

*The physician and health advocate voice for a world free from nuclear threats
and a safe, healthy environment for all communities.*



Physicians for Social Responsibility
Los Angeles

October 1, 2013

Mr. Allen Elliott
SSFL Program Director
NASA MSFC AS01, Building 4494
Huntsville, AL 35812

Via email: msfc-ssfl-eis@mail.nasa.gov

Re: Physicians for Social Responsibility-Los Angeles Comments on Draft Environmental Impact Statement for Cleanup of NASA Property at the Santa Susana Field Laboratory

Dear Mr. Elliott:

Physicians for Social Responsibility-Los Angeles (PSR-LA) represents over 4,000 physicians, health professionals, and concerned residents in Southern California. Our mission is to reduce threats to public health related to nuclear and environmental toxins.

PSR-LA has been involved in efforts to clean up the Santa Susana Field Laboratory (SSFL) since 1979, when we joined with community members and other advocates to stop nuclear work at the site and to remediate the radiological and chemical contamination in a manner that is fully protective of public health. As physicians and health advocates, we therefore strongly support the Agreement on Consent (AOC) reached with the California Department of Toxic Substances Control (DTSC) regarding the cleanup of Department of Energy's and NASA's portions of SSFL.

NASA's portion of SSFL is extensively contaminated with very hazardous chemicals that negatively impact health and the environment – this is the reason for the cleanup. The vast majority of the community that participated in the two public comment periods before NASA signed the AOC, over 3,700 people, made it clear they want SSFL strongly supported the AOC and its requirement of a cleanup to background. Yet, NASA's Draft Environmental Impact Statement (DEIS) barely mentions the contamination and its effects on health. The DEIS focuses almost exclusively on the purported negative impacts of cleaning up and never even attempts to substantively address the impact of the contamination on the environment and public that would continue were that pollution not remediated. NASA also fails to address mitigation measures seriously, rendering the DEIS grossly inadequate and making it appear to be designed to mislead the community into being more concerned about the cleanup than the toxic chemicals that plague the site that necessitate the cleanup.

That the DEIS omits an examination of the contamination and its impact on the environment is of grave concern considering the types of chemicals and quantities that pollute NASA's property. Tens of thousands of rocket tests were conducted at that NASA portion of SSFL, resulting in significant chemical contamination. Hundreds of thousands of gallons of trichloroethylene (TCE) were used to flush out rocket test engines and then allowed to percolate into the soil and groundwater. The site is also contaminated with perchlorate, dioxins, heavy metals, and volatile and semi-volatile organic compounds that can cause harm to human health.

These are very toxic materials, and NASA spilled large quantities of them. They can cause solid tumor cancers as well as leukemia, and developmental, genetic, neurological, and immune system disorders, and more. TCE can impair immune system function, damage liver and kidney, impairs fetal development and causes dizziness, lung irritation, headaches and poor coordination. In larger amounts it may cause impaired heart function, unconsciousness and death. Perchlorate, an oxidizer in rocket fuel that was used in ton quantities at SSFL, interferes with iodide uptake into the thyroid gland, causing hypothyroidism in mothers and negatively impacting proper childhood development such as decreased learning capability. Dioxins are carcinogenic and can cause reproductive, developmental, immunological, and endocrine side effects. PCBs can serious effects on the liver, immune, endocrine, and reproductive are classified as a probable carcinogen. These are only a few of the harmful contaminants on NASA's SSFL property. Not addressing them in the DEIS is misleading and irresponsible.

The DEIS should also have included information that SSFL's contamination has already impacted public health. Several studies have indicated elevated cancer rates associated with proximity to the site. An extensive, multi-year epidemiological study by the UCLA School of Public Health found significant increases in death rates among the most exposed workers from cancers of the lung, lymph, and blood systems. A study for the U.S. Agency for Toxic Substances and Disease Registry (ASTDR), Professor Hal Morgenstern found rates for key cancers in members of the nearby public increased the closer the person lived to SSFL. In another study for ASTDR, Professor Yoram Cohen found evidence of toxic exposures to the offsite population in excess of EPA standards. And, studies by cancer registries found elevated rates of bladder cancer associated with proximity to SSFL. In addition, a cluster of retinoblastoma cases, a rare eye cancer affecting young children, was identified within an area in the community that was downwind of the site. And the Public Health Institute's 2012 California Breast Cancer Mapping Project found that the rate of cancer is higher in Thousand Oaks, Simi Valley, Oak Park and Moorpark than in almost any other place in the state.

The DEIS should have addressed the fact that if SSFL is not cleaned up, the site will continue to threaten nearby communities via toxic migration. There have been over a hundred exceedances of pollution standards in runoff from the site reported to the LA Regional Water Quality Control Board in the last few years. A TCE plume extends offsite. Perchlorate has been found in numerous wells in Simi Valley and in Dayton Creek in Dayton Canyon. Strontium-90 was found at Runkle Ranch. Other contamination has been found at Brandeis Camp, where a recent well tested over 100 times background for a radionuclide, and Sage Ranch where hundreds of cubic yards of toxic soil were removed. The headwaters of the Los Angeles River are located at the NASA portion of SSFL, and have already been impacted by stormwater run off from the contaminated site. This is why PSR-LA has advocated that a thorough remediation of SSFL is critical for the health and well-being of Southern Californians and the environment.

Asserting that the site may possibly be declared uninhabitable and public access restricted to a few hours of day hikes, and the groundwater declared forever polluted and its use barred, as some have suggested, would breach longstanding environmental requirements. Beneficial water supplies are supposed to be protected and when impacted, treated to return them to unpolluted status. Contaminated land is supposed to be remediated so that the environmental damage is undone. Polluting soil, groundwater and surface water are fundamental significant negative environmental impacts, and refusal to clean up that pollution would have continued significant negative environmental impacts. That is why cleanup is required. Furthermore, there are tens of thousands of people living near the site, so any claim about future use of SSFL is irrelevant. NASA cannot propose that all the people living near SSFL move out of their homes and declare their neighborhoods uninhabitable open space. The AOC requirements for full cleanup must be met and the EIS must

provide a thorough description of the extraordinary damage to the environment NASA has done at the site and the beneficial impacts of restoring the site and undoing that damage.

PSR-LA became concerned that NASA was trying to break out of the AOCs in 2011, when NASA released its Notice of Intent to create an EIS that focused on cleanup standards. We made it clear, in our letter of September 19, 2011, that NASA had no discretion about the cleanup standard. Our letter, attached, stated:

“PSR-LA urges NASA to now put the matter to rest once and for all by explicitly limiting the scope of any NEPA review to that which is discretionary to NASA. This would involve completely dropping any consideration of what the cleanup standard should be, as that is not within NASA’s discretion. It would drop any consideration of whether to leave the structures in place, as it is DTSC which must determine if the structures have to come down to permit site characterization and cleanup of the contamination beneath them. It would limit any review to that which is discretionary to NASA about how to implement the cleanup to background; but since virtually all of the major implementation decisions for the cleanup are DTSC’s, not those of NASA the RP, the residual discretionary matters do not rise to the level of an EIS. Should there be any federal environmental review, strictly limited as we say to that which is discretionary to NASA, it should be, as required in the AOC, coordinated with DTSC, preferably as a joint EIS/EIR in which NASA’s role is limited solely to that which is discretionary to it.

Public health has long demanded the cleanup of the contamination that resulted from decades of poor practices by NASA. The AOCs were the breakthrough that so many people had worked so hard to obtain. NASA should do nothing that slows that process down or spreads any doubt about its full and complete compliance with the AOC, in its entirety, and in particular, the required cleanup to background.”

Many other community members, elected officials, and organizations submitted comments to NASA as well, also urging that the EIS address how to cleanup to background, not whether to do so. The Council on Environmental Quality (CEQ), in a formal written opinion, made clear that NASA was not required by NEPA, as it had claimed, to examine cleanup standard alternatives. The California Department of Toxic Substances Control also wrote NASA that its proposed course of action would violate the AOC. In response, NASA promised to limit the scope of the EIS to how to implement the AOC, and a “No Action” alternative.

Yet the DEIS that NASA has released does in fact include several alternatives that would breach the AOC and associated federal and state law. NASA appears to have broken its word.

Evading Cleanup by Leaving Rocket Test Stands

In the DEIS, NASA suggests that the old rocket test stands not be demolished and instead be considered “historical.” However, NASA is fully aware that much of the contamination is located at the test stands, and that there is no way to clean up the contamination without removing them. This is a direct violation of the AOC, and would also have impact on the surrounding communities as the contaminants continue to migrate offsite.

Misleading and Inadequate Information on Truck Traffic

The DEIS states how many fewer truck trips there would be if NASA does not cleanup the majority of the contamination. The DEIS also misleads by inflating truck trips, and failing to identify mitigation measures such as additional routes, spreading the trucks over the other routes available, or utilizing an existing fire road or rail spur. NASA could also use natural gas trucks or electric trucks to reduce diesel emissions and global warming effects, but these options are not examined in the DEIS. The DEIS provides no reference to the number of trucks that have gone in and out of the facility for decades, and that the truck trips used for cleanup would actually be a small fraction of that.

Failure to Address Impact of Contaminants on Environment

The DEIS claims negative impacts on biological resources, surface water and groundwater from cleaning up contamination, yet does not address harmful impacts of the pollution of these beneficial resources and the impact on the environment contaminated aquifer if one didn't clean up the aquifer, or if one allowed contamination to continue to pollute the streams leading off the property. The DEIS should address the environmental damage that NASA has done, the type and quantity of the contaminants left behind, what negative they have on health and ecological systems.

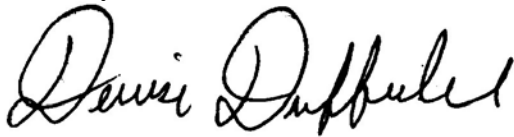
Ignoring Important AOC provisions

The DEIS states that the cleanup to AOC would damage the cave paintings at the Burro Flats area. But the AOC is entirely protective of cave paintings, and explicitly exempts from the cleanup to background requirement anything that might damage recognized Native American artifacts. Every time this issue is brought up at various SSFL meetings, NASA remains silent and refuses to educate the community on what the AOC actually says, intentionally fanning the flames of a few deeply misinformed community members. The AOC allow allows for the protection of endangered species, yet the DEIS uses this issue to also suggest the cleanup is harmful.

The purpose of NASA's DEIS should have been to examine the impacts of the contamination, the impacts of cleanup, and the best ways to cleanup per the AOC that would mitigate potentially negative impacts. Instead, NASA refused to address the effects of the contamination, and deliberately portrayed the cleanup as unnecessary and harmful – when it is just the opposite that is true. The cleanup, per the AOC standards and provisions, is necessarily to protect public health, and myriads of mitigation measures were left unexplored.

PSR-LA urges NASA to uphold the commitment it made to the community, elected officials, and the public when it signed the AOC, so that current and future generations are not at risk from NASA's toxic legacy at SSFL. It must thoroughly and diligently live up to the AOC and its requirement of cleaning up to background, i.e. cleaning up all the contamination that can be detected.

Sincerely,

A handwritten signature in black ink, appearing to read "Denise Duffield". The signature is written in a cursive, flowing style.

Denise Duffield
Associate Director

*The physician and health advocate voice for a world free from nuclear threats
and a safe, healthy environment for all communities.*



September 19, 2011

Mr. Allen Elliott
Marshall Space Flight Center
AS 01, Building 4494
Huntsville, AL 35812

**Physicians for Social Responsibility
Los Angeles**

Re: Santa Susana Field Laboratory Scoping Comments [76 FR 39443]

Dear Mr. Elliott:

We appreciate the opportunity to submit comments in response to NASA's Notice of Intent (NOI) regarding a possible Environmental Impact Statement (EIS) related to NASA's portion of the Santa Susana Field Laboratory (SSFL).

Physicians for Social Responsibility-Los Angeles (PSR-LA) is the Los Angeles chapter of the international physicians organization that won the Nobel Peace Prize in 1985 for its work on the nuclear threat. PSR-LA represents over 4,000 physicians, health professionals, and concerned residents in Southern California, a number of whom live within five miles of SSFL. PSR-LA works to reduce public health threats, with a special focus on environmental toxins, and has been involved with the SSFL matter since at least 1979, working for a cleanup of the contamination at the site that would fully protect public health.

We are concerned about the confusion created in the community by the poorly crafted NOI, which has led many to worry that NASA may be attempting to break out of its obligation under the recent Agreement on Consent (AOC) to clean up SSFL to background. NASA, recognizing the confusion it has created, has attempted to clarify matters in an August 9 letter to the California Department of Toxic Substances Control and in some public statements reaffirming its commitment to the AOC-required cleanup to background. We believe that NASA now needs to, in response to scoping comments, resolve the matter by either abandoning plans for an EIS on cleanup standards, a matter which is outside its discretion and thus doesn't trigger the National Environmental Policy Act, or, if an EIS is to proceed, limits its scope, as required by the AOC, to those matters related to the implementation of the required cleanup to background which are indeed within NASA's discretion.

The AOC

PSR-LA was and remains a strong supporter of the AOC that NASA entered into in December, 2010 with the DTSC. The AOC put to rest years of controversy in which NASA appeared to have been resisting cleaning up the contamination it created at the site. Two public comment periods were held on the proposed AOC, resulting in 1700 comments in the first period and 2000 in the second. The public support was remarkable—approximately 99% of the comments were in favor of the AOC. When, in December, the AOC was formally executed and took effect, there was palpable joy in the affected communities that at long last the contamination would be fully remediated and the threats to their health eliminated.

Over the years, various public health studies had identified potential impacts from the site's pollution. Studies performed by the UCLA School of Public Health in the 1990s found significantly elevated death rates from key cancers among SSFL workers associated with their exposure to the chemicals at the rocket test stands. Reviews by the Los Angeles Cancer Registry found elevated urinary bladder cancers in the

offsite population associated with proximity to SSFL. A review by the Tri-County Cancer Registry similarly found elevated lung cancer rates in Ventura County associated with proximity to SSFL. A study for the federal Agency for Toxic Substances and Disease Registry (ATSDR) by Professor Hal Morgenstern found indications of elevated cancer incidence for a number of cancer types associated with distance to SSFL. And a large study for ATSDR by a team of University of California experts led by Professor Yoram Cohen found that releases from the hazardous materials employed in the rocket testing facilities at SSFL exposed offsite populations to excessive levels of these materials that could result in deleterious health effects.

The AOC requires cleanup of NASA's portion of SSFL to background. That standard is not optional; the AOC says the cleanup "shall" be to background. NASA thus has no discretion about cleanup standard; the cleanup to background is mandatory, and NASA's role is solely ministerial, which does not trigger NEPA, which is limited to *discretionary* federal agency actions.

There are a few special circumstances identified in the AOC that are potential exceptions to the cleanup to background requirement – detection limits, Native American artifacts, Endangered Species Act matters — but NASA is not the decision-maker about any of them. DTSC is to determine detection limits and approve any exception to the cleanup standard that involves Native American artifacts, and the Endangered Species Act decisions are in the hands of the Fish and Wildlife Service.

Thus, NASA has no discretion to choose a cleanup standard—it is bound to cleanup to background by the AOC. Since NEPA is for discretionary federal agency actions, an EIS on which cleanup standard to employ is inappropriate. NASA has no discretion in the matter, and any implication that the scope of an EIS would include evaluating what cleanup standard will be employed needs to be remedied by narrowing the scope accordingly.

This is, of course, already made clear in the AOC, which requires that a NEPA review, if any needs be performed, shall be limited to how to implement the cleanup to background required by the AOC, not whether to cleanup to background or to some other standard. (AOC§4.2.1) NASA acknowledges this requirement in its clarifying letter to DTSC, but even if it didn't, it is part of the legally binding AOC and in consistent with NEPA's limits to discretionary agency actions.

Therefore, NASA should narrow the scope of any EIS to those matters that are within its discretion as to how to implement the required cleanup to background and drop any plan to consider a scope that includes what cleanup standard will be employed. However, virtually all of the major decisions about how to carry out the cleanup to background rest with DTSC, NASA's regulator. It will determine mitigation measures such as replanting, dust abatement, alternative truck routes, covering of truck loads, etc. Only the relatively inconsequential decisions about which DTSC does not weigh in would remain as matters for NASA, and those don't rise to the level that trigger NEPA, i.e., they are not *major* federal actions that can significantly impact the human environment.

NASA has no discretion over the cleanup standard matter, and thus can't do an EIS about it.¹ Nor does it have discretion about the major aspects of how to implement the cleanup to background. The remaining matters that are within its discretion do not rise to the level of an EIS.

Even Absent the AOC, It Is DTSC, Not NASA, That Decides Cleanup Standards for SSFL

NASA is a Responsible Party (RP), and RPs don't get to choose how much of their pollution they have to clean up. That is the responsibility of their regulator. In this case, that is DTSC. DTSC chooses the cleanup standard. That authority was delegated long ago to DTSC, and it covers regulation of federal entities such as NASA. NASA has long been under DTSC's regulatory authority for cleanup of SSFL. There thus is no discretionary NASA action about choosing a cleanup standard, and it can't do an EIS on that issue.

¹ The issue is not whether, if the fundamental decision is within an agency's discretion, it can, in addition to considering alternatives that are within its jurisdiction, analyze one or more additional alternatives that are not within its jurisdiction. The fundamental agency action, however, that triggers the NEPA review must be a decision that is the agency's to make. Here, the decision on cleanup standard is not a NASA decision, as discussed herein. NASA has no discretion to pick any cleanup standard. It must clean up to background. It therefore can't do an EIS to decide a cleanup standard.

The Building Demolition Issue

NASA's NOI proposed to consider two issues in an EIS: what the cleanup standard should be, and whether to demolish or leave in place various structures at the site such as buildings or rocket test standards. The first issue, as we have shown above, is outside NASA's discretion and inappropriate for inclusion in an EIS and should be eliminated from the scope. The second issue is in large measure also not within NASA's discretion, and to the extent it isn't, should also be eliminated.

The contamination at SSFL is centered to a significant degree around and beneath the buildings and test stands, because that is where the toxic materials were used and spilled, dumped, and otherwise released. To characterize the contamination will likely require the removal of those structures so that one can get at the soil beneath them to sample for the spread of the contamination. Additionally, cleanup will almost certainly require removal of the structures so one can get to the contaminated soil beneath them.

However, that decision is not NASA's to make. DTSC, as the regulator, is the decision-maker as to whether the buildings can somehow be left in place or must be removed so as to permit cleanup. As such, NASA has no discretion and inclusion of this issue in an EIS is inappropriate. The environmental implications of leaving the structures is DTSC's to consider and then decide. This issue should also be dropped from any contemplated EIS.

Conclusion

NASA created tremendous relief in communities residing near its contaminated SSFL site when, after years of resisting cleanup, NASA executed a legally binding AOC to clean the site to background. Its recent NOI was so poorly crafted that significant confusion has resulted in the community as to whether NASA was trying to break out of the AOC requirement to clean up to background. NASA, recognizing the confusion it created, has attempted to clarify the matter by a letter to DTSC and various public statements to the effect that it remains committed to the AOC's requirements of cleaning up to background and limiting any NEPA review to *how* to implement the required cleanup to background.

PSR-LA urges NASA to now put the matter to rest once and for all by explicitly limiting the scope of any NEPA review to that which is discretionary to NASA. This would involve completely dropping any consideration of what the cleanup standard should be, as that is not within NASA's discretion. It would drop any consideration of whether to leave the structures in place, as it is DTSC which must determine if the structures have to come down to permit site characterization and cleanup of the contamination beneath them. It would limit any review to that which is discretionary to NASA about how to implement the cleanup to background; but since virtually all of the major implementation decisions for the cleanup are DTSC's, not those of NASA the RP, the residual discretionary matters do not rise to the level of an EIS. Should there be any federal environmental review, strictly limited as we say to that which is discretionary to NASA, it should be, as required in the AOC, coordinated with DTSC, preferably as a joint EIS/EIR in which NASA's role is limited solely to that which is discretionary to it.

Public health has long demanded the cleanup of the contamination that resulted from decades of poor practices by NASA. The AOCs were the breakthrough that so many people had worked so hard to obtain. NASA should do nothing that slows that process down or spreads any doubt about its full and complete compliance with the AOC, in its entirety, and in particular, the required cleanup to background.

Sincerely,



Denise Duffield
Associate Director