



August 12, 2020

Via Electronic Mail

**Re: The Trump Administration’s Proposal to Designate the Heavily Contaminated Santa Susana Field Laboratory as a Cultural District is an Effort to Breach Cleanup Commitments, Does Not Meet Listing Requirements, and Should Not Be Approved**

Dear California State Historic Resource Commission:

The Natural Resources Defense Council and the Committee to Bridge the Gap write collectively today to comment on the proposed nomination of the Santa Susana Field Laboratory (SSFL) as the Burro Flats Cultural District to the National Historic Registry. There is far more to this nomination than has been disclosed. We provide detail in the following pages, but we commence with a succinct response to the Commission – the Commission should find that the nomination form is not adequately documented, is not technically and professionally correct, and does not meet the criteria for evaluation. **We recommend there be no consideration of approving NASA’s proposal until and unless the SSFL site is fully remediated, as long promised by the SSFL Responsible Parties NASA, the Department of Energy (DOE), and Boeing.**

**I. INTRODUCTION & SUMMARY**

The Trump Administration has proposed increasing the Burro Flats Site, already on the National Register of Historic Places, more than 200-fold to precisely match the boundaries of SSFL, **one of the most polluted sites in the nation**. The nomination fails to meet the requirements for listing and should be rejected. Moreover, the Trump Administration’s purpose in nominating this site is to attempt to exempt the entire site from cleanup commitments set forth in 2010 federal-state agreements. Those agreements have an exemption for Native American *artifacts*. NASA’s nomination is aimed at listing the entire 2850 acres of SSFL soil on the National Register of Historic Places and then declare it to be an “artifact” exempt from cleanup. The Commission should not cooperate with the Trump Administration’s efforts to breach its critical cleanup agreement. Failure to do so could result in significant harm.

**The Nomination Fails to Meet Listing Requirements**

- **The nomination does not meet requirements for completeness.** In the entire nomination, there is not a word about the history of ten nuclear reactors (four of which suffered accidents, including a partial meltdown), tens of thousands of rocket tests, or the resulting widespread radioactive and chemical contamination. The most critical changes

to the site since the historic period of significance are for all practical purposes not even mentioned.

- **The nomination does not meet requirements for accuracy.** The nomination asserts that the site is unimpacted, maintains integrity, and is in the condition it was in at the time of historical significance, the occupation of the region by Native Americans. However, in fact, SSFL is one of the most contaminated places in the country, and over the last 75 years was severely degraded by massive earthmoving, hundreds of nuclear and rocket testing buildings and structures, and extraordinary releases of radionuclides such as plutonium-239, strontium-90, cesium-137, TCE, PCBs, heavy metals, dioxins, and a witches' brew of other poisons.
- **The nomination does not meet requirements for boundary justification.** There is a single sentence in a single paragraph at the end of the nomination attempting to justify the boundary being identical to SSFL's property lines. That assertion is that areas within the property lines are largely free of impacts whereas the areas outside are heavily impacted. In fact, the opposite is true: the areas outside the boundary (primarily conservation and preservation sites) are largely free of impacts, whereas the areas inside SSFL were subject to extreme industrial activity. The nomination violates the requirement that boundaries are generally not to be chosen based on property lines.
- **The nomination does not meet requirements for intactness, i.e., are not in a state similar to the time of original occupation.** As indicated above, the Trump Administration asserts the site is basically unimpacted and in the condition it was in when Native Americans originally occupied the site; the opposite is the case. And the nomination could actually *prevent* the very restoration required under the cleanup agreements so essential to returning the site to the state it was in before NASA, the military, DOE, the Atomic Energy Commission, and Boeing and its predecessors so severely damaged and polluted the site.

### **The Nomination is an Attempt by the Trump Administration to Breach the SSFL Cleanup Agreements, a Destructive Move which the Commission Should Not Approve**

- **The 2010 Administrative Orders on Consent (AOCs) between the federal and state government require full cleanup of SSFL, restoring it to the condition it was in before it was so badly damaged and polluted.** This means cleanup to "background," or the levels of chemicals and radioactivity that would have been there had NASA, DOE, Boeing, etc. never operated their intensive nuclear and rocket testing activity throughout the site.
- **The AOCs protect Native American artifacts.** The AOCs have an exception from cleanup for "Native American *artifacts* that are formally recognized as Cultural Resources." (emphasis added). This exception protects the Burro Flats Cave Paintings and solstice observation location.
- **What NASA is attempting by proposing to expand Burro Flats to cover the entire 2850 acres of SSFL is to claim all 2850 acres of soil as an "Artifact" exempt from cleanup.** Several years ago, NASA's strategy to misuse this exception was explicitly set forth in a Senate Appropriations Committee Report:

Preservation of Tribal Artifacts at Santa Susana Field Laboratory.— As NASA works to meet the requirements of the 2010 Administrative Order on Consent for Remedial Action, along with preceding agreements and court orders, the agency is encouraged to protect the unique and historically significant Native American sites on the property, including but not limited to the Burro Flats Painted Cave. **To the maximum extent practicable, NASA shall include all Traditional Cultural Properties and Traditional Cultural Landscapes (as defined by 30 CFR 60.4 and National Park Service Bulletin 38) as “Native American artifacts that are formally recognized as Cultural Resources,” for the purposes of the Administrative Order.**

emphasis added

The language quoted is the precise language of the cleanup exemption in the AOC. Thus NASA’s strategy for several years has been to list the whole site as a Traditional Cultural Property and Landscape and then attempt to declare the property and landscape an “artifact” exempt from cleanup.

- **2850 acres of SSFL soil is not a “Native American Artifact,” and the California Department of Toxic Substances Control (DTSC) could object to an effort by NASA to claim the exemption, but that would merely trigger the AOC dispute resolution and litigation provisions, delaying cleanup by a decade.** One might be told that DTSC need not approve a claimed exemption of the Cultural District as an “artifact,” but all that does is trigger provisions in the AOC for dispute resolution, which would take a year or two, and then litigation taking a decade. The cleanup would be delayed for years and for all practical purposes never occur. The Commission should not be a party to NASA’s efforts to breach, or at minimum heavily delay, the promised cleanup.

#### **The Commission Acting to Approve the Proposal Would Violate the California Environmental Quality Act (CEQA)**

- **In a letter to us on August 10, the State Historical Preservation Officer conceded that the decisions to be made by SHPO and the Commission are discretionary acts (one of the key tests for CEQA being triggered) but asserted CEQA does not apply because SHPO and Commission nominations, including this one, do not result in direct or reasonably foreseeable indirect environmental impacts.** This is of course not true. As indicated herein, facilitating the breach of the cleanup agreements could result in migration of radioactive and toxic chemicals polluting surface water, groundwater, soil, and air, and causing significant health effects.
- **At the same time, SHPO is asserting that the Commission is barred from considering environmental impacts of its decision on the SSFL matter.** One cannot have it both ways. One cannot assert the impossibility of significant impacts while at the same time preventing consideration of evidence of such impacts.

Thus, the Trump Administration proposal should be rejected because it fails to meet the requirements for listing. It also would represent the Commission signing off on the Trump

Administration efforts to breach a critical environmental agreement between California and the federal government. And approving it without performing an environmental review would violate CEQA. These matters are discussed in more detail below, along with an extensive disclosure of the information left out of the Nomination—the intensive nuclear and rocket testing activity and contamination at the site.

## II. COMMENTS

### 1. The Manner in which NASA Has Nomination SSFL as a Cultural District Fails to Meet Requirements for Nomination and Listing Under the National Historic Preservation Act.

A nomination of a district to the National Historic Register must be “adequately documented” and “technically and professionally correct and sufficient.” 36 C.F.R. 60.3. A nomination must include a narrative that “describ[es] the property and its physical characteristics” and “document[s] the evolution of the property, *describing major changes since its construction or period of significance.*”<sup>1</sup> This narrative should include the “[a]pppearance of the district during the time when the district achieved significance . . . and *any changes or modifications since.*”<sup>2</sup> An adequately documented nomination is vital to show whether the nomination meets the criteria for evaluation to be listed on the National Registry.

**Here, the nomination for the proposed Burro Flats Cultural District does not adequately demonstrate the required integrity of the site. Rather, the nomination fails to disclose the extent of the “major changes” to the appearance of the site from the intense industrial activity that occurred from the 1940s through today.**

The Santa Susana Field Laboratory was established in the late 1940s for rocket testing and in the early 1950s commenced nuclear reactor work. In this initial incarnation, the site was supposed to be a remote field lab for work too dangerous to conduct near populated areas, and the original siting criteria stated that “care must be taken to select an area where prospects for population growth in the near future are not anticipated.”<sup>3</sup> However, over the decades the

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<sup>1</sup> National Park Service, National Register Bulletin, *How to Complete the National Registration Form*, at 28 (1997) (hereinafter “NPS Bulletin”)

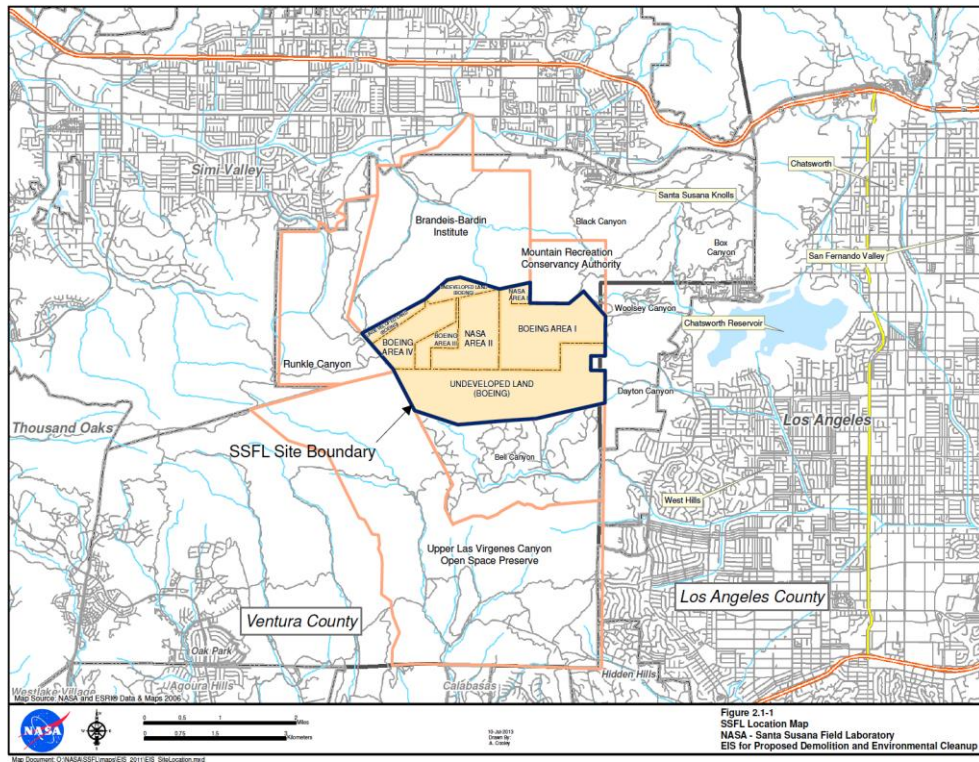
<https://www.nps.gov/subjects/nationalregister/upload/NRB16A-Complete.pdf>.

<sup>2</sup> NPS Bulletin at 33.

<sup>3</sup> NAA-SR-30, *General Reactor Site Survey of the Los Angeles Area*, U.S. Atomic Energy Commission, June 1, 1949, as cited in *Report of the Santa Susana Field Laboratory Advisory Panel*, at 8 (October 2006) (hereafter “SSFL Panel Report”)

<http://www.ssflpanel.org/files/SSFLPanelReport.pdf> The SSFL Advisory Panel was established at the initiative of local legislators in the early 1990s to oversee independent health studies of SSFL and the surrounding areas. Under its auspices, federally-funded worker studies by the UCLA School of Public Health were conducted in the 1990s, and in the next decade a series of studies about potential offsite effects funded by the State Legislature were prepared. This summary of the siting and accident history is drawn in part from the Panel’s 2006 report; the

population nearby mushroomed, so that there are now more than 150,000 people living within 5 miles of the site and more than half a million people are within 10 miles.<sup>4</sup>



Yet, over the last 75 years, SSFL has proven that the work conducted on site is too dangerous. Extensive and impactful nuclear and rocket testing activities took place for decades across the field lab, resulting in widespread radioactive and toxic chemical contamination at the site and intense damage to the natural surroundings. The site has been profoundly disturbed and contaminated by decades of intensely damaging activity by NASA and the other SSFL site operators. In fact, SSFL is one of the most contaminated places in the nation. **NASA’s nomination cannot meet the requirements for nomination to the National Registry of adequate documentation, technically correct documentation, and the criteria for evaluation without a full discussion of the hundreds of nuclear and rocket testing facilities, accidents that occurred at those facilities, and mismanagement of radioactive and toxic waste that have defaced the site.**

a. Accidents, Spills and Releases Have Left the Site Significantly Changed.

The NASA nomination claims that “[t]he use of SSFL by the government and Boeing resulted in keeping the area in a state similar to when the consultants’ ancestors used and occupied the area.”<sup>5</sup> Yet elsewhere, NASA admits that, “[o]ver the course of its use as a testing

reader is referred to the full report for more detail and supporting citations, which is incorporated herein by reference.

<sup>4</sup> SSFL Panel Report at 8-9.

<sup>5</sup> NPS Bulletin at 7.

and development facility, NASA and other agencies and private companies have made extreme changes to the landscape at SSFL to carry out their various missions. Roads, buildings, infrastructure, and testing facilities have altered the landscape...”<sup>6</sup> and that there has been “extreme soil movement during the construction of the test stands and other buildings throughout SSFL.”<sup>7</sup> In fact, this is not the half of it. SSFL is one of the most contaminated sites in the nation. A full review of the history of SSFL shows the extreme impacts the industrial activity has had on the site.

*i. Nuclear Activities Vented Radioactivity Throughout SSFL.*

Over the years, SSFL has become a radioactively contaminated site. SSFL housed ten reactors, plutonium and uranium fuel fabrication facilities, numerous nuclear “critical facilities,” and a “hot lab” wherein highly irradiated nuclear fuel from around the nation was cut apart. Safety considerations were “subordinated to other concerns from the outset.”<sup>8</sup> Despite being ranked 5<sup>th</sup> out of 6 candidate sites for the safety of meteorological conditions (in part because of nighttime migration of potentially contaminated air into the San Fernando Valley), the site was chosen as a nuclear testing site nonetheless, in large measure because of convenient drive times from nearby universities. To compensate for the poor site conditions, and because the reactors would have no containment structures, a reactor power limit was set to limit radioactive inventory. But a decade thereafter, the Atomic Energy Commission (AEC) (the precursory to DOE and the Nuclear Regulatory Commission) chose to build the Sodium Reactor Experiment (SRE) with power twenty times the limit, despite people living much closer than the original rule recommended.<sup>9</sup>



**Nuclear Area at Santa Susana Field Laboratory**

*photo source: SSFL Work Group<sup>10</sup>*

<sup>6</sup> NPS Bulletin at 32.

<sup>7</sup> NPS Bulletin at 36.

<sup>8</sup> SSFL Panel Report at 8.

<sup>9</sup> SSFL Panel Report at 8-9.

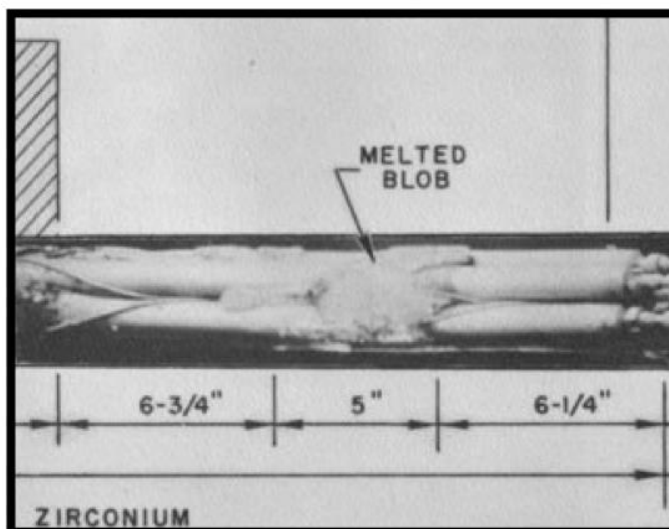
<sup>10</sup> <http://www.ssflworkgroup.org/about-ssfl/>.

SSFL experienced at least four significant accidents, including a partial nuclear meltdown:

- In March of 1959, the AE6 reactor released fission gases as a result of malfunction.
- In July 1959, blockage of coolant precipitated a power excursion and partial meltdown of the SRE.
- In 1964, the SNAP8ER accident damaged 80% of its fuel.
- In 1969, another accident in the SNAP8DR resulted in damage to a third of its fuel.<sup>11</sup>

None of these reactors had a containment structure like modern reactors to prevent radiological releases into the environment.

Regarding the events of June 1959 at the SRE,<sup>12</sup> a fuel rod at the SRE, coated with sodium, exploded when it was washed with water in a “wash cell.” The explosion lifted the shield plug out of the wash cell, and created “extremely high contamination levels within the entire building.”<sup>13</sup> A couple of weeks later, on July 13, the SRE experienced a power excursion—the reactor power suddenly began to increase exponentially, out of control, and the reactor barely was able to be shut down, or “scrammed.” Yet, inexplicably, the operators of the reactor, unable to figure out what had caused the incident, started it up again two hours later, and continued to operate it for another week and a half, in the face of rising radioactivity readings (off-scale) and numerous other signs of a reactor in trouble. When it was finally shut down, it was determined that 13 of 43 fuel elements had experienced melting.

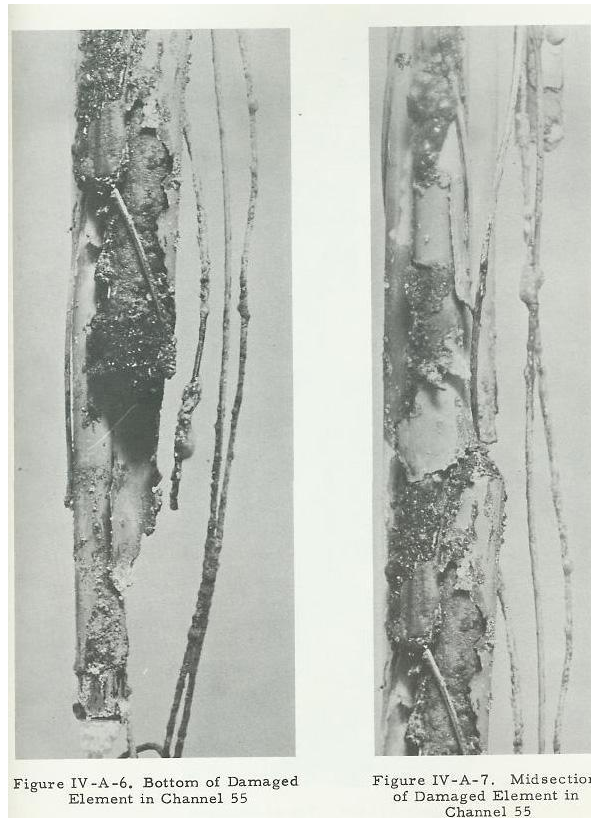


*SRE Fuel “Melted Blob” (label in original); source: AEC/Atomics International*

<sup>11</sup> SSFL Panel Report at 10.

<sup>12</sup> See, e.g., the review of the SRE accident performed for DOE by Dr. Thomas Cochran of Natural Resources Defense Council, *Sodium Reactor Experiment Fuel Meltdown—July 1959* (Aug. 2009) <http://www.etec.energy.gov/Library/Main/Cochran%20SRE%20Presentation.pdf>.

<sup>13</sup> See Committee to Bridge the Gap, *Past Accidents and Areas of Possible Present Concern Regarding Atomics International* (Jan. 1980), and the citations therein. (Atomics International was the name of the AEC contractor running the nuclear portion of SSFL at the time.)



*Photo of Damaged Fuel Element; source: AEC/Atomics International*

The accidents at the SRE, SNAP8ER and SNAP8DR all involved running the reactors for extensive periods of time while they were failing, despite clear indications of problems. As an AEC analysis<sup>14</sup> of the SRE partial meltdown concluded:

[S]o many difficulties were encountered that, at least in retrospect, it is quite clear that the reactor should have been shut down and the problems solved properly. Continuing to run in the face of a known Tetralin leak, repeated scrams, equipment failures, rising radioactivity releases, and unexplained transient effects is difficult to justify. Such emphasis on continued operation can and often does have serious effects on safety and can create an atmosphere leading to serious accidents. It is dangerous, as well as being false economy, to run a reactor that clearly is not functioning as it was designed to function.

Nonetheless, the same pattern of continuing to operate reactors for long periods despite evidence of failing cores subsequently resulted in significant fuel damage in two other reactors at the site.

The problem of cutting safety corners was compounded by a culture of secrecy and a lack of candor. The AEC said nothing publicly about the SRE partial meltdown for nearly five

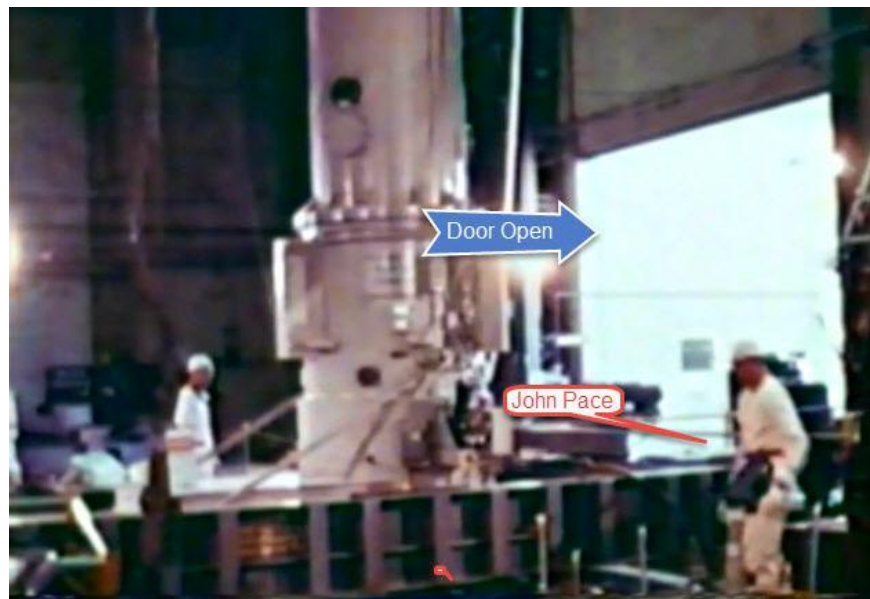
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<sup>14</sup> T. J. Thompson and J. G. Beckerley, *The Technology of Nuclear Reactor Safety*, prepared under the auspices of the US Atomic Energy Commission, at 644 (1964).



weeks. Finally, it issued a news release, embargoed for Saturday morning papers, saying that “a parted fuel element had been observed,” but that there were no indications of unsafe operating conditions and had been no radioactive release. However, in fact, the fuel had experienced not just parting, but melting. And a third of the core underwent partial melting, not just a single fuel element. It was a clear indication of unsafe operating conditions, and radioactivity had been intentionally vented into the atmosphere for weeks. The AEC hid the extent of the incident from the public. To this day, much of the public remains unaware of the extent of damage done by nuclear reactors at SSFL.

Despite subsequent claims that only noble gases were released, independent experts have concluded that other radionuclides such as iodine-131 could have been vented into the atmosphere. One estimate is that over 260 times the I-131 released at the Three Mile Island accident could have been emitted by the SRE.<sup>15</sup> The reactor had no containment structure; because of the coolant blockage, the coolant vaporized, and volatile radionuclides like iodine, cesium and strontium could have been emitted into the core cover gas, which was deliberately vented from the reactor and into the environment. Furthermore, a report by an eyewitness, John Pace, indicates that the reactor room became so radioactive that the large equipment door had to be kept open to vent radioactivity from the room to the outdoors.<sup>16</sup>



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<sup>15</sup> Declaration of Arjun Makhijani, Ph.D., President of the Institute for Energy and Environmental Research, in *Lawrence O'Connor et al. v. Boeing North American, et al.*, U.S. District Court for the Central District of California, at 24 (Feb. 2004).

<sup>16</sup> NBC, Joel Grover and Matthew Glasser, *LA's Nuclear Secret*, <http://data.nbcstations.com/national/KNBC/la-nuclear-secret/>. The photograph is from an AEC film about the accident, taken during the recovery operation. The labels have been added. Pace says the door had to be opened for extended periods during the accident itself because of high radiation readings.

By no means was the SRE partial meltdown the only problem at SSFL that led to releases. Much of the work at SSFL involved radioactively contaminated liquid sodium coolants for reactors, which burn if exposed to air and explode in the presence of water. There were radioactive fires at the hot lab and numerous other radioactive and chemical releases and spills. In addition, for decades, despite requirements to the contrary, radioactive and toxic chemical wastes were burned in open “burnpits.” Sodium-coated reactor components were placed in shallow pools of water to chemically react. The resulting clouds of airborne contamination fell out over wide areas, including beyond the SSFL boundaries. These activities resulted in contaminating soil and groundwater. They also contaminated surface water that ran into the neighboring Brandeis Bardin Institute.

*ii. Rocket Testing changed the character of the site.*

In addition to nuclear development work, tens of thousands of rocket tests were conducted at SSFL, many with very toxic fuels such as monomethyl hydrazine. The rocket tests produced massive airborne plumes of contaminants extending substantial distances and depositing their particulate toxins over wide areas. Huge rocket test stands were constructed, with scores of support buildings, and large spillways and unlined ponds to receive liquid toxic wastes that then percolated into the soil and groundwater. Large amounts of earthmoving and excavation occurred, dramatically altering the original landscape and environment.





Perchlorate, a very hazardous solid rocket fuel component, also resulted in substantial contamination of soil, groundwater and surface water. Because it is so mobile, there is evidence it rapidly traveled offsite contaminating land and groundwater; numerous wells in Simi Valley are polluted with it.<sup>17</sup>

In addition, over 21,500 tests alone involved flushing the rocket engines after firing with trichloroethylene (TCE), a very hazardous volatile organic compound.<sup>18</sup> Approximately one million gallons of TCE were employed for this purpose at SSFL, and about half a million gallons are estimated to have been allowed to percolate into the soil and groundwater. The acceptable concentration (the EPA Maximum Concentration Limit, or MCL) of TCE in drinking water is 5 parts per billion; concentrations orders of magnitude higher than that have been found in SSFL groundwater plumes. A substantial fraction of the groundwater at SSFL is contaminated with TCE and other pollutants. The TCE groundwater plume extends offsite.

There were also various accidents, such as explosions at the Alpha and Coca rocket test stands.<sup>19</sup> In 1994, two workers were killed when hazardous wastes that were being illegally burned in open pits exploded. The U.S. Justice Department commenced legal proceedings against Rocketdyne, resulting in an admission of guilt and plea agreement.

Just as in the nuclear area, there was also an open-air burnpit in the rocket area where for years toxic wastes were illegally burned in the open air. To save the expense of transporting the waste offsite for proper disposal, scores of barrels of toxic waste were brought to the pit each month and ignited by workers firing rifles at them to blow them up, releasing large plumes of contamination.

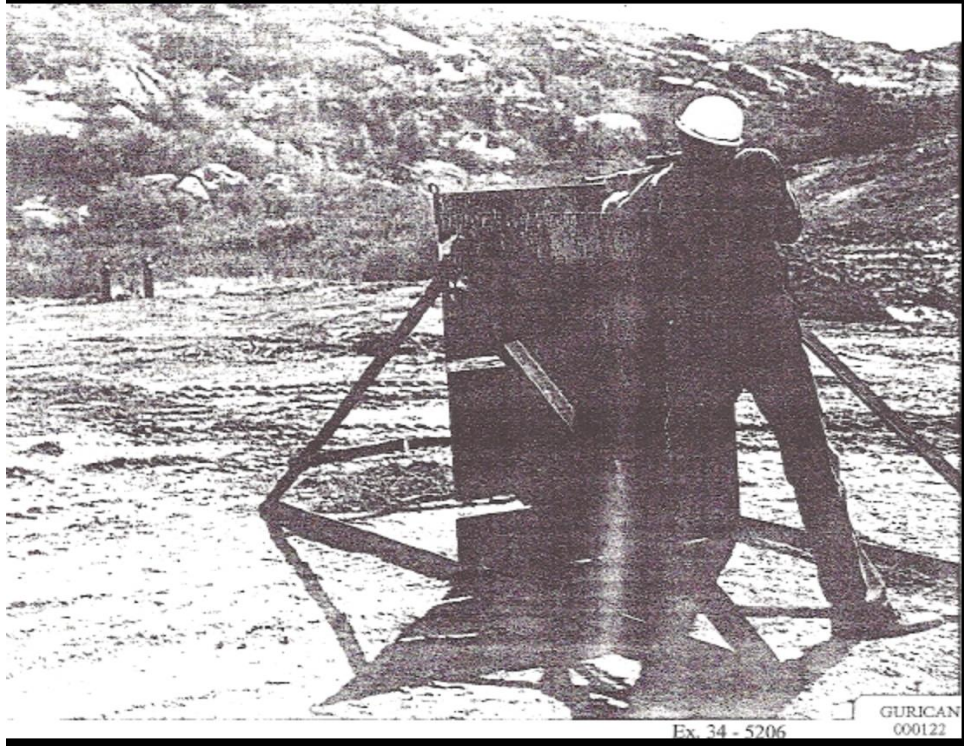


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<sup>17</sup> See Ali Tabidian, *Land-use conversion and its potential impact on stream/aquifer hydraulics and perchlorate distribution in Simi Valley, California*, prepared for the SSFL Advisory Panel (Oct. 2006).

<sup>18</sup> NASA, *Santa Susana Field Laboratory: The Use of Trichloroethylene at NASA's SSFL Sites* (2008).

<sup>19</sup> NASA, *Historic Resources Survey and Assessment of the NASA Facility at Santa Susana Field Laboratory*, at 3-42 (May 2008).



iii. *In Addition to Physical Damage Done to the site, SSFL Causes Health Impacts.*

There is evidence of both onsite and offsite health impacts from SSFL. A federally-funded study by the UCLA School of Public Health found markedly increased rates of death from key cancers for workers associated with their radiation and chemical exposures.<sup>20</sup> The most highly exposed workers had triple the deaths from those cancers as did less exposed SSFL workers.

A subsequent federally funded study by a team of researchers led by UCLA's Professor Yoram Cohen found evidence of contaminants having migrated outside the site boundaries and exposing the public at levels in excess of EPA levels of concern.<sup>21</sup> A study by Dr. Hal Morgenstern of the University of Michigan, also federally funded, found a greater than 60% increase in incidence of various cancers in people living near the site associated with their proximity to it.<sup>22</sup>

The health concern from SSFL is both for potential exposures to people at the site in the future and to the people who live in the area surrounding SSFL. SSFL is located atop the Santa Susana mountains overlooking significant populations in the City of Los Angeles and elsewhere. The site is contaminated with a wide range of radioactive materials, such as plutonium-239, cesium-137, and strontium-90, and over a hundred hazardous chemicals, such as dioxins, PCBs, heavy metals, and volatile organic compounds. Contaminants at the site can migrate offsite and expose those communities. Thus, the cleanup of the source of pollution is critical.

b. The Nomination Fails to Adequately Document the Current State of the Proposed District with Figures, Maps, and Photographs.

Even with all the documented impacts to SSFL displayed above, NASA does not seem to have included documentation of the current state of the site in its nomination. To be adequately documented, a nomination must contain a site plan or sketch map and photographs of the

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<sup>20</sup> Morgenstern, Froines, Ritz and Young, *Epidemiologic Study to Determine Possible Adverse Effects to Rocketdyne/Atomics International Workers from Exposure to Ionizing Radiation* (June 1997) [http://www.ssflpanel.org/files/UCLA\\_rad.pdf](http://www.ssflpanel.org/files/UCLA_rad.pdf). See also *Santa Susana Field Laboratory Epidemiological Study: Report of the Oversight Committee* (Sept. 1997) [http://www.ssflpanel.org/files/panel\\_worker\\_radiation.pdf](http://www.ssflpanel.org/files/panel_worker_radiation.pdf), and the UCLA study of and panel report about chemical exposures, included in exhibits to these comments.

<sup>21</sup> Yoram Cohen, et al., *Potential for Offsite Exposures Associated with the Santa Susana Field Laboratory* (Feb. 2006) <http://www.ssflworkgroup.org/potential-for-offsite-exposures-associated-with-ssfl/>.

<sup>22</sup> Hal Morgenstern, et al., *Cancer Incidence in the Community Surrounding the Rocketdyne Facility in Southern California* (Mar. 2007) <http://www.ssflworkgroup.org/files/UofM-Rocketdyne-Epidemiologic-Study-Feb-2007-release.pdf>. See also, Professor Hal Morgenstern letter to Senator Joe Simitian, then-Chair, California Senate Committee on Environmental Quality (Apr. 5, 2007) summarizing his findings, [http://www.ssflworkgroup.org/files/LettertoSen.Simitian\\_041507.pdf](http://www.ssflworkgroup.org/files/LettertoSen.Simitian_041507.pdf).

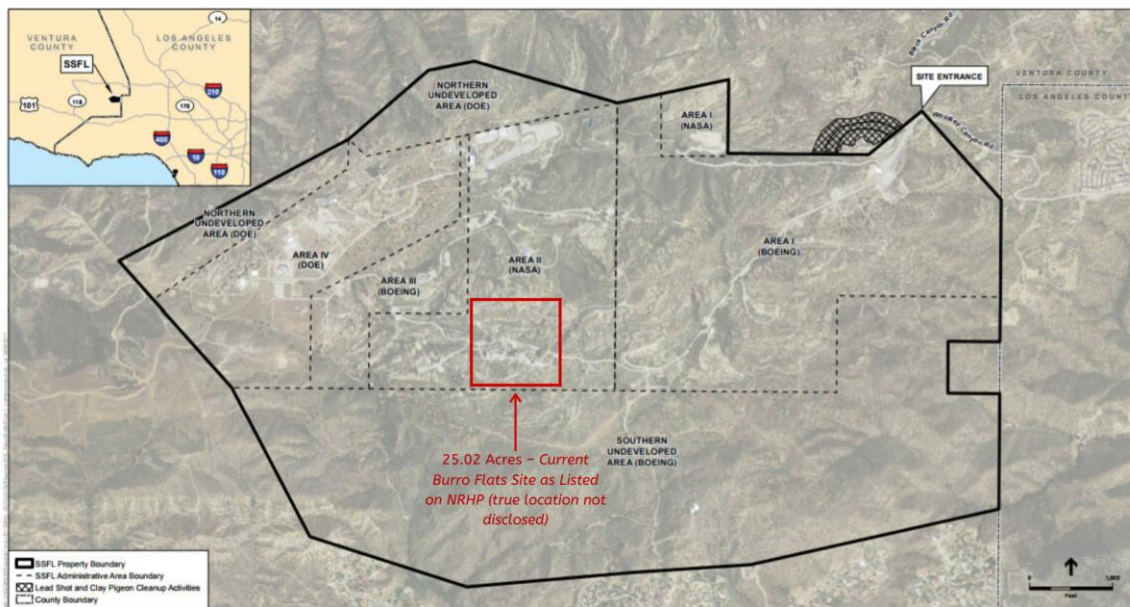
district.<sup>23</sup> While “[o]ne photograph may be adequate to document a property consisting of a single building or object, [] many will be needed for districts and larger properties.”<sup>24</sup> Yet this nomination seemingly contains only a single photograph of an artifact that is already listed on the National Registry as well as multiple maps of historic locations of Tribes.

While the public version of the registry form does explain that figures, maps, and photographs with sensitive information are not included in the public version, the public version does not even list what is included in the unredacted version. We recognize the importance of keeping the location of historic artifacts confidential to protect those artifacts. However, failing to even list the names of what additional figures, maps, and photographs are included in the unredacted version hides to what extent the unredacted registry form conforms with the requirements for an adequate nomination.

For public confidence and transparency, the full list of figures, maps, and photographs should be included in the public version of the registry form, while the sensitive figures, maps, and photographs themselves are redacted. If in fact the unreacted version does not include additional photographs and a site plan showing the extent of artifacts and sites in the proposed district, then this nomination is not adequately documented as required.

c. NASA Proposes a District with Boundaries That Perfectly Match the Location of Industry, Contamination, and Proposed Cleanup.

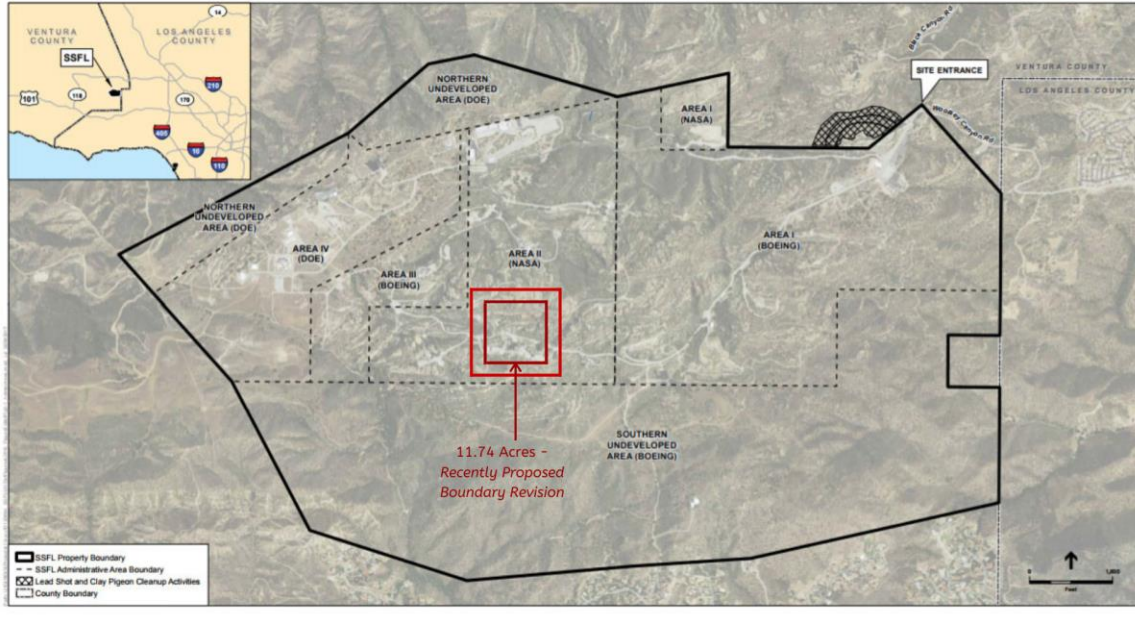
In 1975, the Burro Flats Site was listed on the National Register of Historic Places. This listing was 25 acres which included the Burro Flats Painted Cave and solstice site.



<sup>23</sup> NPS Bulletin at 7.

<sup>24</sup> NPS Bulletin at 63.

In November 2019, the State Historic Resources Commission approved *decreasing* the boundary of the Burro Flats Site<sup>25</sup> and in June 2020 the Keeper of the National Register formally accepted that decrease.<sup>26</sup> The decreased boundary of the Burro Flats Site still includes the Burro Flats Painted Cave and solstice site.



Per regulation, “[f]our justifications exist for altering a boundary: Professional error in the initial nomination, loss of historic integrity, recognition of additional significance, additional research documenting that a larger or smaller area should be listed.” 36 C.F.R. § 60.14(a)(2). As NASA explained in its environmental impact statement on SSFL, “Researchers have since suggested that the 1976 boundary of the site does not adequately reflect the number, density, and distribution of loci associated with the site. *An updated nomination includes four additional loci and reduces the overall site footprint from 25.02 acres to 11.74 acres*, resulting from data gathered during pedestrian surveys (Corbett et al., 2013, 2016b) and the testing of loci boundaries in some locations.”<sup>27</sup>

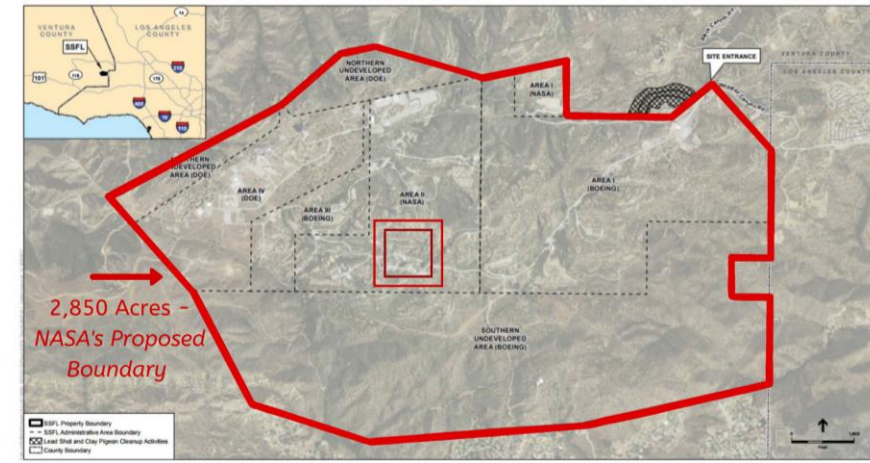
<sup>25</sup> California State Historical Resources Commission, Summary of the Meeting (Nov. 9, 2019) [https://ohp.parks.ca.gov/pages/1067/files/SHRCMtSummary\\_2019-11-07\\_Final.pdf](https://ohp.parks.ca.gov/pages/1067/files/SHRCMtSummary_2019-11-07_Final.pdf).

<sup>26</sup> National Park Service, Weekly List 2020-07-02, <https://www.nps.gov/subjects/nationalregister/weekly-list-20200702.htm>.

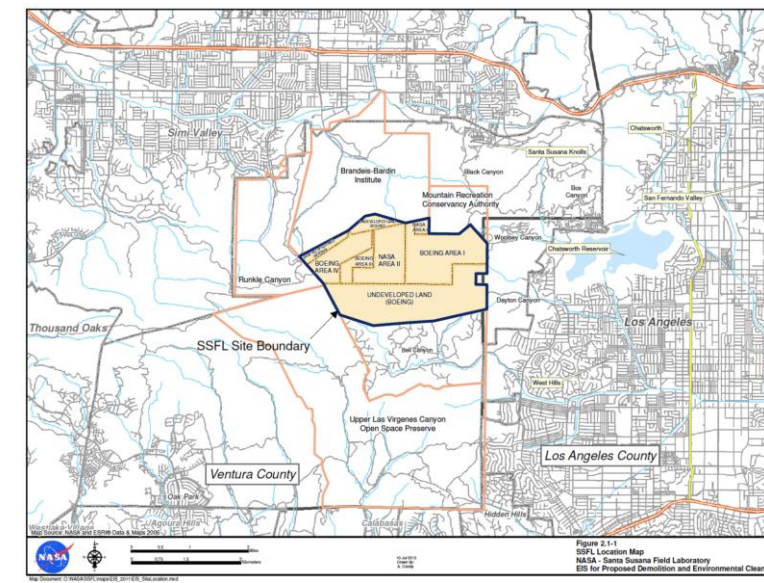
<sup>27</sup> NASA Draft SEIS at 3-8 (emphasis added).



Now, only approximately six months after the boundary of the Burro Flats Site was decreased, NASA proposes a massive increase in the boundary. And that boundary happens to perfectly match the boundary of the SSFL, even though a district “is seldom defined . . . by the limits of current parcels of ownership, management, or planning boundaries. The boundaries must be based upon a shared relationship among the properties constituting the district.”<sup>28</sup>



The nomination attempts to justify the boundary of the proposed district matching the boundary of SSFL by claiming that “the construction of the field lab and its restricted access has protected this part of the Simi Hills from exposure to human housing developments, vandalism, and other impacts that occur in well-populated places.” This justification ignores the intense industrial activities, discussed above, that occurred within the SSFL site itself. The justification also ignores the preserves and conservancy areas essentially surrounding the SSFL, areas which are likely far less impacted than the areas within SSFL.



<sup>28</sup> National Park Service, How to Apply the National Register Criteria for Evaluation, at 6 (1997) [https://www.nps.gov/subjects/nationalregister/upload/NRB-15\\_web508.pdf](https://www.nps.gov/subjects/nationalregister/upload/NRB-15_web508.pdf).

## **2. The Trump Administration is Misusing the National Registry to Get Out of Cleanup.**

The poor documentation NASA put into this proposed nomination demonstrates that preserving significant tribal sites is not NASA's goal. In fact, this is the latest in a series of attempts to bypass cleanup obligations.

NASA and the other parties responsible for the SSFL cleanup have long resisted doing anything more than a minimal cleanup of the contamination for which it was responsible, at this or its other polluted facilities across the country.<sup>29</sup> Concerned about the plan to not clean up the great majority of the contamination and the failure to examine the environmental impacts of the harms associated with such weak cleanup choices, the City of Los Angeles, the Natural Resources Defense Council, and Committee to Bridge the Gap filed a lawsuit in U.S. District Court, challenging the legality of DOE's actions under the National Environmental Policy Act (NEPA), 42 U.S.C. §4321, et seq. In 2007, in an Order highly critical of DOE, Judge Samuel Conti granted summary judgment for the plaintiffs and against DOE.<sup>30</sup>

In the 2007 ruling against DOE, Judge Conti wrote in pertinent part: "Area IV is known to be radiologically contaminated and, in fact, was the location of at least one well-known nuclear meltdown....It is located only miles away from one of the largest population centers in the world....Among the primary purposes of NEPA, and the [Environmental Impact Statement] process more specifically, is assuring the public is informed and aware of the potential environmental impacts of government actions....It is difficult to imagine a situation where the need for such an assurance could be greater." He therefore permanently enjoined DOE from "transferring ownership or possession, or otherwise relinquishing control over, any portion of Area IV until it completed an EIS and issued a Record of Decision pursuant to NEPA." The Court retained jurisdiction over the matter until it is satisfied that the DOE has met its legal obligations related to the remediation. This decision led to cleanup agreements between California and the responsible parties.

In 2007, the California Department of Toxic Substances Control (DTSC) entered into a Consent Order with NASA, DOE, and Boeing. The Consent Order obligated the Responsible Parties to complete cleanup of soil and installation of the permanent groundwater remedy by mid-2017.<sup>31</sup> In 2010, in the face of mounting frustration by DTSC, the California Environmental Protection Agency (CalEPA), and state and federal legislators with what appeared to be continued foot-dragging, these groups again opened negotiations with DOE and NASA on the cleanup. After two rounds of opportunity for public comment, in which more than 3000 comments were received, of which all but a handful were strongly in favor, DTSC, DOE and NASA executed the new Administrative Orders on Consent (AOC) in December 2010.

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<sup>29</sup> See, e.g., National Governors Association, *Cleaning Up America's Nuclear Weapons Complex: 2015 Update for Governors*.

<sup>30</sup> 2007 WL 1302498 (N.D. Cal).

<sup>31</sup> Consent Order, at 20.

There are several key components of the AOCs. (1) They are legally binding; the parties cannot unilaterally choose not to comply with any part of them. (2) Cleanup of soil shall be to local background. (3) For the purposes of the AOCs, soil is defined to include structures, debris, and other anthropogenic materials. (4) There is to be no averaging; any contamination above background is to be cleaned up. (5) The deadline for full soil cleanup and implementation of the groundwater remedy was 2017. (6) All waste with radioactivity above background must be disposed of in licensed or authorized low-level radioactive waste disposal facilities. And (7) critically, no “leave in place” alternatives will be considered.

NASA entered into an AOC with DTSC in 2010 committing to clean up all its contamination at SSFL by 2017. It is 2020 and the promised soil cleanup has not even begun. Indeed, the SSFL Responsible Parties—NASA, DOE, and Boeing—have all taken steps recently to breach their cleanup commitments and instead leave the great majority of the contaminated soil not cleaned up.

The AOCs contain some very tightly delimited exceptions to the requirement to clean up all contamination to background. The key cultural exception is reprinted below:

**The end state of the site (the whole of Area IV and the Northern Buffer Zone) after cleanup will be background** (i.e., at the completion of the cleanup, no contaminants will remain in the soil above local background levels), subject to any special considerations specified below.

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*The acceptance and exercise of any of the following exceptions is subject to DTSC’s oversight and approval, and the resulting cleanup is to be as close to local background as practicable:*

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**“Native American artifacts that are formally recognized as Cultural Resources.”<sup>32</sup>**

The cultural exemption in the AOCs is limited to formally recognized Native American *artifacts*. What NASA is now trying to do, by proposing listing every square foot of soil in the 2850 acre SSFL site and then declare that all the soil in the whole SSFL is a Native American “artifact” eligible for exemption from cleanup, is a transparent attempt to get the SSFL Responsible Parties out of their obligations to clean up the badly contaminated SSFL soil.<sup>33</sup> Existing contamination poses a great risk to public health—and if left unremediated would continue to threaten the health and safety of both future visitors to the site and residents living around the site who could be impacted by migrating contamination.

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<sup>32</sup> DOE AOC, Appendix B, at 1 (emphasis added); there are identical exemptions for chemical contaminants at 2; those exemptions are also found in the NASA AOC, Appendix B, at 1.

<sup>33</sup> There is exhaustive documentation of the widespread contamination at SSFL with an array of radionuclides and toxic chemicals. See, e.g., the US EPA radiation survey of Area IV and the Responsible Parties’ soil measurements for toxic chemicals, including Soil Data Summary Reports and RCRA Facility Investigation Reports, available at the DTSC Document Library for SSFL, [https://dtsc.ca.gov/sitecleanup/Santa\\_Susana\\_Field\\_Lab/ssfl\\_document\\_library/](https://dtsc.ca.gov/sitecleanup/Santa_Susana_Field_Lab/ssfl_document_library/).

### 3. Additional Concerns with the Nomination Process.

#### d. This action ignores the California Environmental Quality Act.

The California Environmental Quality Act (CEQA) applies to discretionary actions by California agencies if the action is capable of causing a direct or reasonably foreseeable indirect physical change in the environment. CEQA “is to be interpreted to afford the fullest possible protection to the environment within the reasonable scope of the statutory language.”<sup>34</sup> Thus, the determination whether CEQA applies to an action does not take into account whether the potential effects will actually occur.

Here, the nomination of the SSFL to the National Registry is capable of causing direct and reasonably foreseeable indirect physical change in the environment. If it impedes, interferes with, or successfully blocks part or all of the cleanup, radioactive and toxic chemical contamination can migrate and damage the environment and expose the public to serious health risks. Before the State Historic Resource Commission and State Historic Preservation Officer act on the nomination, these agencies must at least conduct an initial study on the potential environmental effects of the nomination. The burden to show that “there is *no possibility* that the activity in question may have a significant effect on the environment, [and thus that] the activity is not subject to CEQA,” lies on the lead agency.<sup>35</sup> An agency’s determination that there is no possibility of significant effect “must be supported by evidence in the record demonstrating that the agency considered possible environmental impacts in reaching its decision.”<sup>36</sup> Here, the State Office of Historic Preservation has provided no support for its conclusion that this nomination has no possibility of having a significant effect on the environment. In fact, the State Office of Historic Preservation has refused to consider environmental impacts of its decision at all.

#### e. The National Historic Preservation Act Requires the State to Take No Action on Behalf of a Nomination When the County, as is the Case Here, Says No.

The National Historic Preservation Act states that “If both the [local] commission and the chief local elected official recommend that a property not be nominated to the National Register, *the State Historic Preservation Officer shall take no further action.*” 54 U.S.C. § 302504 (emphasis added). Here, by a unanimous vote of the Ventura County Cultural Board, its findings were that it could only affirm that *portions* of SSFL met criteria for listing, and the Ventura Board of Supervisors (the chief local elected official in Ventura), also by unanimous vote, formally declared that the nomination does not meet listing requirements and could impair

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<sup>34</sup> *California Farm Bureau Federation v. California Wildlife Conservation Bd.*, 143 Cal. App. 4th 173, 176 (2006).

<sup>35</sup> 14 Cal. Code Reg. § 15061(b)(3). *California Farm Bureau Federation v. California Wildlife Conservation Bd.*, 143 Cal. App. 4th 173, 185 (2006) (emphasis added).

<sup>36</sup> *California Farm Bureau Federation v. California Wildlife Conservation Bd.*, 143 Cal. App. 4th 173, 186 (2006).

public health and that the nomination should be rejected.<sup>37</sup> Thus, the State Historic Preservation Officer and the State Historic Preservation Commission should not be holding a hearing on this nomination.

### III. CONCLUSION

The Trump Administration's proposal to create a Burro Flats Cultural District that is more than two hundred times larger than the recognized boundaries of the Burro Flats Site is one more attempt to get out of the promises for a full cleanup that the Responsible Parties have made. Rather than being a pristine, unimpacted site as claimed by NASA, SSFL is extensively altered from decades of industrial testing and heavily contaminated with radionuclides and toxic chemicals. This nomination cannot proceed at this time because it fails to meet requirements for listing. Furthermore, to truly preserve cultural elements, the promised remediation must be complete, returning the polluted site to the state it was in prior to being contaminated. Then, and only then, should there be consideration of any such nomination. Acting prematurely now can only risk interfering with the restoration of the site and endangering public health. We recommend declining any consent until the full cleanup that has been long promised is complete.

Thank you for the opportunity to comment.

Sincerely,

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<sup>37</sup> See submission by Ventura County to the SHPO (July 29, 2020) and video recording of Ventura Board of Supervisors hearing of July 28, 2020, [https://ventura.granicus.com/player/clip/5450?view\\_id=100](https://ventura.granicus.com/player/clip/5450?view_id=100) and of the Ventura Cultural Heritage Commission hearing (June 29, 2020) <https://drive.google.com/file/d/1MisaBFujquDkfe0VNoSDqLO6KI--wLsx/view?usp=sharing>.