



September 30, 2013

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**RE: Draft Environmental Impact Statement (DEIS) for Demolition and Environmental Cleanup Activities for the NASA-administered portion of the Santa Susana Field Laboratory (SSFL), Ventura County, California**

Dear Mr. Elliott:

Thank you for the opportunity to provide comments on the DEIS for NASA's proposed cleanup activities at SSFL. The Los Angeles-Ventura Cultural Research Alliance (LanVen) is a consortium of nearly two dozen professional archaeologists, historians, curators and community leaders who have come together out of mutual concern for the region's cultural heritage resources, in particular, the area encompassing the interface between Los Angeles and Ventura counties. Although our interests are principally directed toward the potential impacts to cultural resources from the proposed project, we also have more general concerns in regards to the cleanup.

Our comments on the DEIS are as follows:

General

1. We recognize that NASA was politically pressured to only consider two alternatives in the DEIS – the No Project and Clean to Background [as prescribed in the 2010 Administrative Order on Consent (AOC)]. This is very unfortunate, and we agree with the Santa Ynez Band of Chumash Indians (as noted in the DEIS Executive Summary) that NASA's signing of the AOC constituted a federal action subject to review under the National Environmental Policy Act (NEPA), and that by signing on to the AOC without such review, NASA is in violation of the spirit and intent of NEPA to provide an open and public decision-making process.
2. By defining the Purpose and Need solely according to the restrictions set forth in the 2010 AOC, and thus by limiting the range of reasonable and feasible soil cleanup alternatives that would meet standard industry accepted risk-based protocols for the protection of human health and the environment, the usefulness of the DEIS as a decision-making tool is severely curtailed, again violating the spirit and intent of NEPA. Further, if a standard risk-based protocol is sufficient for treatment of groundwater contamination at the entire SSFL site and for soils on Boeing-owned parcels, why is the same risk-based protocol not applicable to treatment of soil contamination on lands under federal jurisdiction?

3. It would seem that at the very least, separate project alternatives that propose different technologies of cleanup in accordance with the 2010 AOC should have been proposed (i.e. complete excavation; excavation plus in situ treatment; excavation plus ex situ treatment, etc.). Unfortunately, soil sampling and soil treatment pilot testing for the “clean to background” threshold are ongoing, thus comprehensive project alternatives cannot yet be fully developed (refer to Section 2.2.2.1 of the DEIS). As such, we believe that the release of the DEIS without the completion of those studies is premature and greatly hampers the ability of the responsible parties and oversight agencies to make an informed decision based on the DEIS document as it currently stands.
4. Alternatively, NASA has already completed remedial investigation (RI) reports that outline cleanup alternatives using a risk-based approach, which resulted in the 2007 Consent Order. It is unclear then, in Section 1.1.4 of the DEIS, why the 2010 AOC was subsequently executed. As a public disclosure document, the DEIS should make this decision more transparent.
5. As described in Section 1.3 of the DEIS, separate environmental reviews will be conducted for each portion of the responsible parties’ jurisdictions. This would seem to make the decision-making process overly cumbersome and confusing such that cumulative effects stemming from multiple cleanup strategies would not be apparent. Why was there not one combined EIS/EIR document prepared concurrently by all responsible parties (Boeing, NASA and DOE) and the oversight agency (DTSC) to allow for full public disclosure?

At the same time, the DEIS Purpose & Need includes the action “to prepare the property for disposition,” yet does not consider end land use of the property in the determination of appropriate cleanup standards. Our understanding is that the General Services Administration (GSA) will conduct separate NEPA review for property disposal/transfer actions, with the potential for additional confusion. We believe that it is important not to divorce end use from cleanup, and that both should be considered together in one joint-agency EIS/EIR document.

#### Cultural Resources - General

6. NASA is proposing to remove and treat 105 acres of soil to a depth of at least two feet as a “worst case scenario” approach based on incomplete soil testing and treatability studies. As acknowledged in the DEIS, this will have a significant impact on cultural resources. Despite this, alternatives that would allow some degree of archaeological and historic preservation and still incorporate cleanup to levels protective of human health and the environment for suburban, industrial or recreational uses have been eliminated from analysis and treated as nonviable alternatives. We believe that this approach is greatly flawed, and should be reconsidered in order to move forward with the site cleanup in a manner that makes it possible to avoid demolishing significant historic structures and severely impacting the archaeological resources associated with Burro Flats Painted Cave site, CA-VEN-1072.
7. The DEIS mixes the terms “ROI” and “APE” within the discussion of cultural resources (Sections 3.3 and 4.3). In order to avoid confusion, only terminology (i.e. Area of Potential Effect, or

“APE”) consistent with Section 106 of the National Historic Preservation Act (NHPA) should be used.

8. Section 3.3.1, second paragraph, notes that the SCCIC provided studies which have been submitted to the State Historic Preservation Officer (SHPO). This is incorrect – not all reports submitted to the SCCIC repository have been submitted to SHPO for review and comment. This is important to note since previous studies may not be sufficient to meet Section 106 obligations, and should not be treated as such.

#### Cultural Resources Affected Environment – Archaeological

9. In Section 3.3.3.3, the DEIS states that an “archaeological survey of 100 percent of NASA-administered lands at SSFL” has been performed, however based upon the subsequent description of the survey methodologies employed, we feel that this is an inaccurate statement. Typical archaeological survey transects in the region range between 10-15 meters (32-49 feet), depending on the terrain and ground visibility. The DEIS notes transect spacing of twice this range, so smaller sites such as lithic scatters could easily be missed. The DEIS also acknowledges that areas of slope greater than 25% were not surveyed. These statements clearly indicate that less than a 100 percent survey was achieved and we recommend that the DEIS text be corrected to reflect a more accurate survey coverage area.

The DEIS goes on to state that all rock outcrops were investigated for the presence of rock shelters. In addition to these features, rock outcrops in the area may also include petroglyphs (including cupules), bedrock milling stations and water basins (tinajas). It is not clear in the DEIS, based on the background research noted, if the field archaeologists were surveying for these types of resources as well. Rather than listing only one specific archaeological feature type, survey methodology should include a consideration for all possible features, and we recommend correcting the DEIS accordingly.

10. The DEIS notes that an updated records search was conducted in February 2013 to cover “an additional 9 acres on Boeing property just north of the NASA-administered area,” however the APE map (Figure 3.3-1) shows several areas that extend beyond the NASA-administered portions of SSFL on all sides and seem to add up to more than 9 acres. Did the records search encompass all of these areas as well? We are concerned that some of the resources identified during the EPA Radiological Characterization of Area IV and the Northern Buffer Zone may fall within the DEIS APE as shown and are not being accounted for in the cultural resources inventory.
11. The DEIS repeatedly refers to the “Burro Flats Painted Cave” site which is actually only Locus 10 of the much larger archaeological site complex, CA-VEN-1072. The continued focus on the rockshelters (note that these features are not true “caves”) containing pictographs and cupules, while almost ignoring the extensive midden and other bedrock features that also are present in site holds huge implications for discussing project effects on historic properties. Basic documentation done 20 years ago by Al Knight for research purposes and excavations done over

50 years ago by a partly avocational group are provided in lieu of modern site recordation. Current inventory work should have used standard practices of detailed site mapping with GPS/GIS technology and controlled test excavation to determine vertical and horizontal site parameters; further, no recommendations were made for additional site evaluation testing to identify or evaluate archaeological characteristics such as artifact assemblage composition, constituents, or chronometry.

In fact, the entire paragraph describing the context of the site on page 3-16 shows a general lack of understanding and poor research breadth of the site complex. For example, only three references are given that all are related to very limited work done in the past two years, however, several reports and records have been written on the site in the past forty years. A period of significance is stated with no accompanying reference to support it. And rather than obtaining a copy of the complete NRHP nomination packet, the DEIS merely references the highly limited data available on the NRHP website. This not only suggests poor scholarship, but gives us additional concern about the level of sufficiency of NASA's cultural resource inventory under the requirements of Section 106 of the National Historic Preservation Act (NHPA).

12. The DEIS states that CA-VEN-1072 has been recorded numerous times and that NASA re-recorded the site in June 2007. Again, this statement is incorrect. Based on the records available at the SCCIC, the Burro Flats site complex was originally recorded by Charles Rozaire in 1959 and 1960 as eleven individual sites (CA-VEN-151 through CA-VEN-161). In 1991, Al Knight recorded four additional sites (CA-VEN-1065 through CA-VEN-1068), then later that same year, based on guidance from the SCCIC, which at that time was located at UCLA, incorporated all fifteen individual sites under one site complex, designated CA-VEN-1072. Not only do the consultants for the NASA DEIS not give credit to Knight for this work, but they openly plagiarize complete sections from his site record and subsequent 1995 report that described the recordation process without proper reference.

Further, the DEIS refers to the ".... full recordation of Burro Flats Painted Cave," by CH2M Hill in 2007. We have reviewed this site record update and find it to be poorly executed and in no way complete for a resource of this significance. For comparison, a recent update for a complex prehistoric and historic-period archaeological site in nearby Santa Susana Pass State Historic Park is 68 pages long, including feature descriptions, sketch maps and photos. The 2007 "update" for CA-VEN-1072 does not even include a photo or sketch of the famous rock art!

### Cultural Resources Affected Environment – Traditional Cultural Properties

13. Sections 3.2.2 and 3.4 describe biological species with traditional importance to native people. This list was constructed solely from a response by the Santa Ynez Band of Chumash Indians on an account of currently-identified onsite species. We believe that this is an inadequate level of inventory, and that consideration be made to species that may have been present at the site historically, as well as expanding consultation to include state-recognized descendant communities.
14. The DEIS notes in several places that a Traditional Cultural Property (TCP) study is underway. Since this type of study is used to inventory historic properties that may be present within the project APE, we believe that this study should have been completed **prior** to the issuance of the DEIS. Without a complete inventory of historic properties, the DEIS cannot properly assess project impacts, again violating the intent of NEPA and the Section 106 process. Simply delaying the determination until the final EIS does not allow for public comment and input.

### Cultural Resources Affected Environment – Historical

15. We agree with the NRHP determinations of eligibility for the three test stand historic districts (Alpha, Bravo and Coca). The DEIS description of each resource is concise and highlights the NRHP eligibility characteristics that are relevant to assessing project effects.

### Cultural Resources Environmental Consequences – Archaeological

16. Demolition – The DEIS notes that proposed building demolitions and removal of ancillary structures would result in a no adverse effect finding for archaeological resources because these areas have already been disturbed. Similarly, NASA maintains that by locating stockpile and staging areas in previously disturbed areas, such as roads or parking lots, no impacts on archaeological resources would occur.

We find that the wholesale assumption that areas associated with existing structures, infrastructure, and other disturbance have rendered the integrity of any archaeological resources destroyed is dubious. In fact, roadways, parking lots and sometimes even buildings can act as a cap to protect subsurface archaeological deposits. And even if there was localized disturbance during installation of such structures, the footprint for removal has the potential to exceed the area of the original installation if techniques such as over-excavation are required. The conclusion that undisturbed soils of appropriate age and association to contain significant prehistoric archaeological resources are present is unwarranted. The only way to make a determination of effects on archaeological resources under and around existing infrastructure is through an archaeological testing program to determine presence/absence and integrity of deposits; this is where a phased approach may be appropriate.

17. Soil Cleanup to Background – The DEIS notes that “there would be a low to moderate potential of encountering buried archaeological deposits outside the boundaries of the significant archeological sites.” Terms such as “moderate potential” imply that more resource inventory

work needs to be done before project effects can be fully assessed. Additionally, the DEIS notes that “the proposed cleanup areas include roughly 0.65 acre of the Burro Flats site.” There is no indication of how this number was calculated – was soils testing completed within the site, and if so, was the testing monitored by an archaeologist and Native American consultant?

We recommend that an Extended Phase I testing program be conducted to verify the boundaries of the known archaeological resources, especially CA-VEN-1072, and to assess the presence of subsurface resources in those areas the DEIS has described as having a “moderate potential” for encountering buried archaeological deposits. Given the significance of the archaeological resources at stake, relying solely on construction monitoring and a stipulation for unanticipated discoveries do not constitute a good faith effort in the identification of historic properties under Section 106.

Once boundaries are established through subsurface testing, we ask that NASA fully explore the exception option provided in the 2010 AOC for “Native American artifacts formally recognized as Cultural Resources” and request that DTSC fulfill its promise to exclude all mapped archaeological resources from soil cleanup requirements. Even though the in situ treatment options would not require as much excavation, the installation of wells, boreholes, pumps and piping would create nearly identical adverse effects to CA-VEN-1072 and CA-VEN-1803 as the excavation and ex situ treatment options, thus the only way to reduce impacts to archaeological resources would be through avoidance.

Further, we request that DTSC provide a full definition for the 2010 AOC exception and explain how the exception percentage calculation was determined. Comments submitted in 2010 by some current LanVen participants expressed concern about the vague language that was used when clear definitions for what constitutes a historic property or historical resource are available in federal and state statutes. And no where do the existing cultural resource laws provide for the preservation of a set percentage of a site without first fully understanding the site parameters and level of effects.

18. Groundwater Cleanup – As in Comment #17 above, we propose that Extended Phase I testing be conducted to confirm archaeological site boundaries in order to plan for avoidance when installing the infrastructure required for groundwater treatment.

#### Cultural Resources Environmental Consequences – Traditional Cultural Properties

19. Demolition – The same comments as in #16 above would apply for an Indian Sacred Site or TCP. NASA cannot assume that removal of all existing infrastructure would necessarily be a beneficial impact if there is the potential to adversely affect prehistoric archaeological deposits that may contribute to the significance of the Indian Sacred Site or TCP.
20. Soil Cleanup to Background – We agree that the proposed removal of at least 320,000 yd<sup>3</sup> of soil would constitute a significant, adverse and unmitigable effect to the Indian Sacred Site and TCP. We advocate for re-visiting the project Purpose and Need to consider additional, less damaging alternatives that would still clean up to levels that protect human health and the environment.

Strangely, the DEIS states that, taken alone, in situ soil treatment options would have a minor impact on the Indian Sacred Site and TCP and result in no adverse effect to the resource. We disagree, as the need for wells, boreholes, pumps and piping has the potential to introduce visual impacts and adversely affect prehistoric archaeological deposits that may contribute to the significance of the Indian Sacred Site or TCP.

21. Groundwater Cleanup – Similar to soil in situ treatment options, the DEIS states that groundwater treatment would be minor and result in a finding of no adverse effect on the Indian Sacred Site and TCP, despite introducing wells, boreholes, piping, manifolds, tanks and power sources. We disagree with this determination and find that the required infrastructure has the potential to introduce visual impacts and adversely affect prehistoric archaeological deposits that may contribute to the significance of the Indian Sacred Site or TCP.

#### Cultural Resources Environmental Consequences – Historical

22. Demolition – We agree that demolition of individually eligible structures or contributors to an eligible historic district would constitute an adverse effect. However, we argue that these effects would be regional since these historic resources have been determined to be eligible at the national level of significance.

Further, we request that the DEIS make a clear statement on the requirement for 100% structure demolition, given that the 2010 AOC only requires that soil be cleaned up to background levels. Our understanding is that a significant portion of the test stand infrastructure is built upon bedrock, and therefore, would not be subject to the terms of the 2010 AOC cleanup, and that DTSC will not be considering structure demolition in their CEQA review. If demolition is proposed as part of the “preparation for transfer,” then the DEIS should be jointly prepared with GSA and consider the end use of the property, as noted in Comment #5 above.

23. Soil Cleanup to Background – NRHP-eligible historic structures will be affected by soil cleanup inasmuch as they are proposed to be removed in order to treat the soils beneath them. We recommend then, that all options be explored to address soil treatment under and around the historic structures using in situ technologies to the extent possible. Further, structures built directly onto bedrock should not be affected by soil cleanup and we advocate retention of these until an end use for the property is determined. These structures may serve as important interpretive elements should the land be transferred as parkland or any other preservation purpose (which we support). In particular, we support the retention of the Alpha and Coca Historic Districts.
24. Groundwater Cleanup – We advocate for installation of groundwater treatment infrastructure such that physical and visual impacts on NRHP-eligible historic structures are avoided or minimized.

## Mitigation Measures

25. Cultural Mitigation Measure 1 – We do not believe that the retention of one test stand should be considered mitigation for an unsupported 100% structure demolition proposal. Instead, we recommend that preservation of all or some of the NRHP-eligible historic districts, including test stands and associated contributing structures, be considered in a more robust alternatives analysis for the proposed cleanup action, as discussed in Comment #23 above. The scope and scale of these facilities are a truly awe-inspiring piece of our American history and can really only be appreciated in person, and would provide a tremendous future interpretive opportunity. We recognize that structural stabilization, safety and long-term preservation issues should be considered, and a preservation plan should be developed as a mitigation measure. Additionally, consideration for an endowment fund for long-term preservation should be explored.
26. Cultural Mitigation Measure 2 – We agree that HABS/HAER documentation is appropriate as partial mitigation prior to demolition of structures, but we also recommend that the same documentation be completed for any NRHP-eligible structures that will not be demolished in order to complete the record. We also recommend that documentation take advantage of modern technology, including LiDAR scanning and high resolution photography, which could be used to develop web and mobile applications for interpretive purposes.
27. Cultural Mitigation Measure 3 – NASA proposes to develop an ethnographic study to build upon the results of the TCP study. We assert that this should be included as part of the inventory process to identify historic properties within the APE, not as mitigation.
28. Cultural Mitigation Measure 4 – NASA proposes to delineate the boundaries of CA-VEN-1072 as mitigation for significant impacts to the site if it cannot be avoided by cleanup activities. As noted in Comment #17 above, this boundary testing should be completed as part of the historic property inventory process, not as mitigation, in order to assess the potential for complete avoidance or minimization of impacts. Recommended mitigation measures include a thorough update of the National Register nomination for the Burro Flats Painted Cave site, completion of analysis of previous collections from the site, and preparation of a comprehensive synthesis of past and current work, including the results of any archaeological testing, and/or data recovery which may need to be implemented for portions of the site which cannot be avoided or excluded by the 2010 AOC exception rule. Archaeologists who are familiar with the site as well as the regional research in the Simi Hills and western San Fernando Valley/eastern Simi Valley should be contracted to perform this work to ensure a thorough treatment.
29. Cultural Mitigation Measure 5 – NASA proposes a temporary protection measure for CA-VEN-1072, but does not describe what such measure(s) might include. Would this include fencing, security systems, a program of site monitoring?



## Summary Comments

In summary, LanVen maintains that by defining the project Purpose and Need to the guidelines of the 2010 AOC, and not by accepted standards of cleanup protecting human health and the environment, the resulting limited range of alternatives included in the DEIS holds little utility for agency decision-makers and violates the spirit and intent of NEPA and Section 106. We support a reasonable cleanup effort, taking into account standard science-based risk assessment methodology, as well as considerations for end land use. We further support an end use as parkland or open space for the entire SSFL property.

Additionally, we hold that NASA's level of effort on identification of cultural resources within the project APE is incomplete and not sufficient for the purposes of Section 106. If NASA intends to use a phased approach on identification and evaluation, then the DEIS should state as much. Further research, documentation and subsurface testing are required before project effects can be completely assessed, and avoidance and mitigation measures are able to be determined. Simply delaying this work to the final EIS or calling it mitigation is not sufficient.

Finally, NASA has made it clear in Section 106 consultation that it intends to use substitution under 36 CFR 800.8(c) of NEPA review procedures in lieu of the Section 106 process defined in 36 CFR 800.3-800.6. As noted in the recently published *NEPA and NHPA: A Handbook for Integrating NEPA and Section 106* (CEQ and ACHP, March 2013), "there are instances where the substitution approach might not work as well....where a high level of public controversy or complex procedural issues have emerged over the potential impacts to historic properties, an agency might recognize the benefit of keeping the review processes separate so that attention can be focused on managing and resolving discrete controversies."

We are concerned that since the level of effort for identification of historic properties is incomplete, the current NASA schedule for completing the EIS and issuing the Record of Decision (ROD), which will document the agency's commitments to resolving adverse effects on historic properties, will not allow for enough time to develop adequate mitigation measures with opportunity for public comment. We are uncomfortable with setting up commitments within the ROD in a tiered approach as this leaves too many unknowns to chance. Therefore, as we represent several Section 106 consulting parties, we find that the DEIS has not met the identification and assessment of effects standards set forth in 36 CFR 800.8(c)(2)(ii), and request that NASA terminate the substitution process and follow the standard Section 106 process. We fully support the recent NASA decision, at the urging of SHPO, to enter into a Programmatic Agreement and believe that this is a more appropriate procedure.

Again, we thank you for the opportunity to comment on the DEIS and hope that you seriously consider and incorporate our comments and recommendations into the development of the final EIS.

Sincerely,



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