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Subject: DEIS Comments
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Attachments: [DEIS Comments0001.pdf](#)

Attached are my comments on the DEIS. I look forward to summarizing them in person at the public meetings.

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August 26, 2013

Allen Elliott, SSFL Project Director,
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msfc-ssfl-eis@mail.nasa.gov

Re: Comments on Draft Environmental Impact Statement for Proposed Demolition and Environmental Cleanup Activities at Santa Susana Field Laboratory, July 2013.

Dear Mr. Elliott,

I am pleased to submit these comments and express my deep concern over the contents of the DEIS and the negative impacts of both of the two alternatives that are evaluated.

The document and the process that created it are flawed by the political interference that caused the removal from consideration of alternatives intermediate between two unacceptable extremes. The Proposed Soil Cleanup to Background/Detect would have significant negative environmental impacts and the No Action would leave contamination in place that most would agree should be removed. Surprisingly, the No Action appears to have far fewer negative environmental impacts than the proposed action.

Additionally, because the re-evaluation of significant negative impacts 'After Implementation of Best Management Practices and Mitigation Measures' for two resource areas, Cultural Resources and Biological Resources, are dependent only on the results of future consultations, there is significant uncertainty in the ultimate evaluation of these impacts. The possibility of additional behind-closed-doors political influence/coercion affecting these consultations is real, based on the actions leading to the removal of the alternatives from this DEIS.

The DEIS itself is overly optimistic and minimizes the amount of soil to be removed by neglecting the likely impacts of the very low soil remediation trigger levels coupled with the extensive confirmation sampling that would be required. Note that DTSC has stated that when the chemical LUT values were applied to the background locations false positives in the range of 20-25 percent were observed. The minimization of soil removal is further compounded by the assumption that all Best Management Practices and Mitigation Measures would be 100% effective in eliminating the negative environmental impacts. As will be discussed in later comments this is highly unlikely.

Finally, the removal of two feet of soil, with all of its lifeforms, from large portions of the NASA areas together with deeper excavations down to bedrock, plus replacement of only one-third of the removed volume would significantly reconfigure the landscape and could be characterized as

‘moonscaping.’ The likely unavailability of replacement soil meeting the SSFL cleanup requirements is also ignored in the DEIS, as the soils listed in the document have not been tested and found to be acceptable.

The focus of the majority of my comments is on the excessive negative environmental effects of the soil removal and transport to meet the requirements of the 2010 Agreement on Consent Cleanup to Background or Detect. The DEIS does not address the cost or schedule implications of this approach with constraints imposed by realistic budget expectations. This would likely extend the short term negative impacts of the remediation until they become long term, as the DEIS optimism is replaced by reality. Additionally, it is possible that the cumulative impacts of the remediation to be performed by DOE and Boeing when added to the NASA actions significantly exceed the estimates included in this DEIS. This is further complicated by the fact that the much larger Boeing areas will be remediated to Suburban Residential soil standards, with levels higher than the very low AOC LUT values. After the passing of time, soils from the Boeing areas will migrate to the other areas by wind and water mechanisms, negating any positive effects of the AOC soil remediation.

Optimism in all resource areas unrealistically overestimates the long-term benefits of Best Management Practices and Mitigation Measures, and attributes unquantified and unjustified cumulative future benefits of remediation actions in the Biological Resources, Health and Safety, Water, and Hazardous and Nonhazardous Materials and Waste resource areas. In practice, because of the high levels of naturally occurring dioxin, arsenic, and radionuclides in SSFL soils, the removal of contaminants above background and detect levels, only in about one-fourth of the NASA project site area, will not significantly change the overall risk. The claims of long-term moderate or significant benefits are unjustified. It is not sufficient to simply state that the removal of non-treatable soils or unquantified possible reductions in groundwater contaminant concentrations would have a long term benefit by reducing the potential for contaminant exposure or bioaccumulation, *without first showing there is a present risk and it will be significantly reduced by the proposed action.*

The potential long-term benefits of the proposed soil remediation can be quantitatively shown to be truly negligible by noting that the 105 acres assumed to be remediated by NASA represents only about four percent of the total SSFL site area. Since the elevation of ‘The Hill’ varies between 700 and 1500 feet above the valley floor, we can assume a 1000 foot average and conservatively overestimate that NASA removes the top ten feet of soil which gives another factor of one percent. Thus 0.9996 of the background levels of radionuclides and chemicals would remain in place after remediation. We know from the background studies that the total agricultural cancer risk from radionuclides and chemicals is about 0.05 and that the remediation only addresses soil with contaminants above background or detect. Most of these local contaminants have risks in the 10^{-3} to 10^{-6} range, which are 50 to 50,000 times less than background risk. Removing these contaminants from the small fraction of soil leaves the total site risk essentially unchanged, and does nothing to lessen the potential for contaminant exposure or bioaccumulation in humans or wildlife.

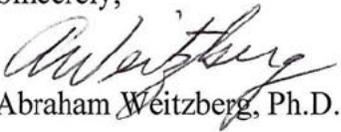
The DEIS correctly states that all groundwater cleanup activities would alter existing water quality conditions appreciably and negatively. However, the claims of moderate, beneficial,

regional, and long term impacts are unreasonable. Considering the very large amounts of contamination present in the fractured bedrock and the long time horizon for their removal, up to 50,000 years, one could more accurately say that no meaningful changes would occur in the foreseeable future. This assumes that pumping is continued to ensure that contaminant plumes do not move away from the site.

If, as the DEIS clearly states, the Proposed Action has unacceptable short-term environmental impacts and the No Action Alternative leaves SSFL with too much contamination, the DEIS does not present viable alternatives to either the public or the decisionmakers. It should therefore be revised to include at a minimum those alternatives that were removed, which should then be prudently applied consistent with the ultimate planned use of the site.

Specific comments following the content of the DEIS are included as an attachment to this letter.

Sincerely,



Abraham Weitzberg, Ph.D.

w/ Attachment

Attachment A

Detailed Comments on Draft Environmental Impact Statement for Proposed Demolition and Environmental Cleanup Activities at Santa Susana Field Laboratory, July 2013

The following comments are listed in the order of the information as presented in the DEIS. There may be duplication between comments made on the Executive Summary and on the body of the document.

Page ES-2,

The CEQ letter states “*CEQ encourages agencies to carry out robust alternatives analyses that consider all reasonable alternatives, including those that are not within agencies’ authorities. The real focus, however, must always be on a meaningful consideration of alternatives.*”

and

In view of NASA’s administrative cleanup resolution with the State of California, which turns upon NASA’s commitment to clean the site to local background levels, CEQ’s view is that – under this rule of reason – NASA is not compelled to consider less comprehensive cleanup measures as alternatives.”

While NASA is not compelled to evaluate other alternatives, it is not forbidden from doing so. Without the intervention of Senator Boxer, as reported in the press, NASA would have evaluated robust alternatives without the negative impacts of both the proposed action and the no-action alternative. The AOC cleanup is infeasible and the No-Action, although undesirable, may be preferable.

For the record, the AOC soil requirement is cleanup to background or detect, without any consideration of risk, not simply ‘cleanup to background.’”

Page ES-4, Section ES-3. 1.2

NASA correctly states: “*Currently, excavation and offsite disposal is the only proven remedial technology to meet 2010 AOC standards..... even if one in the class is not able to be treated, then the class is considered non-treatable.....In the vast majority of contaminated areas on NASA-administered land at SSFL, the top 2 feet (ft) of soil contain non-treatable chemicals and cannot be remediated using any of the technologies. The only way to get the non-treatable chemicals to background levels (2010 AOC requirements) is by excavating and disposing the soil offsite and offsite disposal—an estimated 320,000 cubic yards (yd³).*”

The capability of any treatment technology to meet the very low AOC requirements in any reasonable time period is not credible. The estimated 500,000 cubic yards should be used as a minimum value of soil to be removed, because the full impact of the AOC requirements plus the confirmation sampling is unknown at this time.

Page ES-5, Table ES-2

Beneficial Impacts on Biology and Hazardous Waste, as claimed in the Table, are nowhere discussed in detail and justified in the body of the report. Similarly, the acknowledged significant negative impacts are assumed to be uniformly reduced to moderate, minor, or negligible by use of Best Management Practices or Mitigation Measures which are assumed to be 100% successful. Such an assumption is unreasonable and unwarranted. As discussed in the cover letter, because of the high naturally occurring background concentrations of dioxin, arsenic and radionuclides in the soil, little net benefit from the remediation can be anticipated. The next two feet of soil will have almost the same or perhaps greater risk than the soil that is removed.

Section ES-5.1

Significant negative impacts are presented in detail.

Page ES-8, Section ES-5.2

Moderate negative impacts are presented in detail.

Page ES-9, Section ES-5.2.4

Moderate beneficial impacts are gratuitously inserted into the paragraph without any examples or substantiation. Such an apparent assumption is not warranted. Note there are no regional benefits claimed, although this is what motivates the long-time community activists.

Page ES-10, Section 5.3.3

Long-term beneficial impacts are assumed because the waste is removed from the site, but no information is presenting demonstrating that it now poses a risk on-site. In fact, the AOCs have been interpreted to preclude any risk assessment without language so stating. Without risk assessment, how can NASA claim that risks will be reduced?

Page ES-11, Table ES-4

This table is worthless and provides mis-information to the public and the decisionmakers. Without substantiation, most negative impacts are reduced as a result of Best Management Practices and Mitigation Measures based on an assumption, and all of the beneficial impacts are restated without justification.

Page ES-15, Table ES-5

For Biological Resources it seems strange to claim moderate, beneficial cumulative impact from removing contamination, when you have killed/removed all of the biological resources.

For Water Resources, it seems very questionable that possible small improvements in water quality in an area that is not anticipated to have residents that would subsist on the ground water could have significant beneficial impacts.

For Hazardous and Nonhazardous Materials and Waste, how is a significant, beneficial impact justified, when the waste may not now pose a significant risk. This would be particularly true for any waste that is currently buried on-site.

Page ES-16, Section ES-8.0

NASA states: “*The analysis assumes that the technologies considered are feasible, implementable, and effective.....*” If it is likely that, for the very low AOC cleanup levels, the technologies are infeasible, non-implementable, and ineffective, why is this not reflected in the DEIS?

Page ES-17, Section ES-12.0

NASA states: “*... cleanup of soils to Look-Up Table values, would provide a beneficial long-term impact for the overall reduction of contaminants across the site and reducing exposing risk to wildlife and humans.*” There has been no case made that these contaminants now pose a risk to wildlife and humans, particularly in light of the high natural background of some of these contaminants. If NASA does not establish the current risk, how can they claim a future reduction from their proposed actions?

Page 2-19, Section 2.2.2.3

Document does not declare that the referenced replacement soils have been tested and found to meet the AOC requirements. Based on the failure of other candidate soils to meet the requirements, it must be assumed that these may not be found to be suitable.

Table 2.2-5

Why is the replacement of only one-third of the removed soil acceptable? What are the impacts of so altering the landscape and drainage?

Page 2-33, Section 2.4

Why did NASA eliminate the broad range of alternatives, as viable alternatives? It is clear that they have substantially less negative environmental impacts and meet cleanup criteria that are generally accepted throughout the United States.

Page 2-36, Section 2.4.1.4

When translating soil volumes into trucks, the analysis does not appear to take into account the fact that since there are far fewer trucks bringing replacement soil than are needed to remove excavated soil, the number of trucks to be considered in traffic studies must include the empty trucks that also will drive to and up Woolsey Canyon Road.

Page 4-27, Table 4.3-1

The impact on Cultural Resources is significant and negative. Mitigation measures would not eliminate negative impacts and one must assume that consultation will not alter the situation, unless there is political interference.

Page 4-36 and Page 4-49, Table 4.4-1

The assessment of impact on Wildlife from removal of non-treatable soils as moderate, beneficial, regional, and long-term by reducing the potential for contaminant exposure or bioaccumulation is a gratuitous fabrication, unless there is some evidence that such effects are or have been observed.

Since the vast majority of the impacts listed are negative, how can the whole be listed a beneficial? The analysis borders on fraud.

Page 4-54

Project Trip Generation –

Construction workers carpooling is a non-conservative estimate. By personal observation, they usually drive individually in pickup trucks rather than carpooling.

Woolsey Canyon should not be considered rolling terrain. It is a steep winding grade.

There seems to be no realistic account of the need for empty trucks to drive up to the site to receive their loads. In practice, with far less replacement soil than removed soil, and loaded trucks driven to a variety of destinations at different distances, this would come close to doubling the number of trips up and down Woolsey Canyon Road.

Trucks would not necessarily come from the dumps to which they would eventually deliver their loads and drivers would have to drive there to pick up their trucks if they did.

Page 4-63

Truck speeds and stopping distances are interesting, but do not seem relevant to the critical route up and down Woolsey Canyon Road.

Page 4-64, Table 4.5-1

Table assumption states that trucks arrive and depart between 7 am and 7 pm, which on average would be consistent with the stated practice of only working during daylight hours. However, in practice, the Los Angeles daylight varies considerably with about 16 hours at the summer solstice and slightly under ten hours at the winter solstice. Are the numbers of workers based on the assumption of two shifts with double traffic loads at shift change during the summer and single shifts with overtime during the winter?

Page 4-65, Table 4.5-3 and Page 4-69, Table 4.5-5

Analysis of traffic on Arterial Roadways and Safety of Truck Trips appears to be limited to numbers of trips, concluding that Levels of Service are not raised above LOS threshold and the safety is not significantly affected. This does not account for the fact that the trucks on Woolsey Canyon Road and Valley Circle will travel at greatly reduced speeds compared with passenger vehicles and the abilities of passenger vehicles to safely enter these roads from side streets will be significantly impacted and the risks of accidents increased. There is no runaway truck escape ramp on Woolsey Canyon Road and the steep grade poses an added risk from trucks.

Page 4-68, last sentence

It is difficult to understand how the addition of a significant number of trucks to the existing traffic load would not add to the number of truck accidents, even if the rate expressed as number of accidents per mile traveled per truck does not change.

Page 4-74, Table 4.5-6

Another example of a significant negative impact arbitrarily changed to minor negative impact, with no real changes made in the actual traffic load as part of the mitigation. The only real way to significantly mitigate the impacts of traffic is to decrease the number of trucks.

Page 4-79, Page 4-80

Groundwater Quality – Claims that in the long term groundwater and soil cleanup to LUT values would likely reduce groundwater contamination sources are overstated. The residual natural background arsenic and radionuclides over the entire site throughout its depth far outweigh the relatively small amounts of contamination that may be removed. Moreover, in the long term there is high probability that these contaminants will migrate from the Boeing areas which are being cleaned to Suburban Residential levels. The sentence beginning the third paragraph seems to state that groundwater is being cleaned up to LUT values. The LUTs apply only to soil.

Page 4-81, Section 4.6.3

The risk of harmful exposure is not estimated. Therefore lengthening it may or may not be consequential.

Page 4-84, Table 4.6-1

All Impacts with the exception of Water-6B are negative and local and some are long term. How can this translate into an Overall Impact that is beneficial, regional, and long term? There is no case made that any local actions regarding the water resource will have regional effects. These purported benefits are arbitrary and unsubstantiated. The very large amount of contamination contained in the fractured sandstone bedrock coupled with the slow rate of migration out of the

bedrock ensures that groundwater quality will remain essentially the same for centuries to come. Estimates up to 50,000 years have been made. While pumping should continue for the foreseeable future to ensure that contaminant plumes do not move away from the site, no credit should be taken for hypothetical future improvements in water quality.

Page 4-129, Table 4.9-1

How can any short-term benefits affecting worker health and safety have any long term benefits to the workers who are no longer working at the site? It has not been shown that the current levels of contamination pose a risk and after the workers leave the site they cannot be affected by on-site contamination.

Page 4-152, Table 4.12-2

All impacts shown are negative, yet the overall impact is claimed to be significant, beneficial, local and long term. Where are the benefits described and justified, or are they just assumed? How can all of the negatives be combined into a beneficial?

Page 4-167, Table 4.13-2

All impacts shown are negligible or minor, mostly negative, yet the overall impact is claimed to be significant, beneficial, and long term. How can this mixture of impacts be summarized as significant, beneficial?

Page 4-169, Section 4.14.3

It is unrealistic and not conservative to assume that the technologies are feasible and effective. The assumption can be made, but it is wrong to claim conservatism.

Page 4-154, Table 4.12-2

Where are the benefits described, or are they just assumed? How can all of the negatives be combined into a beneficial?