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DEPARTMENT OF TOXIC SUBSTANCES CONTROL COMMENTS ON NASA DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT FOR SOIL CLEANUP ACTIVITIES, SANTA SUSANA FIELD LABORATORY, VENTURA COUNTY CALIFORNIA

Dear Mr. Zorba:

The Department of Toxic Substances Control (DTSC) provides these comments on the National Aeronautics and Space Administration's (NASA) Draft Supplemental Environmental Impact Statement for Soil Cleanup Activities (Draft SEIS) at the Santa Susana Field Laboratory (SSFL). NASA issued the Draft SEIS on October 25, 2019.

I. NASA'S DRAFT DOCUMENT CONTAINS IRREGULARITIES AND A REVERSAL IN APPROACH THAT CONFLICT WITH NASA'S LEGAL OBLIGATIONS TO CLEANUP NASA SANTA SUSANA FIELD LAB PROPERTY.

NASA's Draft SEIS includes two irregularities on which we elaborate with more specificity in the following comments. First, in March 2014 NASA produced a final EIS for the cleanup, but later identified significantly more soil contamination on the site than evaluated in the document. This increase in volume required NASA to prepare the October 2019 Draft SEIS. While estimates of contaminated soil on site have increased, three of the four alternative cleanup scenarios presented in the 2019 Draft SEIS are estimated to cleanup less contamination than NASA proposed in 2014.

Second, in 2012, the White House Council on Environmental Quality (CEQ) noted that NASA was legally bound by a 2010 Administrative Order on Consent (AOC), which requires a background cleanup standard at SSFL. Therefore, CEQ stated that cleanup alternatives in an EIS which did not comply with the AOC standards were infeasible. NASA's March 2014 Final EIS complied with CEQ's direction by analyzing actions that

complied with the AOC. However, NASA's 2019 Draft SEIS includes three infeasible cleanup alternatives that would fail to comply with the AOC. The same three infeasible alternatives are also based on scenarios which propose to clean up less contamination than NASA proposed in 2014.

NASA has failed to provide a rational explanation or data to support the Draft SEIS' irregularities and unexplained reversal. Therefore, the Draft SEIS is legally deficient. DTSC also reminds NASA that we will continue to hold NASA accountable for complying with the AOC.

II. NASA HAS IMPROPERLY DEFINED THE PURPOSE AND NEED OF ITS PROPOSED ACTION IN THE DRAFT SEIS

The Draft SEIS fails to describe compliance with the AOC between DTSC and NASA as a purpose or need of the SEIS. The AOC dictates NASA's cleanup process and cleanup levels for soils at SSFL. NASA should restate the SEIS's purpose and need to achieve compliance with the AOC.

NEPA requires NASA to include a statement explaining NASA's purpose and need in proposing an action and alternatives at issue in the SEIS. (See 40 C.F.R. § 1502.13.) The purpose and need statement dictate the range of reasonable alternatives. (*League of Wilderness Defenders-Blue Mountain Biodiversity Project v. Bosworth*, 383 F.Supp.2d 1285 (D. Or. 2005).)

Here, NASA's description of the Purpose and Need for Action of the Draft SEIS (Section 1.0) states the following:

The purpose of the Proposed Action is to use the best available science and technology to achieve soil cleanup swiftly and in a manner that reduces impacts to the community and protects public health and the environment. (Supp. EIS p. 1-10.)

NASA makes no mention of its obligations under AOC, which should be the priority and driving force behind NASA's SSFL cleanup. The AOC, which was agreed to and signed by delegates of NASA and DTSC, strictly defines NASA's obligation to clean up soils in SSFL Area II and Area I LOX to chemical background concentrations or reporting limits where no background value exists, on a point-by-point basis. Thus, the purpose of the proposed action must reflect NASA's cleanup commitments under the AOC.

Moreover, NASA's 2019 description of the purpose and need is an unexplained reversal of the Purpose and Need for Action in NASA March 2014 Final EIS for Demolition and

Environmental Cleanup Activities at SSFL. In 2014, NASA appropriately acknowledged its AOC commitments:

The purpose of the Proposed Action is to remediate the environment to a level that meets NASA's environmental cleanup responsibilities and to undertake the demolition actions necessary to support both remediation and property disposition of the NASA-administered portion of SSFL.

Contamination is known to exist at NASA's SSFL property Therefore, the Proposed Action is needed to protect human health and the environment, **to meet the requirements of the 2007 Consent Order and AOC** by the completion date of 2017, to reduce ongoing maintenance costs, and to prepare the property for disposition. (NASA 2014 Final EIS, p. 1-7) (emphasis added.)

Given this unexplained change, DTSC believes it is important to reiterate our commitment to holding NASA accountable for meeting its legal obligations under the AOC. NASA agreed to these enforceable requirements. DTSC will use all available authorities to ensure NASA complies with its obligations under the AOC.

The purpose and need statement also misrepresents the actual need for the Draft SEIS, which is to augment the impact evaluations related to the substantial increase in NASA contaminant soil volumes since 2014. The statement's explicit promotion of swiftness of cleanup is of potential concern, when the statement omits mention of factors that balance swiftness, such as quality and thoroughness of cleanup. For these reasons, DTSC strongly requests that NASA reconsider the purpose and need for the proposed action.

III. ALTERNATIVES SHOULD FOCUS ON HOW TO COMPLY WITH THE AOC IN THE LEAST IMPACTFUL MANNER, NOT WHETHER TO COMPLY WITH THE AOC

NASA asserts that the Draft "SEIS is written per the requirements outlined in the... AOC." DTSC disagrees. The Draft SEIS is flawed because it fails to consider alternatives within the bounds articulated by the AOC that governs NASA's cleanup of the SSFL site.

NEPA is clear: "The purpose of an EIS is to 'provide full and fair discussion of significant environmental impacts and [to] inform decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.'" (40 C.F.R. § 1502.1). The alternatives section "is the heart of the environmental impact statement." (40 C.F.R. § 1502.14.) In order to fulfill its

intended role of “sharply defining the issue and providing a clear basis for choice among options by the decisionmaker and the public,” the environmental impact statement must “[r]igorously explore and objectively evaluate all reasonable alternatives.” (*Id.* § 1502.14(a).) “The agency must look at every reasonable alternative within the range dictated by the nature and scope of the proposal.” (*Ilio’Ulaokalani Coalition v. Rumsfeld*, 464 F.3d 1083, 1095 (9th Cir. 2006); see also *Muckleshoot Indian Tribe v. U.S. Forest Service*, 177 F.3d 800, 812-13 (9th Cir. 1999).)

Here, NASA has chosen to analyze a range of alternatives that are infeasible because they are contrary to NASA’s legal obligations under the AOC. Three of NASA’s alternatives directly contradict the agreed upon terms of the AOC. These are Alternative B (Revised Lookup Table Levels Cleanup), Alternative C (Suburban Residential Cleanup), and Alternative D (Recreational Cleanup).

Under the AOC, DTSC will determine where NASA’s contamination in soil exceeds background and is subject to remediation. DTSC will not consider the Draft SEIS’ non-AOC compliant Alternatives in the final soil remedy selection and decision-making processes for NASA’s areas. Thus, any alternative that does not comply with the cleanup goals outlined with the AOC is inconsistent with the purpose and need of the proposed action and should be rejected as unreasonable or infeasible. (See *Headwaters, Inc. v. Bureau of Land Mgmt.*, 914 F.2d 1174, 1180 (9th Cir. 1990) (“Nor must an agency consider alternatives which are infeasible, ineffective, or inconsistent with the basic policy objectives”).)

This identical issue previously arose in 2011 when NASA identified five possible alternatives for remediation, some of which were inconsistent with the AOC. In May 2012, DTSC wrote to NASA requesting that NASA “modify the scope of its NEPA process to align itself with the project that NASA is actually undertaking – a cleanup of the site to background levels of contaminants in compliance with the AOC.” (Letter from Debbie Raphael, DTSC Director, to Allen Elliott, SSFL Project Manager, NASA (May 22, 2012), p. 1.) In response to an inquiry from Senator Boxer, the Council on Environmental Quality (CEQ) issued an opinion letter stating:

In this particular situation, where NASA has signed the Agreement and committed to a cleanup standard to background, nothing under NEPA or CEQ regulations constrains NASA from looking beyond cleanup to background, even though some may consider the analysis unnecessary and inconsistent with the agreement NASA signed with the State. However, there is no requirement that NASA consider alternatives that cleanup to other standards that differ from the agreement with the State. The Supreme Court has stated that the concept of alternatives must be

bounded by some notion of feasibility, *Vermont Yankee Nuclear Power Corp., v. NRDC*, 435 U.S. 519, 551 (1978), and under the specific facts of the cleanup at this time, feasibility is most sufficiently defined within the scope of cleanup to background.

(Letter from Nancy Sutley, CEQ Chair, to Honorable Barbara Boxer, U.S. Senate, (June 19, 2012), p. 1.) The position set forth by the CEQ seven years ago is equally applicable now.

Despite this, NASA has developed a suite of alternatives that cannot achieve the cleanup requirements of the AOC, and thus cannot be applied at the SSFL site. Describing the impacts from non-applicable cleanup approaches is not relevant to the analysis if DTSC cannot, and will not, approve a cleanup to levels exceeding those articulated in the AOC. Rather than select alternatives that do not actually comply with the AOC, NASA should have considered alternatives that could achieve the AOC-required standard of cleanup and *how* that standard could be met over time in the least impactful way. For instance, NASA has not provided a phased alternative, or one that considers the methods used for removal in sensitive areas. While the amount of soil removal is relevant to how cultural and natural resources may be impacted, the method, manner, and timing of soil removal is arguably equally if not more relevant.

The worst-case scenario for soil removal has been broadly established through the investigation and should exist across all alternatives as the potential amount of material that will have to be removed to comply with NASA's cleanup obligations. What is not established is how NASA might approach removal of the soils at issue. For instance, NASA should have considered whether hand-tools and other less-impactful equipment can and must be used in sensitive areas. NASA should have analyzed whether soil cleanup phased in over a period of time can avoid unnecessary environmental damage, including to nesting and other migratory animals. This type of analysis could also inform decision about the potential range of impacts on locations with plants of significance, including whether such areas can be left untouched until less resource-heavy locations are cleaned so that re-seeding might occur before additional soil removal actions. Similarly, in areas of high-cultural or historic significance, and in particular areas of concern to Native American and Tribal Governments, NASA could have considered partnerships with those entities and their communities that would have allowed for the appropriate background cleanup to be achieved. NASA could have but failed to consider approaches that create a project with fewer and less severe environmental impacts, while complying with the AOC.

Further, NASA fails to demonstrate that excavation and offsite disposal cannot be accomplished in a less harmful manner within the confines of the AOC's cleanup requirements. By its own words:

To obtain an understanding of the greatest potential impact by alternative and to provide decision makers with a comparative analysis by which to make a fully informed decision, it was assumed that excavation and offsite disposal would be the technology applied to the majority of the site. Consequently, the soil excavation quantities and truck traffic explained in Table 2.2-2 were used to analyze the greatest potential impact as a conservative assumption. (Supp. EIS p. 3-12.)

Relying on this worst-case-scenario assumption, and with no further information on how it might design contracts for offsite removal and disposal of soils in a way to be less impactful, NASA's document concludes that the AOC Alternative (Alternative A) is the most impactful to certain resource types because trucks will take out the most volume of soils under a background standard, and then focuses on how this can be mitigated if a lesser cleanup is applied. This approach is neither justified nor transparent, and not evidence of infeasibility under NEPA. By engaging in this approach, NASA has made it appear that the AOC is a problem that must be solved, when in fact the AOC is the driver for the cleanup and the binding document that governs it.

Finally, in broadly stating the impacts as it has, NASA fails to disclose how leaving contamination at these sites could harm their long-term viability and use both by people and animals, suggesting that in order to preserve various resources, NASA's contribution to their contamination should be underscored. Thus, its "no project" analysis states that doing nothing is the least impactful to these resources simply because they would remain undisturbed, while Alternatives B and C suggest less soil removal will lead to less impacts. However, NASA fails to discuss how risk-based scenarios with and without potential home-grown produce consumption would be affected if Area I LOX and II are not cleaned to background standards.

As a result, this false comparison masks the true issue. The question before NASA is not revisiting the cleanup standard that was NASA agreed to in 2010. The question is how to achieve that cleanup with varying levels of environmental impacts. NASA's approach does not answer the real question. Therefore, NASA's range of alternatives considered is infeasible and unreasonable. For these reasons, DTSC strongly requests that NASA revise the alternatives discussed in the Draft SEIS to once again align with the AOC.

IV. NASA SUPPLEMENTED ITS 2014 FEIS BECAUSE OF SIGNIFICANT NEW EVIDENCE OF CONTAMINATION, BUT PROPOSES A RANGE OF ALTERNATIVES THAT REDUCES NASA'S CLEANUP REQUIREMENTS

NASA states it issued the March 2014 FEIS and then conducted additional investigations that found "significant new circumstances," namely "substantially" increased volumes of soil that need to be cleaned up. The resulting 2019 Draft SEIS proposes a range of three infeasible alternatives that reduce soil cleanup volumes compared to its 2014 FEIS. (Compare 2014 FEIS, Table 2.2-6 with 2019 SEIS, Table ES-2). An agency must provide a rational explanation for a reversal of its direction. However, NASA provides no rational justification for its reversal; only discussion unsupported by analysis and alternatives outside the scope of NASA's legal obligations. DTSC believes that NASA must revise the range of alternatives to undertake actions that comply with the AOC.

V. THE DRAFT SEIS USES HYPERBOLE TO DESCRIBE CLEANUP CHALLENGES WHILE ESCHEWING ANALYSIS AND IGNORING EXISTING FLEXIBILITIES

DTSC disagrees with NASA's discussion contained in the Draft SEIS' section titled "Issues with Implementing the AOC Cleanup" (in the Executive Summary) and the expanded discussion in Section 2.2 (Action Alternatives) because they present an unbalanced discussion. These sections discuss six technical and logistical difficulties NASA foresees in implementing the AOC soil cleanup. NASA presents needless inflammatory phrases, such as "seemingly unresolvable issues," "severe environmental damage," and "potentially devastating effects."

However, NASA fails to provide analysis of cleanups impacts using all of the AOC's provisions, including provisions that provide flexibility in making cleanup decisions. Histrionic writing is not analysis and does not serve to inform the public or decision makers. DTSC is committed to working with NASA to resolve all challenges and assure compliance with the AOC.

VI. THE DRAFT SEIS ALTERNATIVE B PROPOSED LUT REVISIONS ARE INAPPLICABLE TO THE SSFL SITE.

NASA's Alternate B proposes a set of revised AOC Look Up Table (LUT) values for seven contaminants and contaminant classes in soil in areas NASA is responsible for cleaning up at SSFL. The AOC sets out the requirements for creating the LUT values. NASA's proposed LUT values are inconsistent with the AOC's requirements. Therefore, DTSC disagrees with NASA's proposed LUT values and will not consider this alternative as a final cleanup option.

DTSC has several reasons for rejecting NASA's alternative values. One central reason is that NASA's proposed modifications are inconsistent with the AOC's requirement to

clean up to background. Moreover, NASA's alternative risk-based values do not adequately take into account ecological risk factors, which would result in lower concentrations and likely require more cleanup. In addition, NASA appears to have picked values that skew towards less protective analysis. For example, the TPH concentration used in the evaluation (1,000 milligrams per kilogram, cited to the Los Angeles Regional Water Quality Control Board) represents one of the higher values applied by the Board. Similar criticisms are applicable to other alternative values. In summary, the Draft SEIS failure to account for such factors seriously limits the accuracy and utility of the Alternate B evaluation.

VII. THE DRAFT SEIS DISCUSSION OF SOIL BACKFILL ISSUES LACKS SUBSTANTIAL EVIDENCE.

NASA's Alternate B proposes a set of revised AOC Look Up Table (LUT) values for seven contaminants and contaminant classes in soil within NASA-administered areas at SSFL. The AOC sets out the requirements for creating the LUT values, and NASA's proposed modifications are inconsistent with these requirements. Therefore, DTSC disagrees with NASA's proposed LUT values and will not consider this alternative as a final cleanup option.

In addition to their non-compliance with the AOC, DTSC has several technical objections to NASA's modified LUT values. One central objection is that NASA's proposed modifications are inconsistent with the AOC's requirement to clean up soil to background concentrations. Moreover, NASA's alternative risk-based values do not adequately take into account ecological risk factors, which would result in lower cleanup concentrations for some constituents and likely drive additional cleanup.

In addition, NASA appears to have picked values that skew towards a less protective analysis. For example, the TPH concentration used in the evaluation (1,000 milligrams per kilogram, cited to the Los Angeles Regional Water Quality Control Board) represents one of the higher values applied by the Board. Similar criticisms are applicable to other alternative values. In summary, the Draft SEIS failure to account for such factors seriously limits the accuracy and utility of the Alternate B evaluation.

VIII. DISCUSSION OF LABORATORY SCREENING LIMITATIONS IS INCOMPLETE AND PREMATURE

The Draft SEIS claims that AOC-mandated LUT values for cleanup are lower than conventional laboratory screening capabilities, and that LUT values should be revised to more attainable levels. NEPA requires NASA to provide analysis and data for its blanket assertions in the Draft SEIS on this issue. However, NASA's discussion includes one short paragraph without sources or data. NASA does not propose reasonable approaches to addressing this issue, which can include conducting a new

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multi-lab survey to evaluate the current status of commercial laboratory capabilities and detection limits. Consequently, DTSC believes that NASA has failed to meet NEPA's minimum standards for presenting analysis and information that informs the public and decision-makers.

IX. HEALTH BASIS OF AOC LUT VALUES

The NASA Draft SEIS states that risk-based cleanups provide an equivalent level of protection as AOC cleanups to background. NEPA demands that NASA provide sufficient evidence and analysis to inform the public and decision-makers about issues relevant to the proposed project. This statement is irrelevant since the governing order, the AOC, has already set the cleanup standard at NASA's areas at SSFL. Moreover, NASA's brief discussion on this point (page 2-8) is very general and oversimplified and in DTSC's opinion leads to confusion regarding public protection.

X. CONCLUSION

In conclusion, DTSC requests that NASA move to revise the Draft SIES to address the range of issues discussed in this letter.

NASA must also be aware that DTSC is not open to considering NASA cleanup alternatives which are non-compliant with the AOC. DTSC is also will not renegotiate the binding AOC soil cleanup commitments to accommodate challenges NASA claims will be posed by the SSFL soil cleanup implementation. Any assumptions which are stated or implied in NASA's Draft SEIS document to this effect are erroneous.

If you have any questions regarding DTSC's comments, please contact me at grant.cope@dtsc.ca.gov or (916) 328-0845, or my DTSC Branch Chief in charge of the SSFL Cleanup, Steven Becker, at steven.becker@dtsc.ca.gov or (916) 255-3717.

Sincerely,



Grant Cope, Deputy Director
Site Mitigation and Restoration Program
Department of Toxic Substances Control

cc: (via email)

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