Environmental Impact Statement (EIS) is required under the National Environmental Policy Act (NEPA) whenever a federal agency, like NASA, proposes an action that could impact the environment. An EIS is conducted to inform decision makers and the public about the likely environmental impacts the proposed action would have on the community and the environment. A Supplemental Environmental Impact Statement (SEIS) reviews the findings from an existing Environmental Impact Statement (EIS) and considers new or additional environmental impacts based on a significant change in circumstances from the original EIS.

What is the Proposed Action at SSFL?

The Proposed Action being evaluated in the SEIS is the cleanup of soil contamination on the NASA-administered Area I and Area II at SSFL (approximately 450 acres).

Why is NASA conducting a SEIS at SSFL?

Scientific data gathered from NASA’s soil investigation since 2014 has determined that the estimated excavation soil quantity has increased substantially, from 500,000 cubic yards (yd³) to 870,000 yd³. In addition, the 2017 Draft Programmatic Environmental Impact Report (PEIR) released by the California Department of Toxic Substances Control (DTSC) identified substantially greater soil removal than originally estimated in NASA’s Final EIS and described significant, unavoidable impacts to the site’s protected natural, cultural, and biological resources. Under NEPA law, this change requires NASA to supplement its soil cleanup evaluation.

What is the decision being made?

No decision is being made at this time. The purpose of NASA’s Draft SEIS is to evaluate and inform decision makers and the public of the impacts reasonable soil cleanup alternatives would have on the community and the natural and cultural resources found at SSFL. NASA will formally respond to public comments and identify a preferred alternative in the Final SEIS, which NASA anticipates releasing in 2020.

What are the Alternatives that NASA is evaluating?

NASA has identified four alternatives, all of which comply with federal and State of California environmental laws and regulations and are protective of public health and the environment:

Alternative A: Administrative Order on Consent (AOC) Cleanup. After NASA signed the 2010 AOC, DTSC developed soil Look-up Table (LUT) values at SSFL for 130 chemicals. Under Alternative A, NASA would remediate the soil on the NASA-administered property at SSFL to these LUT values.

Alternative B: Revised AOC Look-Up Table Cleanup. Alternative B would utilize an AOC remediation LUT that uses existing state and federal soil cleanup standards, rather than the AOC investigation LUT values, for seven specific contaminants of concern. All other AOC investigation LUT values would remain the same.

Alternative C: Suburban Residential Cleanup. Alternative C would clean up soil to meet standard Suburban Residential risk-based cleanup goals, developed using nationwide Environmental Protection Agency (EPA) guidelines and the DTSC approved risk-based methodology specific to SSFL. The exposure scenario for Suburban Residential cleanup assumes that both adults and children would be exposed to soil 24 hours per day, 350 days per year, for a total of 26 years, with no threat to health.

Alternative D: Recreational Cleanup. Alternative D would entail the cleanup of soil to meet standard Recreational risk-based soil cleanup goals, developed using nationwide EPA guidelines and the DTSC approved risk-based methodology specific to SSFL. The exposure scenario for Recreational cleanup assumes that both adults and children are exposed to soil while performing recreational activities for several hours per day, 50 days per year, for a total of 26 years, with no threat to health.
Why is NASA evaluating Alternatives that do not meet AOC LUT cleanup values?

NEPA and NASA regulations require that NASA evaluate all reasonable soil cleanup alternatives. In addition, DTSC’s Draft PEIR describes significant and unavoidable impacts associated with an AOC cleanup, which may be reduced or avoided using other approaches. Finally, NASA has identified the following issues regarding implementation of the 2010 AOC and DTSC’s proposed AOC cleanup requirements:

**Limited Treatment Technologies.** NASA has evaluated the feasibility and effectiveness of multiple onsite treatment options to reduce the amount of soil required for excavation and removal. Although some are viable under site conditions, the LUT values are so much lower than standard cleanup levels used by the DTSC, California EPA, and the EPA across the state and the nation, that most treatments are largely unproven to meet the remedial goals and are not expected to meet AOC LUT criteria.

**Suitable Replacement Soil Availability.** Backfill is critical for the revegetation and restoration of habitat impacted by cleanup activities. NASA will require approximately 448,000 yd³ of backfill to replace excavated soil and support native revegetation and habitat restoration. NASA tested soil from multiple potential offsite backfill locations and has not been able to identify soil that both meets AOC standards and is capable of restoring or sustaining the native plant life.

**Laboratory Screening Limitations.** AOC LUT values are significantly below conventional laboratory capabilities; for example, levels for polycyclic aromatic hydrocarbons (PAHs), total petroleum hydrocarbons (TPHs), and dioxins are so low that laboratories are unable to distinguish potential “contamination” releases from natural “background” concentrations of these types of constituents commonly found in an urban environment.

**Significant Environmental Effects.** The AOC LUT cleanup standard would result in severe environmental damage, which would not be realized using DTSC, EPA and California EPA-recognized cleanup guidelines. The significant impacts associated with the AOC LUT cleanup were identified in the 2017 DTSC Draft PEIR, NASA’s 2014 Final EIS, and NASA’s Draft SEIS. NASA is committed to making the necessary effort to mitigate impacts associated with the cleanup; however, many impacts are not avoidable under AOC cleanup requirements.

**Differing Cleanup Standards.** Like NASA, Boeing and the Department of Energy (DOE) are working with DTSC to complete soil cleanup activities at SSFL. Boeing is not subject to the AOC and has announced that it will clean up to a recreational-based standard, which they have determined to be the most likely future land use type. Therefore, soil that does not meet the AOC LUT cleanup standard could shift onto NASA-administered property from Boeing’s immediately adjacent property, requiring NASA to remediate soil considered clean by recreational standards.

**Health Basis of AOC LUT.** The AOC background cleanup is not proven to provide an increase in protection to public health compared to EPA-recognized risk-based cleanup alternatives. The DTSC, EPA, and California EPA have established health-based exposure limits for chemicals of concern that are dependent on the intended land use and associated exposure pathways. The AOC LUT values were not developed based on these exposure values.

What were the findings of the SEIS?
The chart below provides a brief summary of some of the impacts of each of the soil cleanup alternatives evaluated in the SEIS.

<table>
<thead>
<tr>
<th></th>
<th>Alternative A: Administrative Order on Consent Cleanup</th>
<th>Alternative B: Revised Look-Up Table Cleanup</th>
<th>Alternative C: Suburban Residential Cleanup</th>
<th>Alternative D: Recreational Cleanup</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil Excavation Volume</td>
<td>870,000 yd³</td>
<td>384,000 yd³</td>
<td>247,000 yd³</td>
<td>176,500 yd³</td>
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<tr>
<td>Soil Excavation Area</td>
<td>220 acres</td>
<td>78 acres</td>
<td>36 acres</td>
<td>26 acres</td>
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<tr>
<td>Significant Environmental Impacts After Mitigation</td>
<td>10</td>
<td>7</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Backfill Soil Volume Needed</td>
<td>448,000 yd³</td>
<td>253,000 yd³</td>
<td>189,000 yd³</td>
<td>141,000 yd³</td>
</tr>
<tr>
<td>Total Truckloads</td>
<td>99,098</td>
<td>47,895</td>
<td>32,782</td>
<td>23,873</td>
</tr>
<tr>
<td>Total Duration of Cleanup</td>
<td>25+ years</td>
<td>12 years</td>
<td>8 years</td>
<td>6 years</td>
</tr>
<tr>
<td>Uses cleanup standards recognized by CalEPA and U.S. EPA as protective of public health</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

How can I get involved?

NASA values input from the public regarding the soil cleanup at SSFL. Before a decision is made about which Action Alternative will be the Preferred Alternative, NASA invites the public to comment on this Draft SEIS during a 45-day comment period from October 25 – December 9, 2019. In addition, on November 20 and 21, 2019, NASA will hold public meetings to provide the public the opportunity to ask questions about the draft SEIS and provide comments on the document.

Submit Your Comments

October 25 - December 9, 2019
Email: msfc-ssfl-eis@mail.nasa.gov
Mail: Attn: Peter Zorba
Santa Susana Field Laboratory
5800 Woolsey Canyon Road,
Canoga, Park, CA 91304

Attend the Public Meetings

Simi Valley:
Wednesday, November 20, 2019
6:30 to 8:30 p.m.
Best Western Posada Royale
1775 Madera Road
Simi Valley, CA 93065

San Fernando Valley:
Thursday, November 21, 2019
6:30 to 8:30 p.m.
Corporate Pointe at West Hills
8411 Fallbrook Avenue
West Hills, CA 91304