Appendix 4B
Comment Matrixes

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Public Comments

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Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
1	a	Deva Andrews	I am writing in regards to the lack of clean up for the Santa Susanna Field Lab. My parents bought their first home in Canoga Park off Valley Circle Blvd by Vanoween Street. I grew up with 5 siblings, all of us climbing the hills especially Castle Peak. I rode horses in what is today Bell Canyon. I remember the rocket engines going off all different times of the day, rattling the windows of our home or school. My parents were told it was rocket testing, and that was it. I asked them if they knew about the partial meltdown, and they did not. I lived there from April 1960 until May 14, 1977. My parents moved in August of 1977. I remember so many fires, Santa Ana Winds and heavy flooding in our neighborhood. I was told my first classmate in the third grade being very ill, and then he stopped coming to school. My older sister Annie died from breast cancer that went into her brain. My little brother died from bladder cancer that also came back in his brain. Our next door neighbor died from brain cancer. I myself had my first tumor at age 11, and a brain tumor in my 50s. My granddaughter who lives in my childhood area of West Hills had a very rare cancer at age 4, and it came back at age 6. I have lost so many classmates, friends and neighbors from cancers. Many of my classmates parents who worked on the hill have died from cancers. I cannot stress enough that SSFL needs to be cleaned up. Watching my granddaughter go through chemo ten times stronger than normal chemo still haunts me. I would go to CHLA three times a week to spend time with her. She would ask me to climb into her hospital bed and just hold her. I spent time with my brother at City of Hope in Duarte watching him be brave as his head was placed into a cage for radiation. I was with my brother when he passed away. My family sat and waited at the Skull Clinic for 6 hours for my brain surgery.	Cancer Concerns	
1	b	Deva Andrews	Our last major fire, the Woolsey fire started at the SSFL. If the water tanks were still there and the fire department had a working fire truck perhaps the fire could have been contained. And maybe the containments would not have spread even more through the high winds. We live here. My parents, myself, my children and now my grandchildren live here. That is four generations that have been affected by NASA not caring to clean up their mess. Please do so now. Please take responsiblity for your actions and protect the people.	Wildfire Concerns	
2	a	Deva Andrews	I grew up in the area and my family's health has been affected by the Santa Susana Field Lab. It must be cleaned up to protect future generations.	Cancer Concerns	
2	b	Deva Andrews	We are here in an open forum, but a person Dr. Hirsch was removed because he was giving over facts. What can't we hear the opposing side?	Public Meeting Format	
3		Diana Bain	It is not acceptable to leave ANY carcinogenic waste at the Santa Susana Field Lab, so close to the local community! Please clean up the waste!	Support for AOC	
4		John Bakeberg	Shame on you for your handling of the Santa Susana Field Lab toxic sight. You’re a bunch of no account liars.	Support for AOC	
5		Kristen Beaton	Radionuclides and carcinogenic materials are harming our children and our community. It is your job to clean up SSFL 100% NOW!	Support for AOC	
6		Susan Bradford	Simply put and to the point...It is unacceptable to leave ANY carcinogenic waste in a location so close to the local community....period. It is your responsibility. You've caused enough sickness, death and grief already. CLEAN UP YOUR MESS.(something you people should have learned in kindergarten!) So do it and do it well!	Support for AOC	
7		Elliott C	I hear from website that toxic waste is apparently not going to be removed from santa susana; if true this is a disgrace! Poor people living in fear for their health and can't just choose to move on..	Support for AOC	

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
8		Steven Carter (North American Land Trust (NALT))	I am the President of North American Land Trust (NALT), a national land conservation organization with an exceptional track record of conservation. Over its 26 year history, NALT has completed nearly 540 conservation easements across 23 states protecting over 130,000 acres of significant wildlife habitat and cultural resources, providing diverse outdoor recreational opportunities to the public and helping to ensure clean water and air. In 2017, NALT partnered with The Boeing Company to permanently restrict their portion of the Santa Susana Field Laboratory (SSFL) from any commercial, industrial, residential or agricultural uses. This was accomplished through the establishment of a perpetual Conservation Easement recorded at the Ventura County court house. We're very proud of our conservation accomplishments at the SSFL and the legacy of permanent conservation we've helped establish. I am writing now to share concerns regarding proposed Soil Cleanup standards that are currently being considered on the NASA owned portion of the Santa Susana Field Laboratory, and how they could potentially adversely impact the significant natural, historical and cultural resources documented at SSFL. Although NALT staff biologists and conservation professionals have not had the opportunity to survey the NASA owned portions of SSFL, the property is likely comprised of natural habitats comparable to those documented on the Boeing owned portions of SSFL. These native habitats and ecosystems support a variety of rare and state endemic species. The same is presumably true of the outstanding cultural and historic resources found throughout both the NASA and Boeing owned portions of the SSFL property. If not properly considered, evaluated and monitored, impacts related to the removal of native surface soils and introduction of soil and seed from offsite locations could have lasting negative impacts on the vegetative communities found throughout Boeing's protected property. Heavy truck traffic and excavation equipment used in the soil remediation activities within the NASA owned portions of SSFL would also presumable traverse in and out through the conserved areas of the Boeing owned portions of SSFL. This increased level of activity and disturbance could have negative effects on wildlife movement and migration and contribute to habitat fragmentation. These negative impacts would be especially true for resident and migratory bird species as well as large mammals such as mountain lion, bobcat, fox and mule deer. NALT urges the careful evaluation of the diverse risks attendant to a soil remediation phase on the NASA owned portion of the Santa Susana Field Laboratory and encourages the appropriate consideration of alternatives that would avoid or minimize adverse impacts to the protected portions and significant habitats of the SSFL.	Support for Risk Based Approach	
9		Joyce Coldwells	Thank you for the opportunity to review and comment on the subject document. It has been a longstanding position of the County of Ventura to seek that NASA, as an owner of land at SSFL, clean up contamination to the most protective standards, equivalent to background and consistent with NASA's agreed upon 2010 Administrative Order on Consent (AOC). Alternative A in the Draft SEIS is the only alternative that cleans the site to AOC requirements and as such is aligned with Ventura County's position to be protective of the public's health, our first priority. NASA's November 20, 2019 hearing portrayed the draft SEIS alternatives as having "no discernable differences to health and safety" even though risks would persist if alternatives other than Alternative A were selected. This is because the contamination that would be left on site by the other alternatives would continue to threaten the health and safety of people onsite and offsite during wind, rain, fire and other events. Recently SSFL had 57 violations of pollution standards from stormwater released offsite after the 2018 Woolsey Fire. The types of contaminants found at SSFL have been linked to an increased risk of disease including cancer, thyroid disorders, lymphoma, and leukemia. Draft SEIS maps show that alternatives other than Alternative A would leave large areas of NASA's SSFL property contaminated. Entertaining any alternative other than Alternative A would break the legally binding terms of the AOC. Recycled Paper Board of Supervisors December 17, 2019 Page 2 Furthermore, the current land use of the NASA property is open space. Section 8104· 1.1 Open Space of the Ventura County Non-Coastal Zone Ordinance outlines the purpose and land uses of the Open Space Zone. NASA and Boeing incorrectly conclude that the future land use would be limited to recreational (DEIS, 2019, Executive Summary page 5, and Boeing, 2017a). The Open Space Zone in Ventura County allows for more than recreation, it also allows among other uses, agriculture and housing. Clearly, leaving contaminated soils with the potential for agriculture and housing would pose future health risks. It is of the utmost importance that the SSFL property be fully cleaned up to protect public health and safety. The Ventura County Board of Supervisors strongly recommends Alternative A ("AOC Cleanup,.) and opposes other alternatives that leave contaminants on site that are not consistent with levels stipulated in the AOC.	Support for AOC	
10		Kama Craig	I am writing on behalf of my family, including my 4 year old son, who live in the community surrounding the Santa Susana Field Lab. I implore you to keep your 2010 agreement with California DTSC, for full clean-up of your portion of the site. It is unconscionable that you did not finished the clean-up by 2017 as agreed to, and now the SSFL burned during Woolsey Fire in 2018 and has possibly endangered our children via the contaminated smoke and water. You cannot imagine the anxiety and fear parents in our community feel because of your reckless disregard for our safety. The delay in clean-up, and now the proposed lesser level of clean-up is NOT acceptable! It's TERRIBLE to think that we teach our kids to respect and revere NASA, and yet you would risk their health and well-being in this way. You should be ashamed. We have worked so hard to provide a safe and comfortable home for our family, and you have jeopardized this with your reckless and selfish actions. KEEP YOUR WORD TO OUR STATE! KEEP YOUR WORD TO OUR FAMILIES AND CHILDREN! CLEAN-UP YOUR MESS - FULLY - SO THAT OUR FAMILIES DO NOT HAVE TO LIVE IN FEAR OF THESE TOXIC CHEMICALS MAKING THEIR WAY INTO OUR COMMUNITIES EVER AGAIN.	Support for AOC	

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
11	a	Kristin Danan	I am deeply concerned by NASA's Draft Supplemental Environmental Impact Statement for cleaning up contamination at the Santa Susana Field Lab, which proposes leaving up to 80% of the contaminated soil in NASA's portion of SSFL not cleaned up. This contamination includes highly toxic chemicals such as trichloroethylene, perchlorate, dioxins, heavy metals, and other hazardous chemicals which migrate offsite, posing a risk to those who live in the area around SSFL. In 2010 NASA signed a legally binding cleanup agreement with California, committing to clean up all of the contamination, to background levels, by 2017. But NASA failed to even start the cleanup, let alone complete it. I urge NASA to comply with its agreement to clean up all of the contamination at SSFL. NASA must live up to the law and the commitments it made to undo the toxic mess it created through years of sloppy environmental practices and negligence. Clean it up, all of it, as promised, so that public health and the environment are protected from exposure to SSFL's dangerous contamination.	Leaving Contamination Onsite	
11	b	Kristin Danan	This whole situation is disturbing. Having grown up here (in Thousand Oaks), now knowing that living here and raising my son here has put our lives and health in jeapordy because of NASA's complete disregard for the safety and wellbeing of our local residents is disheartening to say the least. I have seen countless neighbors and friends watch helplessly as their children battle cancers due to the mess at SSFL. My father's oncologist is usually the first doctor to diagnose our local cancer patients, and he is 100% certain that SSFL is responsible for the majority of his patients' cancer. He currently has four patients on the same small culdesac in Simi Valley. That is not some random coincidence. Grow some balls and fix this. You owe it to our suffering residents, especially our innocent children.	Cancer Concerns	
12		Jillian D'Angelo	Please clean up your portion of the Santa Susana Field Lab. Innocent children are suffering chemo therapy and surgeries because of the waste. Please, if I had the money I would give it to you to do this. If I could do it myself, I would. Please clean this up as fast as possible. I know that you would not want to be responsible for more children developing cancer as a result of this carcinogenic waste. I am sure you are a good person and would not be able to live with yourself if you had the blood of people’s precious beloved children on your hands. God is real. He is just and merciful. He will forgive you as long as you truly request it. It is never too late to make the wrong right. God’s love drench you! In Jesus Name!	Support for AOC	
13		Laura Davies Tilley	It is unacceptable to leave carcinogenic waste - any carcinogenic waste - at Santa Susana Field Lab, or anywhere. I am a State employee and we do our best always to represent the best interests of the citizens of our State. I would hope - and expect - that NASA would try to represent and safeguard the citizens of our country. It is disappointing to hear that is not your current plan. Please change your plans and remove all carcinogenic waste from the Santa Susana Field Lab.	Support for AOC	
14		Matthew Davila	it is unacceptable to leave ANY poisonous waste at a dumpsite, let alone up to 100%.	Support for AOC	
15		Richard Dawson	It is unacceptable to leave ANY carcinogenic waste in a location so close to where people live. Stop lying and do a proper clean up.	Support for AOC	
16	a	Denise Duffield (Physicians for Social Responsibility-Los Angeles)	Attached please find a letter regarding two important matters necessary to ensure meaningful opportunity for public comment regarding NASA’s Draft Supplemental Environmental Impact Statement (SEIS) for the cleanup of its portion of the Santa Susana Field Laboratory (SSFL.) These issues pertain to a lack of availability for more than 75% of the references in the SEIS and appendices, and to the time allotted for public comment in the upcoming hearings Nov. 20 and 21. We urge NASA to make all documents referenced in the SEIS and appendices available and notify the public that it has done so, and to ensure it's public hearings enable all participants to give meaningful public comment. Please see the attached letter for further information.	Reference Availability	
16	b	Denise Duffield (Physicians for Social Responsibility-Los Angeles)	We write regarding two matters important to assuring that there is a meaningful opportunity for public comment regarding NASA’s Draft Supplemental Environmental Impact Statement (SEIS) for the cleanup of its portions of the Santa Susana Field Laboratory (SSFL), as required by the National Environmental Policy Act (NEPA). **Availability of Documents Upon Which the Draft SEIS Relies:** Much of the Draft SEIS consists of conclusory assertions. When a basis is referred to, the referenced document has generally not been made available by NASA. NASA has neither posted on its SSFL website nor provided a URL for more than 75% of the references, either those for the main body of the draft SEIS or its appendices. NEPA is at its heart a public disclosure and public participation statute. There cannot be meaningful public comment if NASA does not make readily available the documents upon which the claims in its SEIS are based. We note that the Department of Energy, for its draft EIS for SSFL, posted virtually all its references http://www.ssflareaiveis.com/documentation.aspx). We urge NASA to promptly do the same, and notify the public of the availability of that documentation.	Reference Availability	

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
16	c	Denise Duffield (Physicians for Social Responsibility-Los Angeles)	NASA has scheduled two public hearings on its Draft SEIS, one in Ventura County on November 20 and one in Los Angeles County on November 21. However, it has allotted at most two hours (6:30 p.m. to 8:30 p.m.) If sixty people attended each night, for example, each person would get a mere 120 seconds to testify. If NASA were to choose to use up some of those two hours in a presentation at the start of the hearing trying to defend its controversial draft, each member of the public might get only on the order of 90 seconds to make their comments. If more than sixty people are present, each might only get a single minute. The draft SEIS is over a thousand pages long. It is filled with detailed and controversial claims related to NASA's proposal to not comply with the legally binding Administrative Order on Consent. While written comments will also be accepted, if there is to be a public hearing it should be organized in a fashion to maximize the opportunity for public comment. We therefore urge that NASA (1) extend the time of each hearing to 9:30 p.m., and (2) not use up valuable hearing time with a NASA presentation defending its draft SEIS. The NEPA hearing should be for the public to be able to tell NASA their views about the draft SEIS, not vice versa.	Public Meeting Format	
17	a	Denise Duffield (Physicians for Social Responsibility-Los Angeles)	We write to follow up on our letter dated November 11, 2019, regarding matters of importance for assuring meaningful opportunity for public comment on NASA's Draft Supplemental Environmental Impact Statement (SEIS) for the soil cleanup of its portions of the Santa Susana Field Laboratory (SSFL). We have received no reply to that letter. Based on the concerns identified in that letter and those identified below, we respectfully request that NASA extend the deadline for public comment on the Draft Supplemental Environmental Impact Statement (SEIS) for Soil Cleanup Activities at Santa Susana Field Laboratory, 84 Fed. Reg. 57,490 (Oct. 25, 2019), for an additional forty-five (45) days. We also respectfully request NASA hold an additional public hearing, in a true hearing format, allowing formal oral testimony and the use of supporting exhibits shown as slides, before the comment period closes. NEPA is at its heart a public disclosure and public participation statute.There cannot be meaningful public comment if the public does not, during the full comment period, have readily available the documents upon which NASA based its claims in the Draft SEIS. We therefore request NASA extend the comment period 45 days from the date NASA publicly posts the full reference documents.This will allow the public the opportunity to review all newly available relevant documents and to provide fully informed comments on the Draft SEIS. Since written comments are due shortly, we request that NASA promptly announce whether it is granting the extension and the request for a formal hearing. Withholding such an announcement until shortly before the due date for written comments would further interfere with meaningful comment, as people would have to operate on the assumption of a Dec. 9 due date because of the failure of NASA to timely announce whether that date is being extended. We hope NASA will take the necessary steps to return to a course of action that meets NEPA's core principles of transparency and assuring meaningful public comment on NEPA documents.	Comment Period Extension Request	
17	b	Denise Duffield (Physicians for Social Responsibility-Los Angeles)	In our prior letter, we expressed concern that more than 75% of the reference documents relied on in the draft SEIS have not been made available by NASA, preventing meaningful public comment on the draft SEIS. We understand that NASA representatives acknowledged this failure to provide public access to the referenced documents at the public meeting held on Thursday, November 21st, 2019, and that NASA said it would place on its SSFL website the missing documents by the end of the following week (i.e., after Thanksgiving). [As of the dateof this letter, they have not been posted.] We appreciate that NASA is working to fix this error. However, the belated availability of scores of lengthy documents on which the assertions in the SEIS are based means that the public has not been given a meaningful opportunity to review and comment upon the draft SEIS. If NASA posts the documents by the end of the week, that will mean that they will not have been available for more than a week after the two public meetings NASA held to receive comments on the NEPA document. And if released by the end of this week, they would only be available for roughly six business days before written comments are due.	Reference Availability	
17	c	Denise Duffield (Physicians for Social Responsibility-Los Angeles)	NASA held two "public meetings" on its Draft SEIS, one in Ventura County on November 20 and one in Los Angeles County on November 21. Both meetings followed the same unusual format. Rather than the standard hearing format, in which there are chairs for the public, news media, and staffs of elected to sit in while they listen to public testimony, there were almost no chairs and NASA merely had its own posters on easels around the walls of the room, with NASA staff standing next to the posters, presenting their defense of the draft SEIS.There was a court reporter sitting off in a corner, to whom members of the public could make brief private comments but which virtually no one else in the room could hear. At the Nov. 21 meeting, NASA did not even announce to people that they could make comments to the court reporter.On November 20, NASA physically blocked people who came to present comments on the draft SEIS from showing slides of exhibits as part of their testimony, forcing the PowerPoint projector to be disconnected.NASA personnel interposed themselves between the projector and the screen to physically obstruct the proffered testimony. The format meant that NASA provided a one-sided presentation, promoting the controversial claims made in the draft SEIS, without allowing the public the benefit of listening to individual's testimony and concerns about the draft SEIS, which could inform their own testimony. Further, NASA physically blocked the slides that were to support the oral testimony. Because the documents that purportedly support the claims made in the draft SEIS were not publicly available at the time of the two meetings held to receive comments, and because the meetings failed to be anything even roughly equivalent to a public hearing for testimony on the NEPA document, we request NASA hold an additional public meeting in the traditional hearing format in which individuals may present oral comments not only to NASA but also to the attendant community and use what visuals they choose as part of those comments.	Public Meeting Format	

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
18		Denise Duffield (Physicians for Social Responsibility-Los Angeles)	NASA's Draft SEIS for the cleanup of soil at the Santa Susana Field Laboratory omitted the 2006 study "Potential for Offsite Exposures Associated with Santa Susana Field Laboratory" from headed by UCLA's Dr. Yoram Cohen, Professor of Chemical Engineering and Director of the UCLA Center for Environmental Risk Reduction. I am sending the study to be included as a supplemental comment. Due to its size, I will send the study over several emails.	Missing Health Studies	The Potential for Offsite Exposures Associated with Santa Susana Field Laboratory, Ventura County, California. Final Draft Report. Report Prepared by Center for Environmental Risk Reduction. University of California at Los Angeles, California February 2, 2006
19		Denise Duffield (Physicians for Social Responsibility-Los Angeles)	Attached are the appendices for the 2006 study "Potential for Offsite Exposures Associated with Santa Susana Field Laboratory" from headed by UCLA's Dr. Yoram Cohen, Professor of Chemical Engineering and Director of the UCLA Center for Environmental Risk Reduction which were submitted in a separate email. These should be included with the study as a supplemental comment on NASA's Draft SEIS for the SSFL cleanup, since NASA failed to mention the study at all.	Missing Health Studies	The Potential for Offsite Exposures Associated with Santa Susana Field Laboratory, Ventura County, California. Final Draft Report. Report Prepared by Center for Environmental Risk Reduction. University of California at Los Angeles, California February 2, 2006 (Appendix A through U)
20		Denise Duffield (Physicians for Social Responsibility-Los Angeles)	NASA's Draft SEIS for the cleanup of soil at the Santa Susana Field Laboratory misrepresented and omitted information related to SSFL health studies. Attached please find a letter regarding the 2007 University of Michigan study, "Cancer Incidence in the Community Surrounding the Rocketdyne Facility in Southern California" from its author, Dr. Hal Morgenstern, written to Senator Simitian on April 17, 2007 after Boeing misrepresented the study. Morgenstern states, “Boeing’s assertion that we found no increased cancer rates in the communities surrounding SSFL is false. We did, in fact, find increased incidence rates of certain cancers associated with proximity to the facility, the significance of which would require further research.” Please include this email and the attached Morgenstern letter as supplemental comments on NASA's Draft SEIS from Physicians for Social Responsibility-Los Angeles. I will send next, in a separate email, a study that NASA entirely omitted in its Draft SEIS regarding the potential for offsite exposures associated with the Santa Susana Field Laboratory.	Missing Health Studies	April 15, 2007 Letter from Hal Morgenstern, PhD to Senator Joe Simitian, Chair Committee on Environmental Quality Re: The Boeing Company Statement in Opposition to SB 990 (Kuehl) April 2007
21		Tara Ebrahimian	Please reconsider your stance on the Santa Susana Field Lab. To leave the toxins there is to be responsible for contributing to the continued poisoning of people, including children. Thank you.	Support for AOC	
22	a	Iris Edinger	1) The plan to leave contaminated soil in a public park seems ludicrous. People go to parks to experience nature as opposed to our mechanical society and yet this would be a "booty trap". 2) You maps weren't "grounded" with names of streets, etc. so that we could locate our residences on a map. 3) Where will you (optimistically) put contaminated soil and where will you get replacements?	Leaving Contamination Onsite	
22	b	Iris Edinger	4) It was "scary" to see police with guns.	Public Meeting Format	
23		Tracey Ellison	I find it unconscionable that you would leave your toxic waste at SSFL. It is too close to the local population. How many children must die of cancer for you to take responsibility? Do it npow! Remove 100% of your carcinogenic waste!	Support for AOC	
24		Peggy Fisher	it is unacceptable to leave ANY carcinogenic waste in a location so close to the local community.	Support for AOC	
25		Laura Foggini	It is unacceptable to leave ANY carcinogenic waste in a location so close to the local community. save lives and clean up waste	Support for AOC	
26	a	Wendi Gladstone (Santa Susana Mountain Park Association)	The Board of Directors of the Santa Susana Mountain Park Association would like to thank NASA for realizing the problems associated with the 2010 AoC’s. We fully agree with NASA IG that the cleanup to Background is “Unachievable”. We feel Alternative D will be protective of human health in the surrounding community and be safe for daily hikers and visitors, while providing protections for wildlife, habitat and cultural and historical resources.	Support for Risk Based Approach	
26	b	Wendi Gladstone (Santa Susana Mountain Park Association)	We would like NASA to preserve all the Test Stands, however we realize this is probably cost prohibitive. Please preserve at least one of the test stands as monument to the genius of the American Space Program. We recommend that the Coca test stand be chosen for preservation due to the location of that test stand and other archaeological assets on the property.	Resource Concerns	
27		Michelle Glittermum	Children are dying. Clean it up. Stop the bullshit.	Cancer Concerns	

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
28		Libbe HaLevy	Hey! You! How DARE you! NASA's Draft SEIS for "cleaning up" the Santa SusanaField Laboratory is a total sham and con job, inadequate for the radioactive and polluted mess that has been made of the site. Trying to duck out on your legal agreement - which was supposed to have you FINISHING the clean-up as of 2017 - is unconscionable. Do you actually think that you are immune to the consequences of your actions? Do you think that money can justify your long-range, slow motion murder of people and future generations by leaving this waste on-site to contaminate people and the environment forever into the future? Can you actually sleep at night? Or have you lobotomized your conscience in order to justify money-saving schemes like taking out the fire station that could have stopped the Woolsey fire?!?!??? Or do statements like this just give ou a good chuckle, that we-the-people think that by protesting your either incompetence or maliciousness we'll make one whit of difference in the outcome? Are you so addicted to money that you can't value life and its future? Change course. Now. Commit to what you already committed to - a total clean-up of the Santa Susana Field Lab to pre-contamination levels. If not, every time another one of your family members, friends or neighbors - or their children/grandchildren - develop cancer, immune system diseases, autism, or any one of the range of radiation-caused illnesses, know that this is not just some random bad luck; it's your doing. You did it. That is, if you don't step up to your responsibilities and provide a total clean-up of the site. I damn you to hell if you don't. But then, perhaps you already live there and just haven't recognized the scenery. It looks a lot like an unmediated SSFL.	Support for AOC	
29		Tirza Haviv	The Boeing Company found radionuclides in Woolsey Fire smoke on its property including the highly poisonous Polonium-210 (Po-210), a substance 250,000 times more lethal than hydrogen cyanide. Po-210 is the Russian radionuclide of choice for assassination because of its lethality. Boeing found it *twice* in Woolsey Fire smoke. We are demanding the 100% cleanup of the Santa Susana Field Lab, because dangerous radionuclides and carcinogenic chemicals have NO PLACE IN OUR COMMUNITY.	Wildfire Concerns	
30	a	Linda Hawkins	I'm not sure I'm getting accurate information in regard to an issue about which I deeply care, so I'd like to know NASA's side of it. I'm one of the more than 700,000 people who want your agency to clean up the Santa Susana Field Lab, which seems to be causing a huge increase in the number of cases of childhood cancer and death in nearby communities. You may be under the impression that only those at the public meeting you recently held care about this issue, but that's a vast underestimation.	Cancer Concerns	
30	b	Linda Hawkins	Could you please tell me if it's true that NASA has announced it will not fulfill the promise it made years ago to clean up that site and instead plans to leave 100% of the waste there? Could you also tell me if NASA had a peaceful protestor removed from a supposedly public meeting that was recently held about the issue?	Leaving Contamination Onsite	
31	a	Lori Hawkins	I am deeply concerned by NASA's Draft Supplemental Environmental Impact Statement for cleaning up contamination at the Santa Susana Field Lab, which proposes leaving up to 80% of the contaminated soil in NASA's portion of SSFL not cleaned up. This contamination includes highly toxic chemicals such as trichloroethylene, perchlorate, dioxins, heavy metals, and other hazardous chemicals which migrate offsite, posing a risk to those who live in the area around SSFL. In 2010 NASA signed a legally binding cleanup agreement with California, committing to clean up all of the contamination, to background levels, by 2017. But NASA failed to even start the cleanup, let alone complete it. I urge NASA to comply with its agreement to clean up all of the contamination at SSFL.	Leaving Contamination Onsite	
31	b	Lori Hawkins	I am 64 years old and was a first resident of homes built in 1959, just a few miles away from the site, in Canoga Park(near Valley Circle and Vanowen). That means that I was living there when the meltdown toxic fumes and everything else, was there!!! I have lost many of my family members from numerous types of cancer, including Hodgekins Disease, colon cancer, lung cancer, pancreatic cancer, brain cancer and breast cancer! Is that a coincidence? I highly doubt it, since the facts show that the SSFL site is full of cancer causing chemicals. We were promised that it would be cleaned up so that future generations could live a healthier life. NASA needs to \do their job and clean up this horrific site with complete cleanup!	Cancer Concerns	
32		Linda Headley	I am appalled, as an American and a taxpayer, that NASA plans to leave 100% of known toxic waste in place at the Santa Susana Field Lab. People are dying from the exposure, many of them children sentenced by NASA to a long and horrific illness and death before they have a chance to live. If our government has money for an unnecessary wall on our border, and money to fund Donald Trump's ubiquitous golf outings, we have money to remediate toxic waste sites near residential areas. I am equally appalled that NASA removed a peaceful protestor who sought to present evidence of the effects of its plans from a public meeting. This is America, not Turkey or Russia.	Leaving Contamination Onsite	
33		Amy Hikita	Please clean up the Santa Susana field lab!	General	
34		Mark Hixon	Please clean-up the toxic waste at your Santa Susana Field Lab in California. That region is my home – my young nieces live nearby. I believe the evidence is sufficient that these toxins pose a substantial public health threat. It is clearly unacceptable to leave any carcinogenic waste in a location so close to a local community.	Cancer Concerns	
35		Illegible	Live up to your cleanup agreement.	Support for AOC	

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
36		Robert Janusko	If I foul my yard, it is my responsibility to clean it up. If NASA fouls its site, it is NASA's responsibility to clean it up. You have a responsibility to America, to me, to my children and grandchildren. Clean your mess.	Support for AOC	
37	a	Alex Jasset (Physicians for Social Responsibility-Los Angeles)	In addition to the meeting format being very anti-democratic, I also found NASA's signs to be completely misleading and lacking proper citation.	Public Meeting Format	
37	b	Alex Jasset (Physicians for Social Responsibility-Los Angeles)	I fully support Alternative A as the only acceptable alternative. Every other option would leave substantial pollution on-site to the detriment of nearby communities.	Support for AOC	
38		Thomas Keys	Do your job!!!! It is unacceptable to leave any carcinogenic waste in a location so close to the local community. Put your kids or other loved ones there. Does that change your mind about it? You don't get the right to use taxpayer funds for research projects then have the demonic carelessness to leave a once virgin site contaminated with all kinds of cancer-causing fallout & chemicals. Do your mother loving job & care about your fellow human being! That is all we common folk ask. If I faced one or many of you face to face, it would not be a good day for you, regardless of whatever law enforcement you cowards hide behind.	Support for AOC	
39		Leslie Koch Koumberg	My name is Leslie Koch Koumberg and I was born in Van Nuys in 1959 and have lived nearly my entire life in the West San Fernando Valley. My Father Edward Koch II was employed by Rocketdyne from 1955 through 1966 at which time he left to pursue his music career on The Jerry Lewis Show. My oldest brother, Edward Koch III was employed by Rocketdyne from 1964-1969. My Father passed in 1995 at the ages of 75 from respiratory issues linked by his doctor to the constant exposure of the toxic fallout at Rocketdyne/Santa Susan Field Laboratory. He said he had never seen such severe lung damage in a man who never smoked. In 2009, my brother John Koch was diagnosed with Leukemia at the ages of 55, a disease which has no other family history. In 2017, I was diagnosed with a massive Meningioma which required me to undergo a craniotomy to remove. There is no other family history. I have a very large scar and continue to suffer from that experience with vision and memory issues. I am required to have an annual MRI for the rest of my life, the next is actually tomorrow. Just this year, my brother Eddie Koch was diagnosed and treated for Renal Cancer. He is 77 and again, no other family history. My son's childhood friend, Jeremy Lebman lost his father a few years ago at the age of 51 to thyroid cancer. He had lived much of his life in Chatsworth. I had been in touch with the man behind the making of a documentary called "The Secrets of Santa Susanna Field Laboratory". I had left him a Facebook message that I had found some old Rocketdyne documents in case he was interested. I will read you his response {see attachments]	Cancer Concerns	
40		Mary Kolberg	Please do your job and clean up the Santa Susana Field Lab. It is unacceptable that you are allowing this contamination to remain and harm our communities. It is noted that you specifically found it in the smoke during the Woolsey Fire, which we all then inhaled. There is no way that is safe. I am raising a toddler and a newborn just a couple miles away and this is a huge concern for our ongoing safety. You signed a commitment to clean this up and you should follow through.	Wildfire Concerns	
41		Rashmika Kommidi	I heard about NASA's intentions to turn their back on Santa Susana and leave all the carcinogenic waste in the field lab. I am very disappointed with how NASA refused to listen to the activists and even had police presence remove them. Through these actions you have made it clear you don't care about the people. Many children in Santa Susana have fallen ill and even died of cancer from exposure to the toxic waste in the field lab. NASA needs to take the initiative to clean up the waste. It is NOT right for you to let the people of Santa Susana suffer because of your refusal to help. This is a democracy, not a dictatorship.	Leaving Contamination Onsite	
42		Dawn Kowalski	Why do you persist in having these ridiculous meetings twisting the facts is counter productive to the clean up of the site. With people still being harmed and NASA dragging its feet about cleaning up its site and trying to renig on the signed AOC agreement is shameful. Do the right thing.	Public Meeting Format	
43		Juli Kring	As a mother and a grandmother, I am very concerned for the health and viability of the planet our children and future generations will inherit. We have a duty to our communities, families and most importantly, children to ensure their safety and well being through environmentally sound, sustainable and *responsible* policies. The duty to public and environmental health and safety should always be top priority. So, I strongly urge you to remove any and all carcinogenic waste in a location close a local community, in this case *specifically*, the Santa Susana Field Lab.	Support for AOC	
44	a	Vhumbani Mancilla	It appears as though you are more concerned about cost and not about health impact. You are trying to get away with doing as minimal as possible.	Support for AOC	

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
44	b	Vhumbani Mancilla	There are alternatives to making sure ensuring a clean/safe transportation of these hazardous material you cannot say that trucks moving material pose a risk. Why can't you ensure safety?	Resource Concerns	
45	a	Mark Osokow and David A. Weeshoff (San Fernando Valley Audubon Society)	CURRENT POSITION OF SFVAS The current position of SFVAS is essentially unchanged from that expressed in the above-referenced documents. That position is that the SSFL soil cleanup must be based on a risk-based open space or parkland standard; i.e., the "recreational standard" described in the DSEIS as "Alternative D." This alternative provides the best opportunities for avoiding adverse impacts to the natural, cultural, and historical resources present at SSFL, while protecting the health of people visiting or working at the site and avoiding impacts to surrounding communities and communities through which wastes must be transported. Given that multiple studies, cited in the DSEIS have concluded that there have been no health impacts to surrounding communities from contaminants originating from SSFL, it would defy logic to invest large sums of money in activities that eliminate non-existent health impacts from the site. By the same token, it would make no sense to deprive stressed communities of much needed open space by foolishly destroying the beneficial natural, cultural, and historical resources there. Much of that destruction will occur through the direct action of excavation or demolition. However, the removal of significant amounts of productive soil that will be replaced only in small part with fill that will likely be incompatible with the existing habitat will lead to additional degradation, increased erosion, and increased fire danger as invasive plant species come to dominate the site. CONCLUSION SFVAS advocates a soil cleanup based on Alternative D, the "recreational standard." This alternative best protects public health and the environment. Thank you for the opportunity to submit comments regarding this important process.	Support for Risk Based Approach	December 14, 2017 letter form San Fernando Valley Audubon Society (SFVAS) to DTSC; November 20, 2017 letter from SFVAS to DTSC; July 15, 2017 letter from SFVAS to DOE; April 11, 2017 letter from SFVAS to DOE; October 1, 2013 letter from SFVAS to NASA
45	b	Mark Osokow and David A. Weeshoff (San Fernando Valley Audubon Society)	As discussed above, SFVAS has not been permitted to perform bird monitoring directly on NASA administered property. Previous SFVAS comments had described the recognition of approximately 114 species of birds at SSFL. However, that figure has increased substantially, and that number is now approximately 154 species -- a much greater number of species than reported by NASA wildlife consultants. Clearly, wildlife is flourishing at the site, as further evidenced by the recent presence of families of mountain lions that could only exist where their food source is also flourishing. SFVAS urges NASA not to jeopardize the welfare of SSFL wildlife by yielding to the foolish demands of well-organized and aggressive radical groups or individuals.	Resource Concerns	
46		Marie Mason	I am deeply concerned by NASA's Draft Supplemental Environmental Impact Statement for cleaning up contamination at the Santa Susana Field Lab, which proposes leaving up to 80% of the contaminated soil in NASA's portion of SSFL not cleaned up. This contamination includes highly toxic chemicals such as trichloroethylene, perchlorate, dioxins, heavy metals, and other hazardous chemicals which migrate offsite, posing a risk to those who live in the area around SSFL. In 2010 NASA signed a legally binding cleanup agreement with California, committing to clean up all of the contamination, to background levels, by 2017. But NASA failed to even start the cleanup, let alone complete it. I urge NASA to comply with its agreement to clean up all of the contamination at SSFL. NASA must live up to the law and the commitments it made to undo the toxic mess it created through years of sloppy environmental practices and negligence. Clean it up, all of it, as promised, so that public health and the environment are protected from exposure to SSFL's dangerous contamination.	Leaving Contamination Onsite	
47		Ellen McCann	I grew up believing that the government cared about me and elected officials were looking out for the best interest of the community they serve. How wrong I was. The government and corporations are poisoning our planet and us and won't accept responsibility for it. It is criminal to knowingly harm the people and the planet. Time to stand up, take responsibility, stop adding to the problem and take responsibility for past mistakes. It is unacceptable to leave ANY carcinogenic waste in a location so close to the local community. Shamefully disappointed in the human race, me included.	Leaving Contamination Onsite	
48	a	Claire Miculian	I am writing to you regarding my concerns about the delayed releasing of the documents referenced in and relied upon in the NASA Draft Supplemental EIS for SSFL... Although NASA has said they will release the EIS by the end of the week, it does not provide a sufficient amount of time for public review, since two hearings to solicit public comment occurred more than a week before the now promised release of the documents. And since comments close only on Monday the 9th, basically providing a week for their review. I am therefore requesting an extension for comments of at least 45 days, so the public can properly review and comment on the SEIS. And please do not delay announcing a decision on the extension - please announce it immediately so that people know they have the additional time.	Comment Period Extension Request	
48	b	Claire Miculian	Three-fourths of the references still have not been release	Reference Availability	

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
49	a	Claire Miculian	After reading through the Draft Supplemental Environmental Impact Statement (SEIS), I have several concerns. NASA signed a legally binding Administrative Order on Consent (AOC) with the DTSC in 2010, requiring it to clean up 100% of the contaminants. However, the SEIS proposes three different alternatives that have far lower cleanup standards, leaving up to 88% of contaminated acreage not cleaned up. These alternatives clearly breach the AOC. NASA does not have the option to opt out of this agreement. Moreover, according to the Resource Conservation and Recovery Act, NASA, as the polluter, cannot decide on how much pollution it should remediate. In conclusion, NASA should withdraw its draft SEIS. All of the new SEIS alternatives would violate the AOC NASA signed. Even if there were no AOC, NASA as the polluter doesn't get to decide how much of its pollution it cleans up; that, under RCRA, is the authority of DTSC. I strongly urge NASA to change direction and fully comply with the agreement it signed and the law. Public health and protection of the environment are at stake.	Compliance with Law	
49	b	Claire Miculian	NASA tried to justify the need for the SEIS and its proposal of these non-compliant cleanup alternatives by relying on the discovery of 75% more contaminated soil than it had previously thought. However, finding MORE contamination than previously thought cannot be a justification for cleaning up FAR LESS contamination than NASA had promised. These findings of increased amounts of contamination are, however, all the more reason to undergo a full cleanup, and cannot form the basis for an SEIS that proposes to violate the legally binding AOC and clean up much less than it requires. In addition, the proposed cleanup levels from the alternative plans pose a risk for the people in the surrounding areas and the ecosystem on site. NASA's own comparison tables in the appendices show that its Suburban Residential Cleanup Levels (Alternative C) and Recreational Cleanup Levels (Alternative D) are, for many contaminants, much higher (weaker) than NASA's own Ecological Risk Levels, demonstrating that, contrary to the claims in the SEIS, such an alternative would not be protective of ecological receptors. Furthermore, the levels for Alternatives B, C, and D for many contaminants all exceed, often by large amounts, even the suburban residential levels identified by DTSC in its Standardized Risk Assessment Methodology. NASA appears to have arrived at its far weaker proposed levels by excluding the garden pathway from the suburban residential exposure scenario; there is of course no basis for doing so. NASA's proposed levels, in addition to violating the AOC and ignoring DTSC's authority under RCRA to set the cleanup standards, are far too weak. If they were adopted, it would make it dangerous for everyone in the area. This contamination left behind can migrate offsite via wind, release during fires, or surface water leaving the site and draining into water sources that pass through neighborhoods, exposing the public to harmful chemicals.	Leaving Contamination Onsite	
49	c	Claire Miculian	Furthermore, NASA exaggerates the soil volumes required by the AOC for cleanup, by assuming that the contaminated soil at the top layer needs to be removed down 20 feet or to bedrock, where there is no evidence of contamination to such depths at those locations. This is presented in the SEIS where it mentions the soil excavation numbers "represent the upper levels of expected excavated soil quantities and footprint" (p.2-12). NASA is assuming the largest amount of soil excavation under the AOC to try to make this agreement look outrageous compared to their own alternatives, but is doing so by grossly inflating the soil estimates.	Soil Quantity Estimates	
49	d	Claire Miculian	Also, NASA has still not made available to the public over 170 documents referenced in the SEIS. I would like to request that these documents are released to the public as soon as possible.	Reference Availability	
50		Christine Morrisey	There is no justification for leaving 100% of your toxic and carcinogenic waste on the Santa Susana Field Lab site. It is unacceptable to leave ANY carcinogenic waste in a location so close to the local community. It is also unacceptable to lie to the concerned citizens via a calculated disinformation campaign. Shame on the American governmental agencies participating in this cover up of a deadly toxic waste site.	Leaving Contamination Onsite	
51	a	Ally Pecego	I am writing to express my concern over NASA's lack of action in fulfilling its duty to restore the Santa Susana Field Lab (SSFL) back to its normal and safe conditions, i.e., before NASA contaminated it.. In 2010, NASA signed a legally binding contract, the Administrative Order on Consent (AOC), stating it would clean up all of the contamination it caused through its damaging environmental practices by 2017. 2017 came and went with NASA doing little to uphold its promise, allowing the toxic chemicals in the land it used to remain.	Support for AOC	
51	b	Ally Pecego	Then, on November 8th of last year, the Woolsey Fire broke out. The results: 80% of the area in SSFL was burned, releasing carcinogenic material and other detrimental substances into the air, exposing people in the surrounding Los Angeles area which could lead to major health risks. Further, the chemicals that were not burnt in the fire were and continue to be swept away into the hearts of adjacent cities and bodies of water when it rains through runoff.	Wildfire Concerns	

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
51	c	Ally Pecego	Now, after years of inaction, NASA has returned with a new proposal, the Supplemental Environmental Impact Statement (SEIS), in which it plans to leave up to 88% of the contamination on site, not cleaned up. However, it is not up to NASA to determine how much of the pollution it is going to clean up -- the AOC it signed, along with a letter from the Council on Environmental Quality, made it explicitly clear that the EIS was only to consider alternatives for how to achieve AOC cleanup goals, not whether or not to reach those goals. By proposing illegal alternatives to its promised course of action, NASA has made it very clear it does not intend to take responsibility for the contamination it has fostered and has continuously shown little reliability on resolving this issue. So, though it is required by law to decontaminate the mess it created, NASA has done little to alleviate the situation and through its negligence, allows the safety of the environment and people to be at risk. NASA must complete its job and remove all of the contaminated soil and polluting substances in the area to ensure the health and security of every person and inch of land in and around the Santa Susana Field Lab. NASA should reverse course and promptly come into full compliance with the AOC it executed.	Compliance with Law	
52		Dawn Peterson	YOU are unacceptable to leave ANY carcinogenic waste in a location so close to the local community. kids with cancer as we speak. People stuck with poison homes and land. They cannot afford to sell and move. Who in their right mind would buy? Buy that land from them and clean it and seal it off, or you are EVIL!!!!!!!!!!!!!!!!!!	Cancer Concerns	
53		Robert Qua	I recently learned that NASA announced that it plans to leave up to one hundred percent of the toxic waste in the soil at the Santa Susana Field Lab site. Permanently. This is completely unacceptable. There should not be ANY carcinogenic waste in a location so close to the local community. There are children and families living nearby and many of them have developed rare cancers that are devastating the community. As a taxpaying citizen I respectfully ask NASA to rethink this announcement.	Leaving Contamination Onsite	
54		Steve Randall (West Hills Neighborhood Council)	I have studied this issue for 20 years. I believe that the contamination needs to be cleaned up to a level that is "safe"! Removing soil and contamination that is below the level that poses a danger to people living nearby or frequently visiting the site is not needed.	Support for Risk Based Approach	
55	a	Dorri Raskin	We need to send public comments to NASA regarding the fact that they do not want to clean up their toxic chemicals at SSFL(Santa Susana Field Lab)/Rocketdyne. They want to leave 80% contaminated soil in their portion of SSFL. This is unacceptable. As you know,the toxic metals,and chemicals migrate off site,causing harm to those who live near the site. We are telling them to clean up completely to the agreement on consent that they signed in 2010.; this is a legally binding contract.(NASA's cleanup was suppose to be completed by 2017,but it never started.) Both our public heath and the environment need to be protected from exposures to SSFL/Rocketdyne's dangerous contamination.	Leaving Contamination Onsite	
55	b	Dorri Raskin	The Woolsey fire started on the NASA's land. Both Boeing and NASA dismantled a fire station with 5 modern fire trucks,water infrastructure-they had huge water barrels,pipes, and fire hydrate was dismantled in 2016;instead they placed a small fire station with only one old,1950 fire engine that broke down during the fire. The station was at the entrance to the site.Both toxic chemicals and radiation was released during the fire.	Wildfire Concerns	
56		Elyse Rhodin	This is a comment on the Draft Supplemental Environmental Impact Statement for Soil Cleanup Activities at Santa Susana Field Laboratory. NASA agreed to engage in a complete cleanup of its portion of the Santa Susana Field Lab site in 2010. I think the site should be cleaned up to “background” cleanup standard per the AOC; in truth, I think the site should have been fully cleaned up in such a manner already, by the summer of 2017. I think that the clean up should include measures to minimize the escape of any contamination into the surrounding area.	Support for AOC	
57		Coral Richardson	Upon reviewing the “Draft Supplemental Environmental Impact Statement for Soil Cleanup Activities at Santa Susana Field Laboratory,” I note that page ES-3, the first paragraph, states, “California State University studies have shown that amending backfill materials to produce soil that is capable of supporting the SSFL ecosystem would result in soil with chemical nutrient levels that exceed the AOC LUT value.”) No citation is given after that claim as to the sources. The exact studies being referenced in that statement are not cited or clearly referenced making it impossible to contribute meaningful analyses of the proposed conclusion. Would you please provide the studies that support this statement, which from the statement are suggested to be multiple studies (plural) from multiple campuses of the Cal State University system? Secondly, most of the documents in the references section of the draft SEIS have not been made available by NASA. No active URL is provided for most of them, nor has NASA posted any of the references on its SSFL website. Without access to the documents on which the draft SEIS assertions are predicated, meaningful public comment on the SEIS is impossible. I formally request NASA post all the references cited in the SEIS immediately on its SSFL website, so that meaningful public comment is possible. Failing to do so would give the appearance that NASA has something to hide, and would be contrary to the fundamental requirement of public disclosure and meaningful opportunity for public comment required by the National Environmental Policy Act.	Reference Availability	

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
58		Coral Richardson	It has been 18 days since my initial email was sent to you addressing my concerns and requesting that the documents referenced in the draft SEIS that should be made easily accessible to the public. Your silence is irresponsible and telling of NASA's intentional neglect to provide sufficient public documentation of your claims. With this follow up email, I again request NASA to make publicly available all the references in the draft SEIS to allow proper public comments to be made.	Reference Availability	
59		Coral Richardson	In 2010, NASA entered a legal agreement to clean up the Santa Susana Field Laboratory by 2017. Now, nearly a decade after executing that agreement, NASA is attempting to breach their agreement and produce revised cleanup levels that are up to 3 million times less protective than the original commitments and requirements. The Administrative Order on Consent (AOC) clearly outlined the necessary actions NASA was required to take to ensure the proper restoration of the site. This draft Supplemental Environmental Impact Statement comes in light of the Woolsey fire and the discovery of significantly higher levels of contamination for which NASA is responsible. NASA says it recently discovered the level of contamination it created is 75% higher than previously thought. If such new information of more contamination has any relevance, it would be to require more cleanup. However, the proposed alternatives presented by NASA all would violate the AOC, leave uncleaned up the majority of contaminated soil, and is dangerous and inappropriate, considering the state government toxics agency has the authority for regulating cleanup levels, not NASA. Most importantly, the AOC is a legally binding document that was executed in 2010 and those standards cannot legally be changed unilaterally by NASA. Any effort by NASA to disobey the requirements of the AOC would be illegal, as that is a breach of the contract. Regardless of the legally binding AOC, as a government organization, NASA's goal throughout the cleanup process should be to promote health and safety of the residents who must now bear the effects of residual contamination. The proposed clean up alternatives leave up to 88 percent of contaminated acreage not cleaned up, which would lead to these dangerous chemicals running into local communities and leaching into groundwater. In addition to attempting to walk away from its cleanup responsibilities, the standards NASA is instead proposing to use are far weaker than even suburban residential standards, considering NASA, with no basis, excludes the required residential garden pathway. It is important for the AOC standards to be upheld to ensure the safety of the environment and local residents. While NASA falsely claims its proposed levels of toxins are safe for the community, which they clearly are not, even NASA's own SEIS tables show that such pollutant levels proposed to be left in place at SSFL are not safe for plants and animals that coexist in the area. NASA also continues to inflate estimates for soil excavation to make a false PR case for less responsibility on the site. This is even stated in the report as they mention the numbers which represent the upper levels of anticipated soil removal. I strongly urge NASA to withdraw the draft SEIS and start complying with the AOC it signed and is legally bound to follow.	Compliance with Law	
60	a	Charlene Rothstein (West Hills Neighborhood Council)	The West Hills Neighborhood Council (WHNC) has taken a formal position in support of a health risk based clean up. Clean up to a level that is safe. Please refer to the letter submitted by WHNC.	Support for Risk Based Approach	
60	b	Charlene Rothstein (West Hills Neighborhood Council)	My personal opinion based on 20 years of involvement with SSFL: I believe it would serve the community well if all agencies agreed to a clean up to parkland, no homes, no agricultural with as much on site cleaned up as possible and of course, health risk based. Thanks again.	Support for Risk Based Approach	
61		Bruce Rowe	Use a risk based clean-up that protects human health and also protects an important wildlife corridor.	Support for Risk Based Approach	
62	a	Christine Rowe	Attached are my comments to NASA SSFL and copied to DTSC Director Dr. Williams. It is my hope that NASA and DTSC will be able to renegotiate their cleanup standards for the SSFL site based upon NEPA, CEQA, the Nine Balancing Criteria of CERCLA, and the desire to have this site cleaned up by my community three years ago rather than 25 years in the future. We all know that litigation by any party will just delay the cleanup further as I believe has happened with the litigation over SB 990 and now the litigation by PSR- LA et al v DTSC et al which is now in its Appeal process. I have seen the posturing related to litigation in documents referencing the City of Los Angeles, the State of California, and by NASA. I personally believe that if science and logic were to win in a Court of Law, that NASA would prevail in their arguments for a risk based cleanup rather than the AOC.	Support for Risk Based Approach	California Department of Resources Recycling and Recovery – CalRecycle SOIL CLEANUP LEVELS REPORT – Version 3. Woolsey and Hill Fire Incidents Los Angeles and Ventura County, California. September 2019.Prepared for: California Department of Resources Recycling and Recovery – CalRecycle. Prepared by: Arcadis U.S., Inc.; 107 slides (no date) Cancer Occurrence in Offsite Neighborhoods Near the Santa Susana Field Laboratory.Thomas Mack, M.D., M.P.H. Keck School of Medicine University of Southern California.

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
62	b	Christine Rowe	I have also attached the Woolsey and Hill Fire cleanup document which are mind boggling to me because they do not contain any chemicals of concern such as Dioxins and Furans which we expect to see in fires. And I also attached Dr. Mack's Power Point at the DTSC Open House in the Spring of 2014. That is the most recent SSFL health study.	Wildfire Concerns	California Department of Resources Recycling and Recovery – CalRecycle SOIL CLEANUP LEVELS REPORT – Version 3. Woolsey and Hill Fire Incidents Los Angeles and Ventura County, California. September 2019.Prepared for: California Department of Resources Recycling and Recovery – CalRecycle. Prepared by: Arcadis U.S., Inc.; 107 slides (no date) Cancer Occurrence in Offsite Neighborhoods Near the Santa Susana Field Laboratory.Thomas Mack, M.D., M.P.H. Keck School of Medicine University of Southern California.
63	a	Christine Rowe	Thank you for the opportunity to weigh in on the NASA Santa Susana Field Laboratory Supplemental Environmental Impact Statement (NASA SEIS). I also want to thank you and NASA for extending the deadline for Public Comment. Due to the timing of the due dates, it would have been impossible for me to read what I have of this document without that extension. For the future, I respectfully request that documents not be requested for public comment over holiday periods. Furthermore, I believe it would have been highly beneficial if NASA would have created a Power Point document that would have been easy for the reader to identify each scenario and their potential impacts.	Comment Period Extension Request	
63	b	Christine Rowe	Comment #1: NASA should have referenced which contaminants of concern would be reduced by each scenario and at which depth. For example, this is the NASA SEIS Alternative A map. It does not indicate to me if the purple is many different chemicals or if it is primarily TCE and groundwater contamination. It does not show the Nature and Extent of the contamination for the casual reader to understand. This is the NASA Alternative C map. How do we get from Alternative A to Alternative C on this map? - Why are less areas covered in purple? - Is it due to risk related chemical values? - Is it due to the depth at which the chemical is located?	Alternative Justification	
63	b	Christine Rowe	One final but not unimportant comment: Why didn't NASA reference the Health Studies for the area surrounding the Santa Susana Field Laboratory by Dr. Thomas Mack of USC, the former Chair of Cancer Surveillance for Los Angeles County, and the original and ongoing Chair of California's Prop 65 Committee which falls under OEHHA's jurisdiction? Were NASA SSFL personnel not present for his presentation at the DTSC Open House in 2014? His presentation to the community can be found here: "Cancer Occurrence in Offsite Neighborhoods Near the Santa Susana Field Laboratory Thomas Mack, M.D., M.P.H. Keck School of Medicine University of Southern California": https://www.dtsc-ssfl.com/files/lib_pub_involve/meeting_agendas/meeting_agendas_etc/66362_Santa_Susana_8.pdf	Missing Health Studies	
63	c	Christine Rowe	Questions for NASA's Attorneys: 1) Is signing a contract such as the 2010 Administrative Order on Consent between NASA and DTSC predecisional under NEPA? 2) Since I am not an attorney, I searched the question regarding if any portion of a contract is found to be unconstitutional – that document should be considered void as stated above in the NASA Office of Inspector General Report? 3) Comment – I support the position of the NASA OIG that the purpose of the 2010 AOC was to incorporate State Law SB 990 into the existing 2007 Consent Order Question for NASA's Attorneys: Was signing the 2007 Consent Order also pre-decisional under both NEPA and CEQA?	Compliance with Law	
63	d	Christine Rowe	Question for NASA's attorneys: 1) Are the Congress members who signed the letters supporting the test stand preservation aware of the additional costs to postpone the demolition of one or more of these structures and the cost to preserve them? 2) Are the members of Congress who recently signed a letter of support for the NASA 2010 AOC – are they aware that funds according to the 2013 NASA OIG report, will be taken from other NASA priority sites to clean up the SSFL which is less of a priority? 3) Does our Governor and our State Elected Officials – are they aware that funds could be taken from other California sites that may need them more to clean up the SSFL to a standard that would not be applied anywhere else?	Compliance with Law	
63	e	Christine Rowe	1) NASA, more than any other scientific body, can see from space the effects of anthropomorphic impacts on our planet. Therefore, NASA SSFL and NASA HQ should be considering the cumulative impact of this project in terms of greenhouse gas emissions.	Resource Concerns	

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
63	f	Christine Rowe	Comment: Carbon credits cannot make up for the potential impacts on the air quality of the impacted residents. Question: Is NASA aware that the American Lung Association has given the Los Angeles area an F for air quality? Question: How can NASA justify a cleanup that will take 25 years and contribute to our already poor air quality over a longer duration than is necessary based upon health risk?	Resource Concerns	
63	g	Christine Rowe	Comment: The DOE in their Final Environmental Impact Statement referenced Governor Brown's orders relative to the drought. Question: Is NASA Aware of Senate Bill 606 Hertzberg, and Assembly Bill Friedman which were signed into law by Governor Brown that will restrict the personal use of water for residential consumption?	Compliance with Law	
63	h	Christine Rowe	Question: How can NASA justify a project that does not use traditional EPA methods and risk based criteria which could take at least 25 years, when the State of California is trying to move from the use of diesel and other oil based projects?	Alternative Justification	
63	i	Christine Rowe	1) How are the three responsible parties going to find more than 40 trucks per day that do not utilize fossil fuels? 2) How can NASA justify a project that will also require heavy machinery onsite for excavation over a 25 year period?	Resource Concerns	
63	j	Christine Rowe	Question: In light of the Woolsey and numerous other local fires, how can NASA find any backfill soil that meets the screening criteria of the AOC?	Resource Concerns	
63	k	Christine Rowe	Question: Who at NASA has read the Rucker 2009 report specifically referencing the potential releases of radionuclides from the sodium reactor experiment? Is NASA aware of the EPA survey of AREA IV that found only localized radionuclides where EPA personnel expected to find the radionuclides based upon known accidents and spills? Where is radioactive soil found on the NASA portion of the SSFL property? I thought any radioactive soil was cleaned up during ISRA? Is it possible that some radioactivity above local background is the result of the pavement at the SSFL? As an EPA Technical Stakeholder, we were told by the EPA's Lead Scientist into the radioactive characterization of AREA IV that the pavement would always show "Hot" due to the aggregate and therefore we should not sample the roads. Comment: Because this document has been written by scientists of the Federal EPA under the previous Administration, I have always supported their approach to the SSFL cleanup. Due to the concerns about radionuclides in our community, I have always supported cleaning them up to "Background". But what Background? As an EPA Technical Stakeholder, I learned about the use of the 95 USL for determining the Look Up Table Values for Radionuclides for Background at the SSFL. It was always my position that the highest values found in Background should be used. I understand the concept of the 95 USL and statistical methods, but I do not believe the "upper tail outliers" should be removed from the data set if you are looking at local Background. Local Background is extremely variable particularly for metals and radionuclides. For radionuclides, a good way to demonstrate the variability is to look at the interactive Radon map for California. https://maps.conservation.ca.gov/cgs/radon/ Question: Why are we cleaning up radionuclides to the same geological formations as the Santa Susana Field Laboratory when the naturally occurring radionuclides where I live in West Hills are potentially higher than the SSFL site?	Radiological Contamination	
63	l	Christine Rowe	I support as the EPA recommended, a risk based cleanup. Because of the concerns of my local community, I have always supported cleaning up the radionuclides to "Background" with the qualifier of establishing what real local "Background" is since this is an extremely variable number locally and throughout the State of California. Comment: I support the use of the Residential Screening Levels according to EPA methods and the California Human Health Risk Screening Levels for Residential Use referenced by NASA as proposed changes based upon seeing how the State of California has applied these values to cleanups from fires state wide.	Support for Risk Based Approach	
63	m	Christine Rowe	Is NASA SSFL aware of the cleanup values of the local area as the result of the Woolsey and Hill Fires? Comment: I have compared the DTSC LOOK-UP TABLE VALUES: aka: LUTs for the SSFL with the Woolsey and Hill Fire data for metals. In some cases, we are cleaning up the Santa Susana Field Laboratory Site to a stricter level than the local residences in which children will play and people will raise fruit trees and backyard crops. Each chemical is evaluated differently – some use Background, some use health risk levels, and others use another analytical level.	Wildfire Concerns	
64		Tiffany Ruiz	Please clean up the SSFL 100%. We deserve to have radioactive materials not stay in our backyard. How can you sleep at night knowing you might make a huge mistake like this? It's up to you. Do the right thing.	Support for AOC	
65		Lauren Sanders	He did nothing wrong to anyone. Dr. Hirch did nothing wrong. Did not touch or harm anyone. To have no pain for causing cancer, dealth, and immune issues, no God will accept this or look at NASA as right. This was wrong.	Public Meeting Format	
66		Steve Stansbery	The contamination in place has been responsible for clusters of otherwise rare cancers. Leaving it in place is unacceptably negligent.	Cancer Concerns	

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
67	a	Brian Sujata	Thank you for the opportunity to review and comment on the subject document. I have been involved with the SSFL for over twenty-eight years, first as an on-site employee tasked with improving the environmental conditions of the site, then as a long-time neighbor advocating for a responsible cleanup focused on preserving the many cultural, historical and natural features present. I recognize and appreciate both your and NASA's dedication towards achieving those goals. **The document is reasonable, adequate and explored thoughtful alternatives:** After careful review of the subject document, I found it to be generally well organized and thoughtfully presented. It realistically examines the problematic consequences of the intractable AOC -driven clean up standard and provides several workable alternatives. I believe the evaluated alternatives (with some exceptions) are reasonable and adequately address the overall regulatory requirements for successful site restoration.	Support for Risk Based Approach	
67	b	Brian Sujata	Explanation of the offsite health risks presented: The surrounding community is keenly interested in the health effects resulting from the on-site contamination remaining at the SSFL. The document included a plain-language summary of outcomes from a number of studies conducted to determine the presence of health effects on the neighborhoods surrounding the SSFL (section 3.7.1.4). Since the activities have not resulted in offsite effects to nearby residential communities, it is appropriate to conclude that any of the action alternatives (Le., AOC, Revised AOC, Suburban Residential or Recreational) will not increase (or decrease) the health of the surrounding residents. Since the site does not now pose a health risk to the community, all alternatives will provide the same zero health risk to nearby residents.	Support for Risk Based Approach	
67	c	Brian Sujata	**The replacement soil volume is too low and should be re-evaluated.** All alternatives assume only one-third of the replacement soils will be returned to the excavated areas having an original soil depth of two feet or less (see Table ES-2 note c). Shallow areas such as streams and low areas subject seeps and springs generally support a significantly greater extent of localized biota than that of areas having deeper soil columns. These areas provide habitat for aquatic life and support a significant food chain. Reducing the depth of soil in shallow areas will by necessity increase exposed bedrock and will have significant negative and long term impacts to the recovery of native plants and other biotas in formerly verdant areas. The decision to limit the amount of replacement soils in formerly shallow areas is not explained or justified and requires formal consideration.	Resource Concerns	
67	d	Brian Sujata	**The textural properties of replacement soils must be considered:** To date NSAA has considered the chemical and microbial properties of possible replacement soils but not the influence of replacement soils having different textures on the long-term recovery of remediated areas. The US Department of Agriculture has identified soils within the remediation area as having a sandy loam soil texture[1] Soil texture describes the makeup of soil in terms of the relative amount of large (sand), medium (silt) and small (small) particles. In general, soils composed of mostly large particles (such as sand loams) hold less water while those having a majority of small particles (clays). Research has shown that soil texture modulates soil microbial activity and may be used to estimate the success of ecosystem rehabilitation[2.] One must assume NASA may import up to 448,000 cubic yards of any fill material that meets the AOC standard for background chemicals and a general dictionary definition of soil. Simply put, NASA may use any replacement material ranging from heavy clay to sandy gravels to cover up to half of their 451-acre area. The importation and deposition of dissimilar fill materials will result in significant negative, avoidable and long term impacts on the long term viability of the NASA remediated areas at SSFL. Soil column moisture regimes will be changed thereby promoting the growth of nonnative plants, permanently affecting attendant wildlife food sources and possibly, migration patterns. Increased soil erosion may cause additional sediment loading at the SSFl outfalls. Surficial weathering patterns will be impacted and groundwater recharge may be negatively affected. Finally, vegetation supporting Native American traditional practices may not be available to future generations within nearly half of the NASA area because these plants may not thrive in the replacement fill. NASA must consider the use of replacement fill materials having a dissimilar texture than those removed.	Resource Concerns	
67	e	Brian Sujata	**Future land use of agriculture and housing:** The Ventura County Board of Supervisors provided comments to the subject document dated December 17, 2019. The supervisors declared the current land use of the NASA-owned property is open space and that NASA has incorrectly concluded the future land use would be limited to recreational. The Ventura County Supervisors went on to state their support for the AOC cleanup because it offers the possibility of future housing development within the NASA property. As discussed above, without intervention, NASA may be an unwitting enabler by removing the native habitat throughout two hundred twenty acres and creating a site suitable only for housing developments.	Land Use Categorization	
67	f	Brian Sujata	At least one Native American tribe has expressed interest in recovering ownership of the NASA properties when site restoration is complete. Given their long history of association with the site, it's realistic to believe the forthcoming tribal members expect a land similar to that experienced by their ancestors. I share that expectation and I believe NASA does too. Our responsibility to preserve this land looks beyond the present conflicts and into all future generations. With the dedicated assistance of NASA, this land will continue to be a place where people gather to admire its natural beauty and proud past.	Support for Risk Based Approach	

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
68		Gina Thornburg (Coalition for Valley Neighborhoods)	Dear NASA: I am deeply concerned that you are planning to break the legally binding 2010 AOC made with the CA DTSC. I find it irresponsible and indefensible to leave up to 80% of the contamination in place. Also threatning democractic process are your refusal to make up to 75% of the references in your draft SEIS available to the public and your holding of these open-house-style meetings at obscure private location. You appear to be engaging in a concerned effort to withold the information the public needs to check your activities. The carcinogens and other toxins underlying and moving off the SSFL have posed a grave risk to human health for decades: scores of people in nearby areas have died from or suffered from an aray of cancers, particularly very rare cancers. The risk to human health of leaving the toxins in the ground are too great to ignore. The standard for the cleanup should be risk in perpetuity, to human health, not whether a beautiful place loses its beauty. We must agree to sacritice the flora and fauna of the contaminated zones through a full, AOC-binding clean-up because this is the consequence of our former collective folley. Our scientific engineering, aerospace, and R&D communities made terrible mistakes in the ways they handled these toxic materials, including uranium, plutonium, TCE, perchlorate, and many others. Cleaning up the SSFL according to the AOC will acknowledge and atone for the disastrous mistakes of the past. It will also acknowledge the value of present and future human life. Please do the right thing. Move forward with the AOC.	Support for AOC	
69		Margaret Tolberg	We must have 100% cleanup of the Santa Susana Field Lab! Per Enviroreporter.com, "The Boeing Company found radionuclides in Woolsey Fire smoke on its property including the highly poisonous Polonium-210 (Po-210), a substance 250,000 times more lethal than hydrogen cyanide." And Boeing, NASA and the Dept of Energy say they should be able to leave up to 100% of their contamination because it's not hurting our community. These dangerous radionuclides and carcinogenic chemicals have NO PLACE IN OUR COMMUNITY.	Support for AOC	
70	a	Joan Trent (West Hills Neighborhood Council)	Truck transport of contaminated soil. 1) Safety concern for community that trucks travel through carrying the contaminated soil. 2) Trucks need to be sealed! This is a serious concern!	Resource Concerns	
70	b	Joan Trent (West Hills Neighborhood Council)	Please clean this site now instead of allowing it to "drag on and on!"	General	
70	c	Joan Trent (West Hills Neighborhood Council)	There are many "terms of art" being use to describe the desired safe land. I want it safe to be able to breath the air, walk the land, touch the water run-off, and let me dog run and eat the grass. This may sound silly, but it is not silly! Wid animals will be walking through and the soil should be safe for all living creatures, people and animals.	Resource Concerns	
70	d	Joan Trent (West Hills Neighborhood Council)	1) Some people want to be able to grow marijuana on the soil - can you clean it to that level. This would be termed agricultural level. 2) Can wild animals eat growth on this land? Is it safe?! It should be. 3) Is the water run off safe for us to drink - safe for wild animals? It should be. 4) I am asking simple questions not as a scientist but as a community member. 5) There is no excuse for allowing this area to be a poison area! Please do the right thing...	Support for Risk Based Approach	
71		David Trof III	Procedure of meeting testimony not "public". I can't hear all testifiers.	Public Meeting Format	
72		Liza Tucker (Consumer Watchdog)	NASA's draft Supplemental Environmental Impact Statement proposes three new alternatives for addressing the contamination at the Santa Susana Field Laboratory. Each of them would leave the majority of the contamination not cleaned up. Each would be in breach of the Administrative Order on Consent (AOC) that NASA signed and is legally bound by. NASA does not have the authority to pick any of those alternatives, as they would violate the AOC. Even were there no AOC, NASA, as the polluter, does not get to choose how much of its pollution it will clean up; that power rests with the state regulatory authority. We urge NASA to withdraw the SEIS and start to expeditiously comply with the AOC.	Compliance with Law	

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
73		Unknown Unknown	NEPA Rebuttal NEPA Rebuttal. NASA's Draft SEIS is illegal and violates the 2010 AOC cleanup agreement. In 2010, NASA signed an Administrative Order on Consent (AOC) with the California Department of Toxic Substances Control (DTSC), commiting to clean up all contamination on its portion of the Santa Susana Field Laboratory (SSFL) to background levels - in essence, returning the site to the condition it was in vefore NASA so heavily polluted it. NASA does not have the authority to choose not to comply with this cleanup agreement. In 2011 and 2012, NASA got in trouble with DTSC and the Council on Environmental Quality (CEQ) - the federal agency with primary authority to interpret National Environmental Policy Act (NEPA) requirements - for proposing an Environmental Impact Statement that would have included alternatives that would violate the AOC, which requires NASA to clean the site to local background levels, "NASA is not compelled to consider less comprehensive measures as alternatives." (Letter from CEQ Chair Nacy Sutley to Senator Barbara Boxer, June 19, 2012). Even if the AOC did not exist, NASA, as the polluter does not have legal authority to determine how much of its pollution it will clean up. That authority is delegated under hazardous waste laws to the Department of Toxic Substances Control (DTSC). Nonetheless, NASA has now again issued a draft Supplemental Environmental Impact Statement (SEIS) proposing to break its obligations under the AOC and DTSC's directives and instead choose to leave the majority of its contamination not cleaned up. This is illegal and a direct threat to public health and the environment. NASA asserts it is preparting this Supplemental EIS because of "significant new information" - primarily that is has discovered that there is 75% more contamination on its property than previously estimated. One would think that such a discovery of more pollution would result in more cleanup. However, NASA has instead proposed to radically reduce the amount of cleanup it does. Clean up oversight is the job of the regulator, not the polluter. Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Section 6901 et seq. NASA's draft SEIS is illegal and violates the 2010 AOC cleanup agreement.	Compliance with Law	
74		Keith Vega	It is unacceptable to leave ANY carcinogenic waste in a location so close to the local community. And removing a peaceful protester is reprehensible. Your agency aught to be ashamed of itself, but unfortunately it is probably proud instead. NASA is disgraceful.	Support for AOC	
75		Susanne Villard	I have been watching a presentation about the proposed cleanup and a refutation by members of the public who are very concerned because of cancers in children in the area. I am asking that you hear out their evidence in a public manner. The truth will always come out eventually. If these people are right and you do not take their concerns into consideration it will only be worse down the line. We live in a world of contamination. We must learn how to deal with it. Hiding our head in the sand won't solve any of it. Please hear these people out and put yourselves in their shoes for a while. You will save both money in the long run and your reputation.	Public Meeting Format	
76		Keynes Von Elsner	You need to remove all the toxic chemicals from Santa Susana without further delay or else you need to relocate your headquarters to the Santa Susana to prove that you sincerely believe the area to be non-toxic.	Support for AOC	
77	a	Anna Wada	I am writing to you in regards to my concerns about NASA not complying with the Administrative Order on Consent (AOC), its contracted agreement with the California Department of Toxic Substances Control (DTSC) to clean up the areas of pollution at NASA's responsible portions of the Santa Susana Field Laboratory (SSFL). The cleanup was promised to be done by the year 2017 when the agreement was signed in 2010, yet as we enter this new decade the efforts of mitigating the pollution have not yet begun. Instead, NASA has proposed a Draft Supplemental Environmental Impact Statement (DSEIS) that is attempting to nearly double back on its commitment to clean up the SSFL contamination. NASA has claimed there are much higher values for volumes of soil that must be excavated if it were to use the required AOC Look-Up Tables (LUT). NASA does not have the authority to propose Cleanup Alternatives that do not act in accordance with the legally bound commitment. I view the proposed DSEIS as NASA's inability to obey the AOC and this failure are putting human health and the environment at more risk. The DSEIS is merely an attempt to dismiss NASA's obligations under the AOC to clean up the contamination and should have consequences of punishment through legal action. The alternative cleanup proposals that are made in the DSEIS is a foreshadow of indicating direct threats to the public and the environment. NASA has deliberately stated that there is 75% more contamination in the soil than it has originally estimated in 2014. As NASA openly admits to the fact that there is more contamination than they have previously discovered yet attempts to continue with their agenda of noncompliance with the AOC and orders of the DTSC. I am beginning to wonder if NASA has thought of the idea of the contamination spreading due to the resistance of the cleanup from the years they were supposed to act upon the pollution they have created. The Alternatives that NASA proposed on the DSEIS decrease the action of cleanup up to 88% of their pollution. NASA needs to acknowledge that the proposed Alternatives violate the laws for regulating hazardous and toxic waste as per the AOC. ..... The DSEIS is an attempt to be released from the AOC commitments they have legally contracted to in 2010. I cannot accept the Alternatives that have been proposed by them because it can potentially leave the local communities, public, and the environment at risk for continuous damage from the pollution they have created due to the decades of mismanagement of the land. They have not properly published an Environmental Risk Assessment (ERA) for their proposed alternatives, but nevertheless, NASA must be held accountable for the failure to comply with agreements with the DTSC and AOC contract of their pollution cleanup. It has been 3 years since the cleanup was supposed to be finished and NASA has still not even began operations of mitigating their pollution. NASA must come clean and began to take responsibility for its liability under the AOC.	Compliance with Law	

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
77	b	Anna Wada	NASA clearly states in the DSEIS its Purpose and Need for Action is “to use the best available science and technology to achieve soil cleanup swiftly and in a manner that reduces impacts to the community and protects public health, the environment, and cultural resources.” However, the Alternatives proposed in the DSEIS seems to highly contradict the purposes and goals excluding the considerations of the binding obligations NASA must comply with in accordance with the AOC. NASA attempts to reason for incompetence by reinstating its troubles and issues of Limited Treatment Technologies and Availability of Suitable Replacement Soil. However, the claims made on these issues were done by NASA with no scientific or referenced evidence of these risks and the Alternatives seem to be full of options of Soil Treatment Technologies. Indeed, NASA’s own Soil Treatability Studies Summary Report, which is not cited at all in the DSEIS, found that many of these treatment technologies would be fully capable of meeting the LUT values NASA is required to under the AOC. NASA believes that the option of Monitored Natural Attenuation (MNA) is a legitimate cleanup technology, but it’s simply another phrase of flowering their way out of a true cleanup, as “MNA” is really just a fancy phrase for “leave it in the ground.”. The insurance of the reliability for treatment technologies seems to be absent. There were also attempts of eliminating some Alternatives and Options that would be beneficial in protection to the public and the environment such as the Additional Risk- Based Cleanup Standards, Additional Cleanup Technology Options, and Additional Soil Transport Options. The DSEIS is an attempt to argue that NASA will only have to contribute to the bare minimum of Alternative C - Suburban Residential Cleanup which is eliminating nearly half of the original AOC cleanup they must commit to. NASA sizably increased the volumes of soil that need to be excavated in the DSEIS to beg for mercy in the incapability to commit to a large area that must be cleaned up. Again, however, the revised LUT values have no references on how they measured those numbers available to the public. Making assumptions about the contamination measurement should not allow them to be dismissed from their remediation efforts of restoring the natural environment - in other words, it doesn’t make sense to claim there is more contamination and that therefore you are considering doing less cleanup.	Soil Treatment Technologies	
77	c	Anna Wada	It has also come to my attention that nowhere in the DSEIS mentions the tragic incident of the Woolsey fire that occurred in November of 2018. There have been reports regarding that the fire has begun at NASA’s portion of SSFL. If that statement were to be true, I’d assume it should be indicated in the analysis of the LUT and newly reported numbers of the contamination levels in the DSEIS. The Woolsey Fire should also be a re-evaluation of NASA’s Best Management Practices (BMP) as stated in their DSEIS for their SSFL in order to ensure the prevention of wildfires in the near future to mitigate the ongoing effects of climate change.	Wildfire Concerns	
78		Michael Walsh	There has been concerns raised about the impact on local communities from the many truck loads of contaminated soil. What protocols will be used to address these impacts, particularly in light of frequent wind and fires?	Resource Concerns	
79	a	Christina Walsh	Staying above the fray, as NASA has over the years of political influence and misdirection has it’s costs. In the case of Santa Susana Field Laboratory, the argument for decades has been between a moonscape, and no action at all. As we steer towards adhering to the AOC, we need to remember that the AOC described the problems of implementation, which are not adequately understood by the general public. As a result, it seems that NEPA has been weaponized as a tool to make implementation by the deadline, impossible—thereby taking the enforceability out of the agreement because of the force majeure problem of enforcing a deadline that is three years past. If I remember correctly, it was the tolling language that was the back and forth debate between the parties at the time, because that allowed this to go and go and go on forever. Recent actions at recent meetings, as well as recent public claims, has altered my perception of the efforts by those seeking the most stringent cleanup. When I brought up the fact that CBG had in fact sued to block the cleanup by blocking removal of buildings in 2013/14, it was denied. More importantly, by the time I got home from that meeting, the page on the CBG website describing their activities, had been removed. In addition to how I have been treated by the very people I have defended for years, it leads me to believe that they just want to fight, not to win. Apparently the ‘fight’ is where the action is. I hope for a tangible, reasonable, implementable, and health protective cleanup that is responsible to the environment. CBG et al, if they really wanted to protect people, would not be fighting for the most extreme thing, ever, but rather for an actual cleanup. When this was signed, many of the kids sick today, weren’t wasn’t even born yet. No children are protected by meetings and videos. They are only provided a more safe environment by actual tangible and thoughtful cleanup. As I said in the meeting last night, every truckload of soil that leaves SSFL should not be considered a win. This is a much more complex problem that has been simplified in a way that distorts the truth.	Support for Risk Based Approach	
79	b	Christina Walsh	Challenges: 1. There is only one way down the hill, and that is Woolsey Canyon. So despite the improvement to the environment in all directions, the impacts of the traffic for years, will be one-sided and that needs to be considered carefully. The people who live on Woolsey Canyon rightfully have concerns when confronted with the idea of two decades of waste coming down the hill.	Resource Concerns	
79	c	Christina Walsh	2. Soil Estimates are under-estimated due to very thin soil profile at the site. While I believe that the estimates presented provide an over estimation, but not to the degree being described by others.	Soil Quantity Estimates	

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
79	d	Christina Walsh	3. Option "B" seems most reasonable, but I think it needs to go further, and also be more clearly discussed, so that the public has a more clear understanding of the challenges and requirements of the AOC. 4. The AOC is often described publicly as the only safe solution, as if it is a religion. If background is to be used as the solution, it must be acknowledged as it is clearly described in the AOC itself, that every effort to minimize impacts must be taken. According to the original EPA presentation about the decision to implement "Background" as a solution, was that careful decisions about "near background" must be made according to known toxicity concentrations according to established risk levels, as well as, addressing time and migration pathways for both human and wildlife receptors. 5. Currently, all less invasive alternative cleanup methods including in situ and ex situ processes have been dismissed on the basis that they will not achieve the AOC levels required. Ten years have gone by where these alternative solutions could have been working to reduce the final challenge of how much waste has to actually leave the site via truckloads to local and radiologically approved landfills. Public concerns have been presented as if the choice is between all or nothing, or that anything less than 100% is a loss. This is a mistake and in my opinion the reason the inaction continues on. I agree with the environmental and cultural concerns presented in the report, with special interest in protecting the Burro Flats cultural site. It is my understanding that there are no sampling results that would prompt any destruction of that area, so I do believe that it should not be considered impacted, though the view-shed may very well be impacted and those considerations are important. I also believe it is important to preserve all open space areas that are being considered for excavation and have a scale/rationale process to use mitigative solutions including phyto solutions so that climate and habitat impacts are minimized. If we are going to treat the AOC like it is a religion, we should do so for the whole thing, not just the page that says LUT. Use of less invasive solutions to minimize the impacts is also part of that same agreement, for the very purpose of making sure the solution isn't worse than the problem. A cleanup that has a revenge approach will only harm the local environment and community. We need to do this the old fashioned way – through doing the difficult work of making decisions based on science, including protecting the public. Claiming that the toxic materials we are dealing with are not toxic is not helpful and has led to a toxic and ineffective public process ruled by lobbyists and politicians instead of through real oversight in the interest of protecting the affected public.	Support for Risk Based Approach	
79	e	Christina Walsh	TABLE ES-1: This describes the rationale for alternative B where seven primary analytes are used to cover "most" of the impacts due to the prevalence of these constituents of concern. I support this rationale, but believe it needs to be discussed in more depth to provide for better public understanding because this is being described as a way to "cheat us out of the cleanup." Well, a cleanup that never happens, cheats us all. But as we discussed, by providing the math in greater detail, as Mr. Zorba provided to me, allowed for a debate on the issues, so that responsible decisions for implementation can be made, and trusted by the public. Unfortunately, because of the decades of information, the public is not able to navigate the information to find the truth – especially when only one side is being heard on a wider basis. In order to understand these decisions, we need a public process that focuses on the public, and on the "How to get this done." Instead of the constant debate about step one: whether to do the work at all. The Agreements signed in 2007 and 2010 all promise a solution by 2017. We now have the data we need, and we need to implement for a solution. I also appreciate that the dioxin/furan number is calculated based on the TCDD congener (DIOTEQ)	Alternative Justification	
79	f	Christina Walsh	I also appreciated the reality check regarding truckloads per day: The story always seems to be that of a hundred trucks a day for decades. The reality is that I don't think anyone has gotten more than 20 off the site in a day and the local landfills haven't taken in more than 35 in a day, so I really appreciated the discussion about these realities. But when trucks are used as a fear-tool to make the public not want a cleanup, the result is that both sides misuse these numbers.	Resource Concerns	
79	g	Christina Walsh	The best dust mitigation is a guy/girl with a hose, to ensure it doesn't get too wet (movement) or dry (dust emission), so we need to focus on realities instead of using this process to argue extremes. Extremes protect no one, especially when they are never implemented.	Resource Concerns	
79	h	Christina Walsh	As a Section 106 Consulting Party I appreciate the effort to protect native American sacred sites located at the site, as well as the opportunity to save portions of history in the form of rocket test stands where feasible. The point needs to be that no matter what we do, we need to make sure that it is safe for the people that come after us, that we will never meet, and will never know all that went into this process. We have to care about people we will never meet. That is why it is important to also describe in the noaction alternative section that risks do exist from INACTION.	Resource Concerns	
79	i	Christina Walsh	In the years SINCE the 2010 agreement was signed, three fires have burned large portions of the site, resulting in further impacts to the surrounding communities. These will only get more common with the extreme weather we are seeing from climate change. Following each of these fires, violations in water discharges from the site have been forgiven as a result of the fire. None of this protects the people or the environment. That is why we need to focus on implementation of solutions and not accept this endless use of NEPA as a tool to deflect and delay for decades. My son is now 22 years old and the cleanup hasn't started. We deserve better than two decades of inaction.	Wildfire Concerns	

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
79	j	Christina Walsh	This is important to begin every meeting with this brief description so there is an ongoing and continued understanding about the decisions being contemplated at each stage of the process as the audience varies over time. In observing the current public process surrounding Santa Susana Field Laboratory, the public narrative of understanding of the stage of the project, the alternatives and challenges, the general public has an extremely limited understanding of the facts and rely almost entirely on biased narratives driven to explain fund litigation instead of tangible improvement to the current condition of the environment and affected communities surrounding the site. Since the only voices heard by the public are those of extreme views based on fear and denial, neither of which are very helpful in good decision-making. Concerns of Process: Communication is generally one-directional with the public, where NASA has done an excellent job of presenting accurate, detailed, as well as understandable information to the public, there has been little to no effort to correct the misinformation being offered by both extreme sides. Understanding NASA's respect for free speech, which is commendable, the misinformation is damaging when a centered voice, either from responsible parties or from the regulator are not available for public consumption. In the absence of this voice, people "will literally drink the sand." For a long time, the people in the community have wanted a more interactive process so that the division in the community can be addressed and allow facts to drive the process. Instead, it has been a race for control and power, and the squelching of opposing voices—precisely the opposite of the "purpose and need" of a public process. The CAG handbook described a mandate to include all facets of the affected community, and yet instead, it was used as a tool to silence those dissenting. While I was the target of much of that, I can also say at this point, that the silencing of opposing voices has backfired, because no one trusts any of it now. I participated in every day of the background study because at the time, I thought that if we all went from site to site together, and discussed these issues by being able to "ground truth"the issues together. That's how division can be healed and progress can be made. Instead, today we have a community that includes only those approved by Dan Hirsch, and people like me have been targeted and harassed and indeed silenced. Our voices, especially those who actually live here and are affected by the decisions made, should be protected and I appreciate NASA's effort to do so despite the efforts of DTSC, Boeing, and DOE to target dissenting voices. 1.5 Purpose and Need for Action, 1.6 Scope of the Analysis, 1.7 Decision to be made -- These are the most important sections of the report, and while they are prominently organized in section one, people really do not read the report. They need the information spoon-fed to them, and that what is happening on the other side, through story-telling and videos, where the scientific details are not remotely involved. While this is one of the most well-written of these reports I have read over the last twenty years, more understandable, you still have not even led the horse to the water [metaphor] People are so used to these reports and presentations are organized so that people in the general public do not understand what they are about, what the decision is, and they feel looked-down upon because of the multitude of acronyms, it is almost as if the reports are written in code. The reports are designed to not be read. Through frustration, people put the book down, and just decide to yell. In this case of this SEIS, while it is miles apart from the old standard, and that of the other responsible parties, you still have to get the people to read it. I tell people to focus on reading the executive summary and the table of contents, and then use the report to look up the answers to the questions you then might have. Remember, Dan Hirsch starts almost every sentence with, "What they don't want you to know is…."and has used this project to work his own objectives surrounding waste disposal and nuclear operations. While those objectives are valid, they should not be prioritized ahead of the safety and remediation needs of the site. In the case of Santa Susana, it seems the AOC presents a mandate to be chasing a "perfect cleanup," while potentially sacrificing any cleanup at all.	Public Meeting Format	
79	k	Christina Walsh	Background: I was in the meeting in then Senator Sheila James Kuehl's office after SB990 had been signed into law and she informed us that she agreed to carry legislation that following session to un-do part of it, and she did that in order to get Governor Schwarzenegger to sign the bill (which mandated an agricultural cleanup). She said that she made this deal in the interest of getting to the actual business of cleanup and making our neighborhoods safer for the future. She then turned to us, and said, "But I expect you to be yourselves, and if that means opposing that legislation, I respect that," and she winked at us. Maybe this means nothing now, but as I understand this, based on the two decades that I have been involved, where my son was a toddler when I first got involved in a nuclear cleanup less than TWO MILES from my house. Today, the cleanup still has NOT STARTED and my son has turned 22 and has heard about this issue, literally his entire life. When we consider the cluster of kids with eye cancer in 2007, and now again, another cluster brought to the attention of decision makers by Melissa Bumstead most recently. I follow the kids from 2007, and they are now getting drivers licenses and turning 18. They deserve better than to watch this fight their whole lives, without ever seeing action, because we are supposed to demand something called an AOC, and accept nothing less. When are regulators going to be honest with the public about the most important rule about toxic contaminant exposure pathways – TIME. Time is an equally important part of the equation, most certainly if the project never starts, and remains just talk. Every year with fires, floods, and more inaction, we will continue to see more cancer clusters instead of less, and I think we deserve better, as do the people of NASA who have worked to make progress on this for so very long.	Cancer Concerns	

* See Appendix 4A for responses by category

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79	l	Christina Walsh	**2.1.1.2 Ex Situ Soil Treatments.** I support all of these except 2.1.1.2.4 Using Thermal Desorption and believe that a priority on identifying areas that are potential candidates for these options should be employed in the interest of REDUCING the footprint of what will be required to be excavated and moved off-site. **2.1.1.3.1 Soil Vapor Extraction.** I support this effort and feel it should be employed in multiple areas of the site to focus on groundwater plume concentration areas, problem areas such as Ws9a where the seeps emerge contaminated, this is a forever problem, so using soil vapor extraction to create a layer of non-contaminated zones so that re-contamination risks are reduced or at least slowed down. (example is the recontamination of the Area IV burnpit after installing a clay cap). **2.1.1.4 Monitored Natural Attenuation.** I do not support this except for in conjunction with phytoremediation technologies that create barriers while improving the contaminant influence. We've waited long enough, but need active effort. Even the GETS system which was presented as a solution for groundwater treatment, was not turned on for a year. Since the most recent fire, I believe we again have an issue where pipe systems have burned and we, the public need to know the status of these remediation systems that have been presented as solutions that make us safer. We are only safer if they are turned on.	Soil Treatment Technologies	
79	m	Christina Walsh	**3.8 Traffic and Transportation** More than FIVE years have gone by since DTSC presented false traffic and transportation alternative routes that included where roads didn't even exist, across private property, and even used maps where railroads were a decade out of date. They left this faulty information in the public sphere for years without response, until it was "baked in." It is important that these be corrected. The only real viable route off the hill is Woolsey Canyon, and the alternatives of either Plummer or Roscoe should be alternated, with most going toward Roscoe because the turns in that direction are fewer, and generally, the route is less invasive to a small community, where the Plummer route goes directly through a windy community with homes facing the road with little relief. For information, I live on the Roscoe side, but believe Roscoe is more viable, safer, and can handle a larger capacity. I am pleased to see the fake conveyor belt solution taken off the list.	Resource Concerns	
79	n	Christina Walsh	In looking at this timeline, I think it is a perfect example of why NEPA reform is needed. I actively commented on a substantive basis at every juncture described in this section, and yet it is as if none of that has even happened, when looking at the decisions and framing of today. I can only imagine how frustrating it must be for the workers onsite both in the past, as well as in the remediation era, to have it be more like Groundhog Day, happening over and over and over again, with few steps forward. **Section 5 – List of Preparers:** I wanted to thank all of you for the work presented herein. I think the ownership of the work is clear, as well as the quality. I can only hope that this can be the beginning of the tangible part of the process.	general	
80		Abraham Weitzberg	The October 25, 2019 Draft Supplemental Environmental Impact Statement for Soil Cleanup Activities at Santa Susana Field Laboratory, presents clear and cogent documentation of the evaluation of a range of cleanup alternatives as required by NEPA. The executive summary provides the affected public and NASA management sufficient information to identify a preferred alternative that is fully protective of the public and the environment and, equally important, has significantly less negative impact on the environment and cultural resources. Without going into details, it is clear that the best alternative from any rational perspective is the Recreational Cleanup and, by far, the worst is the AOC Cleanup. It has been known since 2010, that the AOCs were political, rather that environmentally or health based. It is time for NASA management to act responsibly, based on the information presented in the DSEIS. NASA should identify the Recreational Cleanup as its Preferred Alternative and plan to resist any attempted for DTSC to cling to the discredited AOCs.	Support for Risk Based Approach	
81		Haakon Williams	I intend to send in my public comment today on NASA's Supplemental EIS for the Santa Susana Field Lab. My comment will include an attachment, so I want to know if NASA has a size limit for documents it can receive. Gmail, which I will be sending my comment through, has a size limit of 25 megabytes for sending emails; does NASA's email system accept emails up to 25 megabytes in size, or will an email of this size bounce back?	General	
82		Linda Yoder	Children's lives are important. Children are our most valuable resource. Please clean up the NASA site and remove ALL toxic waste at once. It is unacceptable to leave ANY carcinogenic waste in a location so close to the local community. Let this government agency stand FOR the people, as it should.	Support for AOC	
83	a	Ronald Ziman (FACP, FAAN)	I am reassured to learn that NASA has supplemented their original EIS with meaningful alternatives. Given the fact that all of the alternatives are equally protective of public health, I am in favor of the least invasive and least environmentally destructive alternative that will be achieved in the shortest time frame. That is alternative D, a risk based recreational cleanup. Due to Boeing's environmental easement, this property will not be developed, but rather set aside and preserved. Under the circumstances, there no need for a cleanup that would be more intensive.	Support for Risk Based Approach	
83	b	Ronald Ziman (FACP, FAAN)	Cultural resources and artifacts reflective of the rich Chumash and other Native American tribes that frequented the area should be preserved, preferably in situ whenever possible. Lastly, I strongly urge that the Coca test stands be preserved given the geographic and historical nexus between prehistoric man's nascent curiosity about the heavens, as documented in the polychromatic painted cave, and the development of the capability to visit the heavens, which enabled America to not only enter the space age, but lead. No place on earth is known to encompass such features other than SSFL.	Resource Concerns	

* See Appendix 4A for responses by category

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84		Susanne	I'm writing to urge NASA to do a completely clean the toxic waste from the Santa Susana Field site. It is unacceptable to leave ANY carcinogenic waste in a location so close to the local community. Also, I've heard that your representatives did not allow any public comments at NASA's public meeting with the community last week. That's unacceptable.	Support for AOC	
85		DD	It is unacceptable to leave ANY carcinogenic waste in a location so close to the local community.	Support for AOC	
86		David	it is unacceptable to leave ANY carcinogenic waste in a location so close to the local community	Support for AOC	
87		(The Committee to Bridge the Gap)	The discussion of the Woolsey fire in the draft SEIS on SSFL is deficient. These attachments detail information that is missing from or mischaracterized in the draft SEIS.	Wildfire Concerns	February 21, 2019 Bulletin of Atomic Scientist article by Daniel Hirsch: A failure of governmental candor: The fire at the contaminated Santa Susana Field Laboratory; The Santa Susana Field Laboratory and the Woolsey Fire by Daniel Hirsch Ron Pomerantz Maria Caine January 8, 2020 COMMITTEE TO BRIDGE THE GAP; The Santa Susana Field Laboratory and the Woolsey Fire by Daniel Hirsch Maria Caine Audrey Ford January 8, 2019 COMMITTEE TO BRIDGE THE GAP
88		(West Hills Neighborhood Council)	The Department of Toxic Substances Control (DTSC) has issued the SSFL Program Environmental Impact Report (PEIR) for public comments, which are due by December 7, 2017. The purpose of the PEIR is to describe cleanup alternatives for the SSFL, leading to a final selection of cleanup method, which will be announced in a future project management report. The PEIR describes the cleanup alternatives as: first, a baseline "do nothing"; a second, applying the 2010 Administrative Order of Consent (2010 AOC) for the NASA and DOE portions of the cleanup; and third, using a U.S. EPA risk-based procedure for the Boeing portion of the cleanup. The 2010 AOC calls for cleanup to background or non-detectable levels for a list of chmicals and nuclides, which is an extraodinarily severe cleanup that is required regardless of any health hazard that may or may not be in the substance. As a result, an enormous amount of soil, 60% non-hazardous, must be excavated and trucked through surrounding communities to distant waste facilities, creating unnecessary health hazards for those communities. The PEIR does not consider the end use of the land, and prescribes clean up to a suburban residential for the Boeing portion, as if homes may be built on the property in the future. But Boeing has recorded a conservation easement that forever prohibits development on that property, and Boeing plans to keep it as open space. Futhermore, the PEIR does not consider that the SSFL is in the middle of the most important Habitat Linkage in Southern California. This is critical for the proper functioning of the eco-sytem in the Santa Monica Mountains, which is in the middle of the world's largest urban natural preserve. This area contains the rocket engine test stands that were an integral part of the assurance that our rockets would make it to the Moon, other historically significant aerospace sites, Native American Sacred sites, archeological sites, and artifacts. Public health and public safety should be the most important considerations relative to the cleanup of the SSFL site! The PEIR is required by the California Environmental Quality Act (CEQA) to consider resonable alternatives for management consideration and this report does not meet that stipulation. The West Hills Neighborhood Council therefore recommends that an additional cleanup alternative be added to the report that uses the U.S. EPA risk-based analysis for the entire SSFL site. The U.S. EPA procedures are recognized and use throughout the United States to get complete cleanups with minimum excavation, minimal trucking, and limited distruption of the environment. It is essential that in situ treatment be a major consideration as an alternative, as it would significantly reduce truck traffic in the surrounding communities. The trucking represents its own health hazards and Valley Circle Boulevard and Roscoe Boulevard, main throughfares, have many schools, churches, synagogues, residences and commericl areas that would be affected. It is our vision and desire that the SSFL site becmes open space or a national park, and we ask that you respect our community's wishes. It is a rare event when a 2,850-acre parcel becomes available that contains such diverse plant and wildlife habitats, a wildlife corridor, historically significant aerospace sites, Native American sacred sites, archeological sites and artifacts. We must preserve it for future generations.	Support for Risk Based Approach	
89	a	Steven Shestag (Director - Environment, Health, and Safety - Boeing)	The Boeing Company appreciates the opportunity to submit comments on the Draft Supplemental Environmental Impact Statement (SEIS) for Soil Cleanup Activities at the Santa Susana Field Laboratory prepared by the National Aeronautics and Space Administration (NASA) under the National Environmental Policy Act. The Draft SEIS identifies several bases for NASA's determination that a Supplemental EIS is warranted given the significant changes in the information and circumstances concerning the project that have emerged since NASA published its Final EIS in 2014. Boeing submitted comments on NASA's 2013 Draft EIS and 2014 Final EIS on October 1, 2013 and April 11, 2014. The Draft SEIS still does not adequately address some of Boeing's prior comments, so I have attached copies of those letters to be considered as part of Boeing's comments to the Draft SEIS.	Support for Risk Based Approach	April 11, 2014 Boeing letter to NASA with comments on the FEIS; October 1, 2013 Boeing letter to NASA with comments on the DEIS

* See Appendix 4A for responses by category

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89	b	Steven Shestag (Director - Environment, Health, and Safety - Boeing)	In addition, the environmental analysis in the Draft SEIS does not address NASA's remediation responsibility for drainages that lead to Silvernale Pond or for Silvernale Pond itself, both of which are located on Boeing's property and may be subject to cleanup by NASA. This issue and the issues left unaddressed from previous comment letters should be,addressed in the Final SEIS. Boeing values its cooperative partnership with NASA regarding remediation of the SSFL site. We look forward to working with you to coordinate the various remediation actions by NASA that may affect Boeing's property at the site in a way that appropriately implements site cleanup objectives, protects human health and safety, preserves the invaluable biological and cultural resources on the site, and ensures that the impacts from remediation are adequately evaluated and mitigated.	Resource Concerns	April 11, 2014 Boeing letter to NASA with comments on the FEIS; October 1, 2013 Boeing letter to NASA with comments on the DEIS
90	a	Geoffrey Fettus (NRDC)	We write regarding matters of importance for assuring meaningful opportunity for public comment. Based on our concerns below, we respectfully request that NASA extend the deadline for public comment on the Draft Supplemental Environmental Impact Statement (SEIS) for Soil Cleanup Activities at Santa Susana Field Laboratory, 84 Fed. Reg. 57,490 (Oct. 25, 2019), for an additional forty-five (45) days. We appreciate that NASA is working to fix this error. However, the late date for making publicly available the documents upon which the Draft SEIS is based means that the public has not been given a full opportunity to review and comment upon the Draft SEIS. NEPA is at its heart a public disclosure and public participation statute. There cannot be meaningful public comment if the public does not, during the full comment period, have readily available the documents upon which NASA based its claims in the Draft SEIS. We therefore request NASA extend the comment period forty-five (45) days from the date NASA publicly posts the full reference documents. This will allow the public the opportunity to review all newly available relevant documents and to provide fully informed comments on the Draft SEIS, also taking into account the upcoming holidays.	Comment Period Extension Request	
90	b	Geoffrey Fettus (NRDC)	It has come to our attention that more than three fourths of the reference documents relied on in the Draft SEIS have not been made publicly available. NASA representatives acknowledged this failure to provide full public access to the reference documents at the public meeting held on Thursday, November 21st, 2019, and assured us that the documents are currently being prepared for posting on its website, although this would not occur until more than a week after the public meetings held to obtain comments and just a bit more than a week before written comments are due.	Reference Availability	
90	c	Geoffrey Fettus (NRDC)	We also respectfully request NASA hold an additional public meeting, in a traditional public hearing format, before the extended comment period closes. NASA held two public meetings on its Draft SEIS, one in Ventura County on November 20 and one in Los Angeles County on November 21. Both meetings followed the same open-house format, in which the public engaged with individual NASA representatives one-on-one. NASA also allowed individuals to provide recorded comments in writing or privately to a court reporter, though neither system was obviously demarcated at the meetings. This system ultimately left the public wanting. The format meant that NASA provided a one-sided presentation, without allowing the public the benefit of listening to individuals' personal questions or concerns. This is a vital aspect of the comment process as it allows open dialogue not simply between NASA and the public, but also shared knowledge between community members. Further, as stated, the majority of the reference documents were not available to the public for these meetings. We therefore request NASA hold an additional public meeting after the documents are all made available and in the traditional public hearing format in which individuals may present oral comments not only to NASA but also to the attendant community. If NASA decides to grant the extension and hold an additional meeting, we also respectfully request that NASA immediately make a public announcement of that decision in order to keep the public timely informed of the process.	Public Meeting Format	

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
91	a	Gregory Fettus (NRDC, PSR, CBG)	The National Aeronautics and Space Administration (NASA) has recently issued a Draft Supplemental Environmental Impact Statement (DSEIS) for remediation of its portions of the Santa Susana Field Laboratory (SSFL). The new cleanup alternatives put forward in the DSEIS would violate the Administrative Order on Consent (AOC) that NASA executed with the California Department of Toxic Substances Control (DTSC) in 2010; the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §6901 et seq; and other legal requirements, as well as commitments made by NASA. The DSEIS itself also is at variance with the National Environmental Policy Act (NEPA), 42 U.S.C. §4321, et seq. NASA's action is unlawful in terms of process and substance. If the agency were to follow the course of action it proposes in the DSEIS, Californians would be harmed and meaningful cleanup would be foreclosed for future generations. The decision by the Trump Administration NASA to issue this DSEIS sets the stage for abandoning huge amounts of chemically hazardous material and would consign this important land in Southern California, set in the midst of millions of California residents, to never be cleaned up. Collectively, the undersigned Natural Resources Defense Council, Committee to Bridge the Gap, and Physicians for Social Responsibility-Los Angeles urge NASA to withdraw the DSEIS and to immediately commence working with the State and the public to quickly reach compliance with the AOC that the agency signed nearly a decade ago.	Compliance with Law	EX01 Letter from Debbie Raphael, DTSC Director, to Allen Elliott, SSFL Project Manager, NASA, September 19, 2011; EX02 Letter from CEQ Chair Nancy Sutley to Senator Barbara Boxer, Chairman, Committee on Environment and Public Works, June 19, 2012; EX03 Public Statement from SSFL Project Director Allen Elliott 7.18.12; EX04 NASA-SSFL-Communications, "Notice of Update to NASA SSFL Website," December 11, 2019 email; EX05 Taylor Altenbern, "Missing Appendices NASA's SSFL Soil Data Summary Report," email, December 3, 2019; EX06 Error Messages for DTSC Information Repository Webpage; EX07 DTSC Document Library Webpage that Shows Links to Appendices E - J Posted; EX08A-K Error Messages for Missing Appendices on DTSC Document Library; EX09 Transportation and Road Agreement "403 - Forbidden: Access is Denied" error code; EX10 DTSC, Chemical Soil Background Study Report, December 2012; EX11 Briana Jahnsen, "Draft SSFL DEIS," email, October 30, 2019; EX12 NASA, "Soil Treatability Studies Summary," May 2018; EX13 Email "Re: NASA Final Remediation Areas," from Peter Zorba, NASA SSFL Project Director, to Paul Carpenter (DTSC) and Jason Ricks (ESA), June 29, 2015; EX14 DSTC, Comments on NASA Draft Soil Treatability Study Report, May 2018; EX15 DTSC, Chemical Look-Up Table Technical Memorandum, June 2013; EX16 Boeing, NASA, DOE, "Transportation and Road Agreement," 2015; EX17 Statement of The Southern California Federation of Scientists at DOE Scoping Hearing for the Draft Environmental Impact Statement for the Santa Susana Field Laboratory March 1, 2014; EX18 SSFL Transportation Options Taskforce, "Preliminary Overview of Alternative Transportation Options for Santa Susana Field Laboratory Cleanup," August 2014; EX19 Letter from DTSC's Mark Malinowski to Boeing's Mark Zeller, January 16, 2018; EX20 DTSC Response to Comments on the Agreement in Principle, Volume 1, October 26, 2010; EX21A-C Letters from Kim Prillhart, Director, Ventura County Planning Division, to Mark Malinowski, DTSC, July 20, 2015, and December 20, 2017, and the Ventura County Board of Supervisors official December 27, 2019, comment letter on the NASA DSEIS; EX22 December 7, 2017 Comments of the Southern California Federation of Scientists on DTSC's draft PEIR
91	b	Gregory Fettus (NRDC, PSR, CBG)	**The New Alternatives Presented in the DSEIS Would Violate the AOC:** The AOC requires cleanup to local background. (AOC §§1.7.2, 2.1). "Leave in place" alternatives are barred from consideration under the agreement. (AOC §1.7.2.2, Attachment B, p. 2). Contrary to these requirements, NASA now proposes three alternatives in the DSEIS that would leave the majority of the contaminated soil not cleaned up and thus violate the legally binding AOC. NASA does not have the authority to take any action that does not comply with the AOC. Yet only Alternative A would comply with the AOC; all others would violate it. By NASA's estimates, Alternative B would leave 56% of the contaminated soil by volume and 65% by acreage not cleaned up; Alternative C would abandon 72% by volume and 84% by acreage; and Alternative D would walk away from remediating 80% of the contaminated soil volume and 88% of the contaminated acreage. (DSEIS Table ES-2). The amount of contaminated soil that NASA now proposes to walk away from can be seen in maps prepared by NASA.	Leaving Contamination Onsite	
91	c	Gregory Fettus (NRDC, PSR, CBG)	**Even Were There No AOC, NASA Does Not Have the Authority to Decide How Much of Its Pollution It Will Clean Up – That Power, Under RCRA, Rests with DTSC:** Had NASA not executed a legally binding cleanup agreement with DTSC, it still would have no power to determine how much of the contamination it created it will have to clean up. Under RCRA, that authority belongs to the regulatory agency that implements RCRA. In California, that is DTSC. NASA, as the polluter, does not set the cleanup standards for the pollution for which it is responsible. Even absent the AOC, NASA still could not legally do what it proposes in the DSEIS—functionally abandon the cleanup obligations established by its regulator, DTSC. NASA is bound to follow DSTC's cleanup directives, which the agency failed to acknowledge in the DSEIS and fails to adhere to in its actions.	Compliance with Law	

* See Appendix 4A for responses by category

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91	d	Gregory Fettus (NRDC, PSR, CBG)	**NASA Is Not Required to Analyze These Alternatives:** NASA asserts its DSEIS is written per the requirements of the AOC. (DSEIS p. 1-1). That is not correct. The AOC acknowledges NASA shall employ NEPA in analyzing "how to conduct the cleanup to background defined in this Agreement." (§4.2.1, emphasis added). It does not authorize consideration of whether to comply with the AOC requirement of cleanup to background. Similarly, NEPA does not force consideration of alternatives that would breach the AOC. As discussed above, CEQ expressly found that NASA was not required by NEPA to analyze alternatives that were not feasible, and that alternatives that breached the AOC were not feasible. In NASA's 2013 Draft and 2014 Final EIS on Proposed Demolition and Environmental Cleanup Activities at SSFL, NASA complied and did not consider alternatives that did not comply with the AOC; now, in the DSEIS, it is going in an opposite direction, with neither AOC nor NEPA providing the requirement that NASA now claims.	Compliance with Law	
91	e	Gregory Fettus (NRDC, PSR, CBG)	**NASA Has No Discretion as to How Much of Its SSFL Contamination It Will Clean Up:** NEPA is triggered by discretionary federal agency actions which can have a major effect on the human environment. In the present case, NASA has no discretion as to the amount of polluted soil it will remediate. It is bound by the AOC to a full cleanup; and even if the AOC didn't exist, authority over the extent of cleanup required rests solely in the hands of NASA's regulator under RCRA, DTSC. Simply put, NASA does not have the authority to choose among the alternatives which its DSEIS now proposes.	Compliance with Law	
91	f	Gregory Fettus (NRDC, PSR, CBG)	**The Supposed Basis for Conducting a Supplemental EIS Put Forward by NASA Does Not Bear Scrutiny:** NASA asserts it is preparing this Supplemental EIS because of "significant new information"—primarily that it has discovered that it is responsible for much more contamination than it previously estimated. (DSEIS cover sheet). NASA now says it has belatedly discovered that there is 75% more contaminated soil than it had thought in 2014 when NASA published the Final EIS. One would think that such a discovery of more pollution would result in more cleanup. However, NASA has instead proposed to radically reduce the amount of cleanup it does, even as it admits that it contaminated the property more than it had previously realized. The use of purported new information of increased contamination as the excuse for an DSEIS proposing to clean up much less is arbitrary and capricious.	Compliance with Law	
91	g	Gregory Fettus (NRDC, PSR, CBG)	**NASA Inflates Soil Cleanup Volumes so as to Be Able to Push for Weaker Cleanup Standards:** NASA asserts in its DSEIS that large volumes of soil would need to be excavated to meet the cleanup requirements in the legally binding agreement it entered into with the state in 2010. Seemingly in order to try to build a case for breaking that agreement, NASA has heavily inflated those figures. It has done so with an indefensible assumption: that wherever there is soil contamination on the surface, soil would have to be removed down to bedrock or up to 20 feet below ground surface (BGS). So, wherever there are measurements showing the contamination is just at the surface, NASA nonetheless assumed all the soil above bedrock or down 20 feet would have to be removed. Where there are no measurements showing contamination beneath the surface, NASA again assumes all soil down to bedrock or up to 20 feet BGS would be removed. NASA admits that the DSEIS volume estimates are inflated: "These numbers ... represent the upper levels of expected excavated soil quantities...." (DSEIS, p. 2-12, emphasis added). Yet it uses these inflated numbers to create the false impression that a full cleanup would require "moonscaping" the site to bare rock and the neighborhoods having to tolerate huge numbers of trucks, all to the end of trying to get out of cleaning up the contamination its environmentally reckless operations at SSFL created and which it is bound to remediate by the AOC cleanup agreement it executed with the state in 2010. NASA fails to consider the option of taking more measurements to carefully delineate the contaminated areas so as to not remove soil that is, in fact, not contaminated.	Soil Quantity Estimates	

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
91	h	Gregory Fettus (NRDC, PSR, CBG)	**Conclusion:** NASA is legally bound by the AOC it executed with DTSC to clean up to background. Even were there no AOC, NASA has no authority to decide how much or little of its contamination to clean up; that authority rests with its regulator, DTSC. NASA's new alternatives, presented in the DSEIS, would breach the AOC and the regulator's insistence on cleanup to the AOC standards. NASA should reverse course and only consider alternatives that would comply with the AOC. Detailed additional comments on the SSFL DSEIS are attached.	Support for AOC	EX01 Letter from Debbie Raphael, DTSC Director, to Allen Elliott, SSFL Project Manager, NASA, September 19, 2011; EX02 Letter from CEQ Chair Nancy Sutley to Senator Barbara Boxer, Chairman, Committee on Environment and Public Works, June 19, 2012; EX03 Public Statement from SSFL Project Director Allen Elliott 7.18.12; EX04 NASA-SSFL-Communications, "Notice of Update to NASA SSFL Website," December 11, 2019 email; EX05 Taylor Altenbern, "Missing Appendices NASA's SSFL Soil Data Summary Report," email, December 3, 2019; EX06 Error Messages for DTSC Information Repository Webpage; EX07 DTSC Document Library Webpage that Shows Links to Appendices E - J Posted; EX08A-K Error Messages for Missing Appendices on DTSC Document Library; EX09 Transportation and Road Agreement "403 - Forbidden: Access is Denied" error code; EX10 DTSC, Chemical Soil Background Study Report, December 2012; EX11 Briana Jahnsen, "Draft SSFL DEIS," email, October 30, 2019; EX12 NASA, "Soil Treatability Studies Summary," May 2018; EX13 Email "Re: NASA Final Remediation Areas," from Peter Zorba, NASA SSFL Project Director, to Paul Carpenter (DTSC) and Jason Ricks (ESA), June 29, 2015; EX14 DSTC, Comments on NASA Draft Soil Treatability Study Report, May 2018; EX15 DTSC, Chemical Look-Up Table Technical Memorandum, June 2013; EX16 Boeing, NASA, DOE, "Transportation and Road Agreement," 2015; EX17 Statement of The Southern California Federation of Scientists at DOE Scoping Hearing for the Draft Environmental Impact Statement for the Santa Susana Field Laboratory March 1, 2014; EX18 SSFL Transportation Options Taskforce, "Preliminary Overview of Alternative Transportation Options for Santa Susana Field Laboratory Cleanup," August 2014; EX19 Letter from DTSC's Mark Malinowski to Boeing's Mark Zeller, January 16, 2018; EX20 DTSC Response to Comments on the Agreement in Principle, Volume 1, October 26, 2010; EX21A-C Letters from Kim Prillhart, Director, Ventura County Planning Division, to Mark Malinowski, DTSC, July 20, 2015, and December 20, 2017, and the Ventura County Board of Supervisors official December 27, 2019, comment letter on the NASA DSEIS; EX22 December 7, 2017 Comments of the Southern California Federation of Scientists on DTSC's draft PEIR
92	a	Gregory Fettus (NRDC, PSR, CBG)	**I. Summary of Comments** NASA's action is unlawful in terms of process and substance. If the agency follows the course of action it proposes in the Draft Supplemental Environmental Impact Statement (DSEIS), Californians would be harmed and meaningful cleanup would be foreclosed for future generations. The decision by the Trump Administration NASA to issue this DSEIS sets the stage for abandoning huge amounts of chemically hazardous material and would consign this important land in Southern California, set in the midst of millions of California residents, to never be cleaned up. Collectively, the undersigned City of Los Angeles, the Natural Resources Defense Council, Committee to Bridge the Gap, and Physicians for Social Responsibility-Los Angeles urge NASA to withdraw the DSEIS and to immediately commence working with the State and the public to quickly reach compliance with the AOC that the agency signed nearly a decade ago.	Compliance with Law	

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
92	b	Gregory Fettus (NRDC, PSR, CBG)	**II. NASA Fails to Make Publicly Available Key Documents Upon Which the DSEIS is Based, Impairing Meaningful Public Review and Comment** When NASA published the DSEIS on October 25, 2019, approximately two-thirds of the documents it referenced and relied upon ("DSEIS References") were not made public. Even after NASA claimed to have fixed the problem and posted all DSEIS References, many of the documents were in fact still not accessible. Further, NASA failed to even identify sources to provide a basis for many claims in the DSEIS. Such failures have legal consequences. NEPA's fundamental objective is twofold: both that agencies will "consider every significant aspect of the environmental impact of a proposed action," Vermont Yankee Nuclear Power Corp. v. Natural Resources Def. Council, Inc., 435 U.S. 519, 553 (1978), and also ensure "that the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision." Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349 (1989) (emphasis added); see also 40 C.F.R. § 15001(b) ("NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA."). "The information included in and referenced by [an] EIS [must] allow the public to 'play a role in both the decisionmaking process and the implementation of that decision.'" WildEarth Guardians v. Montana Snowmobile Ass'n, 790 F.3d 920, 927-28 (9th Cir. 2015) (citing Methow Valley, 490 U.S. at 349). Therefore, to comply with NEPA's public disclosure requirement, an agency either must provide the public with the underlying data from which it determines its conclusions, or it may incorporate a "publicly available document" by reference so long as "it is reasonably available for inspection by potentially interested persons within the time allowed for comment." Id. (citing 40 C.F.R. §§ 1502.21, 1502.24). Here, NASA failed to comply with NEPA's mandate of public information and participation in the decisionmaking process by both failing to make documents with underlying data available and also simply not referencing what underlying data it relied on at all. We now proceed to explain these failures in detail.	Compliance with Law	
92	c	Gregory Fettus (NRDC, PSR, CBG)	**a. When NASA released the DSEIS on October 25th for public review and comment, NASA failed to make available the majority of DSEIS References.** Approximately two-thirds of the DSEIS References were not immediately made public when NASA published the DSEIS in October of 2019. After numerous public complaints, NASA eventually posted on its website links purportedly to all of the DSEIS References,1 but not until December 11, 2019, about seven weeks after issuance of the DSEIS for comment and three weeks after the November 20-21, 2019 public hearings NASA held to take public comments. Thus, any early comments were made without the benefit of access to the majority of DSEIS References. NASA should held additional public hearings after making all DSEIS References documents publicly available.	Reference Availability	
92	d	Gregory Fettus (NRDC, PSR, CBG)	**b. Despite NASA's claim that it eventually posted all the DSEIS References on its SSFL website, critical documents are still not provided, or the links now given for them do not work**. The following are examples of full DSEIS References NASA never made publicly available. i. National Aeronautics and Space Administration (NASA). 2017b. NASA Soil Data Summary Report for Santa Susana Field Laboratory, Ventura County, California. Prepared for National Aeronautics and Space Administration, Marshall Space Flight Center, Alabama. February. ("2017 SDSR") [Orginal comment privided a detailed listing of communication regarding this reference] ii. National Aeronautics and Space Administration, George C. Marshall Space Flight Center, The Boeing Company, and U.S. Department of Energy, Energy Technology and Engineering Center (NASA, Boeing, and DOE). 2015. Transportation and Road Agreement, Santa Susana Field Laboratory, Ventura County, California ("Transportation and Road Agreement") NASA relies on this document for its claim in the DSEIS that the cleanup will take far longer than it had estimated in its FEIS because "NASA is limited to 16 round-trip truckloads (32 trucks total) per day, 250 days per year."12 However, the link to the document on the NASA SSFL website doesn't work—it takes one to a webpage that shows a "403 - Forbidden: Access is Denied" error code.13 NASA's claim about the supposed truck limit is important to its claim —and, as we show later, false—and having the document upon which the statement is said to rest unavailable for review is inappropriate. iii. National Aeronautics and Space Administration (NASA). 2015a. NASA Soil Data Summary Report for Santa Susana Field Laboratory, Ventura County, California. Final. Prepared for National Aeronautics and Space Administration, Marshall Space Flight Center, Alabama. February. ("2015 SDSR") The DSEIS makes a number of critical and questionable assertions about the purported unavailability of replacement soil. The DSEIS refers to a 2014 investigation of five sites from which replacement soil can be obtained, citing to the 2015 SDSR.15 However, the link NASA provides to that reference on its website takes one to the 2017 SDSR, which appears to have no discussion of a potential replacement soil investigation. We have separately located the 2015 SDSR and it also appears to not have any such investigation reported. It seems that NASA may have meant to cite to the 2015 soil investigation by CH2M HILL, but has not made that critical document available.16 The missing document apparently confirms that there are adequate supplies of replacement soil, contradicting the claim NASA now makes in the DSEIS.	Reference Availability	
92	e	Gregory Fettus (NRDC, PSR, CBG)	**c. No references are identified for many of the central assertions made in the DSEIS, making review and comment difficult if not impossible.** Along with missing appendices, non-working links, and elusive studies, NASA has also made several critical assertions in the DSEIS without meaningful or supportive references. Such actions are contrary to NEPA and NASA should withdraw this document for substantial revision in the manner we set forth above.	Reference Availability	

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
92	f	Gregory Fettus (NRDC, PSR, CBG)	**i. Soil volume calculations** NASA asserts in its DSEIS that the fundamental reason it is performing the Supplemental EIS is because of new information showing that an additional 370,000 cubic yards of soil need to be removed in order to comply with the AOC agreements compared with the soil volume estimate established in the FEIS.17 This substantial increase in the amount of soil supposedly requiring excavation is crucial to the rationale upon which the DSEIS was drafted and the claims it makes. Again, the public made extensive efforts to locate the pertinent material to little or no avail. On December 17, 2019, Taylor Altenbern requested that NASA make the soil volume calculations publicly available, asking "if the actual soil volume calculations for the various alternatives are not in fact in the [S]DSR, then where are they?" NASA responded, saying that "soil volume estimates for Alternative A (AOC LUT cleanup) are based on data from the NASA Soil Data Summary Report," but that "the actual calculations have not been published to date." Altenbern requested that these calculations be added to the public record, stating, "NASA needs to make available the material that it is basing its assertions on in the [D]SEIS. Doing this will allow meaningful public review."NASA has continued to refuse to make the soil volume calculations available for review, despite repeated requests. The repeated claims in the DSEIS that DTSC had confirmed NASA's soil volume estimates also appear to be of little substance, as it appears that DTSC also has not seen the soil volume calculations. In a December 20, 2019 email, NASA's Lori Manes said that DTSC had been provided the 2017 SDSR; however, the 2017 SDSR does not contain the soil volume calculations. The importance of the material NASA is shielding from review should not be underestimated. The primary basis NASA gives for performing the Supplemental EIS is new calculations supposedly showing significant increase in the amount of soil needing remediation, and "verification" by DTSC of those calculations. However, at this juncture NASA has not shared these calculations with the public, and the supposed "verification" of those conclusions by DTSC apparently has also not been based on review of the calculations either. The failure to produce for public review the stated rationale for performing the additional SEIS work in the first instance is troubling and in contravention of the law.	Reference Availability	
92	g	Gregory Fettus (NRDC, PSR, CBG)	**ii. Analysis and calculations for Human Health Risk Assessment (Human Health RA) and the Ecological Risk Assessment (Ecological RA) cleanup levels for the Suburban Residential or Recreational standards** NASA has also not disclosed the analysis and calculations that they performed to produce the proposed Human Health RA Suburban Residential and Recreational cleanup levels and the Ecological RA cleanup levels. These are key, weakened standards for the cleanup now proposed by NASA and failure to disclose the basis of its analysis violates basic public disclosure and review tenets of NEPA. For example, Appendices 2C and 2D of the DSEIS merely list in tables its proposed Human Health RA cleanup levels. Next, NASA proposes for scores of individual contaminants Ecological RA values, but NASA does not provide documentation showing the actual derivation of these numbers. NASA merely states, "This alternative would use site-specific risk-based cleanup levels for contaminants in soil at SSFL that have been developed based on standard risk assessment procedures and equations provided in the DTSC-approved Standardized Risk Assessment Methodology (SRAM), EPA risk assessment guidance (RAG), and Cal EPA RAG."22 However, NASA does not disclose the actual calclulations and assumptions it used to reach these conclusory numbers. the values NASA proposes differ markedly from both the human health and ecological Risk-Based Screening Levels from the DTSC-approved SRAM, as we show below. Thus, vague statements that NASA developed its numbers using unspecified procedures and equations from the SRAM and other agencies' RAGs and similarly unspecified site-specific inputs are insufficient to allow scrutiny of how NASA came up with its questionable values. NEPA does not tolerate such games of "hide-the-ball."	Reference Availability	
92	h	Gregory Fettus (NRDC, PSR, CBG)	**iii. Ecological risk assessment** NASA claims in the DSEIS that cleanup Alternatives C and D would be protective of ecological receptors,23 stating as its basis for that assertion, "An ecological risk assessment was conducted in accordance with the ecological risk assessment guidance developed for the DTSC-approved SRAM, Revision 2 Addendum (MWH, 2014b)." However, NASA has not made available the "ecological risk assessment" it says it produced. SRAM 2 is cited by NASA merely for its assertion that NASA's evaluation was done in accordance with guidance found in SRAM 2, but of course does not contain the ecological risk assessment NASA claims to have performed consistent with that guidance. Furthermore, we note that the ecological risk assessment values NASA proposes in Appendices 2C and 2D for individual contaminants are contradicted by the actual ecological risk-based screening levels (EcoRBSLs) in the SRAM 2 Addendum. The DSEIS states, "Alternative C is protective of ecological receptors such as plants, invertebrates, birds, and mammals that may live or forage on this site" and that "It has been confirmed that the soil cleanup under Recreational Scenario (Alternative D) is also protective of ecological receptors."However, the ecological risk assessment NASA says it conducted and which supposedly supports its DSEIS claims that Alternatives C and D would protect ecological receptors has not been made available to the public for review. Reliance on conclusory statements about an ecological risk assessment that NASA refuses to make available for review strikes at the heart of NEPA public comment rights.	Reference Availability	

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
92	i	Gregory Fettus (NRDC, PSR, CBG)	**iv. Detection limits** In the DSEIS, NASA makes contradictory claims regarding detection limits, a key basis given for its supposed need to prepare a Supplemental EIS and propose alternatives that would violate the AOC. NASA states that DTSC determined the Lookup Table ("LUT") values based on measured background levels and "the method reporting limits (MRLs) of laboratory equipment."26 Therefore, when background concentrations were lower than what a laboratory could detect, the MRLs were used in their place, ensuring that soil samples could be classified as contaminated (or not) with a high level of certainty.27 However, on the very next page, the DSEIS states as one of the key reasons for preparing the DSEIS that "The AOC LUT values are significantly below conventional laboratory capabilities."28 No citation is given to provide a basis for this assertion. On October 30, 2019, just a few days after the DSEIS was issued, Briana Jahnsen noted this discrepancy and emailed NASA SSFL Project Manager Peter Zorba asking for documentation of NASA's claim. She wrote:29 In NASA's "Draft Supplemental Environmental Impact Statement for Soil Cleanup Activities at Santa Susana Field Laboratory" there are inconsistent statements regarding chemical detection levels for toxic materials with which NASA has contaminated its portion of SSFL. At one point in the DSEIS, NASA says that DTSC set the Lookup Table (LUT) values based on measured background levels and "the method reporting limits (MRLs) of laboratory equipment"(p. ES-2). However, on p. ES-3, the draft SEIS proceeds to say, "The AOC LUT values are significantly below conventional laboratory capabilities." No citation to any source is given for this assertion, and no explanation is provided as to the apparent discrepancy with the prior statement that the LUT values are based on laboratory MRLs. Could you please provide the documentation supporting NASA's assertion and which explains the apparent discrepancy with the statement one page prior that the LUTs are based on MRLs of laboratory equipment? 19 days passed without a response. Jahnsen emailed Zorba again, saying: I have not had the courtesy of a response to my email of October 30. . . I asked specific questions about apparently inconsistent assertions in the draft SEIS, requested the basis for the questionable assertion (no source was cited to support the claim) . . . With the public hearing only two days away, the lack of response suggests a continued coverup of the information requested, demonstrating NASA's lack of concern regarding the community involved. In order to provide proper public comment at this event and in the short time remaining for written comments, it is essential that . . . assertions made in the SEIS be backed up with sources. I urge you to cease stonewalling—it creates the clear impression that NASA has something to hide and that its claims cannot bear scrutiny. Please answer my questions and make publicly available the SEIS references.30 On November 20, 2019, Zorba responded with a vague statement that "NASA is committed to providing the public information related to its Draft Supplemental Environmental Impact Statement (SEIS)." He promised to post the DSEIS references by the end of the following week, i.e. by November 29. NASA missed that self-imposed deadline.Jahnsen wrote back to Zorba on December 2, 2019, expressing concern once again that NASA had still failed to make available the documentation it had promised.31 When NASA finally did respond on December 4, 2019, almost seven weeks after the release of the DSEIS, Zorba continued to not answer Jansen's repeated requests for documentation explaining the basis for NASA's critical claim about detection limits and the apparent discrepancy with what NASA elsewhere said about the matter. So, at present, NASA has still refused to make public any documentation that forms the basis for this critical detection limit issue that it claims forms one of the key bases for having to produce an SEIS.	Reference Availability	
92	j	Gregory Fettus (NRDC, PSR, CBG)	**v. Effectiveness of soil treatment techniques** NASA fails to reference or make available any source for its claim that significant new information demonstrates that soil treatment techniques are ineffective and incapable of reducing contaminant concentrations to levels required by the AOC. In its 2014 FEIS, NASA discussed numerous technologies by which contaminated soil could be treated in situ or ex situ—in other words, on site treatment that would markedly reduce the volume of soil that would have to be trucked offsite for disposal.32 Indeed, NASA estimated in the FEIS that 180,000 of the 500,000 cubic yards of soil it estimated needed remediation could be treated on site, requiring only 320,000 cubic yards to be disposed of offsite. In its latest DSEIS, however, NASA now claims that there is significant new information that supposedly shows treatment technologies cannot work: NASA has evaluated multiple onsite treatment options for use at SSFL. Although some treatment options are viable under the site conditions at SSFL, the LUT values are so much lower than conventional cleanup levels that most treatments are largely unproven to meet the remedial goals for SSFL and are not expected to meet AOC LUT cleanup criteria. No citation is provided for this supposed NASA evaluation of "multiple onsite treatment options for use at SSFL." Nor is any citation provided to a single study, let alone a range of studies, to support the assertion of significant new information contradicting NASA's representations in its FEIS on the treatability issue. Nor is the NASA evaluation or any supporting treatability study included in the DSEIS References or posted on the NASA DSEIS References page on its website. We have on our own found a copy of NASA's report evaluating soil treatment technologies for SSFL contamination, comprising nearly 700 pages of detailed analysis of half a dozen primary soil treatment technologies.35 The report includes review of large numbers of case studies, plus bench scale and field tests at SSFL. As discussed later in these comments, in Section III.e., this recent and comprehensive report by NASA itself on these soil treatment technologies reaches precisely the opposite conclusion than that claimed by NASA in its DSEIS.	Reference Availability	
92	k	Gregory Fettus (NRDC, PSR, CBG)	We are 10 single space pages into a long document and we could continue in this vein for several more pages. But we will spare NASA and other relevant readers and simply note that this same pattern is repeated throughout the DSEIS. NASA refuses to make available for public review key documents relied upon for critical claims in its DSEIS, or it fails to even identify the sources that supposedly provide the basis for the claims. When one is able to find some of the documents, it turns out that they illustrate facts contrary to NASA's assertions or simply state the opposite of what NASA claims in its DSEIS. A clear question arises whether NASA is shielding the fundamental documents on which the DSEIS rests because, if those documents were subject to public scrutiny, the NASA DSEIS claims disintegrate. NASA should withdraw the DSEIS.	Reference Availability	

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
92	l	Gregory Fettus (NRDC, PSR, CBG)	**III. NASA's Claims of "Significant New Information" Requiring Preparation of a Supplemental EIS Do Not Survive Scrutiny** NASA's assertion that it is required by NEPA to conduct this Supplemental EIS for soil cleanup stands on two shaky legs: (1) "there has been a significant increase in the expected soil remediation area and volume as determined by the follow-on field work" and (2) that those calculations of increased area and volume have undergone "verification by the California Department of Toxic Substances Control in its draft Programmatic [sic] Environmental Impact Report [("draft PEIR")]."36 It must be emphasized that even if it were true that there were significant new data showing substantially more contamination than previously realized, that of course would not justify an SEIS proposing substantially less cleanup than previously promised. More contamination should result in more cleanup, not less.However, as our analysis will demonstrate, NASA's claims are spurious. What has actually increased substantially is not the amount of soil proven to require remediation, but rather NASA's efforts to get out of the cleanup commitments it made in 2010. Virtually every statement in the passage from the DSEIS quoted above is either false or misleading. There are no measurements in the "follow-on field work" showing contamination in the great majority of the areas NASA now claims to have discovered need cleanup. And as far as the public is aware, DTSC apparently not yet seen, let alone fully reviewed and approved via a public process NASA's soil volume calculations that NASA now claims DTSC has "verified."	Compliance with Law	
92	m	Gregory Fettus (NRDC, PSR, CBG)	**a. Despite its claims to the contrary, NASA has no new measurements to support its claims that significantly greater volumes of soil must be excavated to meet AOC requirements.** NASA claims that the basis of the Supplemental EIS is that there is new, significant information that proves that there is much more contaminated soil requiring excavation than previously anticipated.37 Yet in truth there are no new data to support NASA's claim.NASA's official estimate in its 2014 FEIS of the amount of soil requiring excavation and disposal was 320,000 cubic yards with on-site treatment and 500,000 cubic yards if there were no such treatment employed.38 NASA also estimated in the FEIS that 105 acres of land would need remediation of one sort or another.39 NASA now claims there are significant new measurements that show that in fact, in order to meet the AOC, 870,000 cubic yards will have to be excavated and disposed of offsite, and the acreage supposedly requiring excavation has now increased to 220 acres.40 Thus, NASA now claims that the soil volume requiring excavation has nearly tripled compared to what it estimated in the FEIS with treatment, and increased by 70% if one ignored the potential for treatment; NASA's claimed acreage requiring excavation has now doubled. The primary way that NASA inflated area estimates, and thus soil volume projections, was by tacking on large areas called "extended remediation areas" (XRAs) to the original "Estimated Remediation Areas" (ERAs), upon which the NASA FEIS had been based. Over 250,000 cubic yards of the 370,000 additional cubic yards of soil NASA now estimates requires remediation is due to the addition of these XRSs.41 This is more than two-thirds of the increase in soil volume estimates in the DSEIS, and an even greater fraction of the increase in acreage. The XRAs are shown in light purple in the map below, adding markedly to the area of the ERAs, which are delineated in dark purple—illustrating clearly the dramatic increase in NASA's contamination estimate. Although there are a number of unsupportable assumptions that NASA used to inflate the ERA acreage and volumes, which are discussed later, at least the ERAs were based in part on actual measurements. What the DSEIS does not directly disclose, however, is that the new areas NASA has designated as XRAs and supposedly also require excavation (the light purple areas in the map above) do not contain any soil samples that show actual or potential contamination In order to make this determination, we cross-compared two sets of maps from the 2017 SDSR, the Site Identification and Location Maps and the Sample Locations and Estimated Remediation Areas maps.45 We analyzed if any exceedances (shown as red dots or squares in the SDSR figures) or non-detected concentrations exceeding screening criteria (shown as blue dots or squares) were located within the XRAs. This comparison determined that no such measurements finding exceedances or potential for exceedances are located in the XRAs. [Orginal comment includes detailed assement on the XRA]	Soil Quantity Estimates	

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
92	n	Gregory Fettus (NRDC, PSR, CBG)	**b. NASA also inflates soil volume estimates by assuming all extended remediation areas must be excavated to bedrock or up to 20 feet.** An additional way that NASA has exaggerated the soil volume estimates is by assuming that soil excavation must extend down to bedrock or up to 20 feet below ground surface.49 NASA apparently is assuming contamination goes down that far and soil needs to be excavated to that depth even when there are no measurements showing contamination to those depths or measurements show contamination only at the surface. These are unsupportable assumptions. The 2017 SDSR shows numerous samples where contamination is found at the surface but not in the subsurface, where contamination is found in the subsurface but not all the way to bedrock or 20 feet bgs, or where surface samples have been taken but no subsurface samples have been taken at all. Most surface sample locations had no subsurface samples taken, as indicated in the table below. Further, roughly half of the measurements taken in these areas are identified as "non-detect"—but NASA counts them as detections above screening levels because it used poor quality detection limits—much higher than the MRLs required by DTSC and determined by DTSC to be available from laboratories. In other words, NASA is assuming large volumes of soil will have to be excavated because of its own failure to use proper detection limits, even though those measurements didn't detect any contamination. Obviously, the correct approach is for NASA to take samples that meet the detection limits required by the AOC and DTSC, and only remove soil that actually exceeds the AOC LUT levels, rather than presuming one will have to excavate vast amounts of soil for which no contaminant was detected but for which NASA failed to use appropriate detection limits. Again, it is troubling that NASA's characterization work (that the majority of locations where surface samples were taken had no subsurface samples at all) has been so inadequate, years after the commitment to clean up this site. But the failure to have acquired necessary data is not "significant new information" demonstrating larger contamination volumes and justifying a DSEIS, nor can it provide a basis for assuming everywhere there is surface contamination that it goes down to bedrock or up to 20 feet bgs. The absence of data is not evidence of data, particularly when the failure to have acquired the data is NASA's responsibility.	Soil Quantity Estimates	
92	o	Gregory Fettus (NRDC, PSR, CBG)	**c. NASA falsely claims that DTSC "verified" NASA's calculations of increased acreage and soil volumes requiring cleanup, when DTSC apparently never even saw them.** As discussed earlier in Section II.c.i., it appears DTSC has not been provided and thus has not reviewed NASA's soil volume calculations for the increased soil volumes that NASA claims DTSC has verified.54 The sole source cited by DTSC in its draft PEIR for the NASA soil volumes is a June 29, 2015 email from Peter Zorba of NASA to Paul Carpenter of DTSC and Jason Ricks of ESA (the contractor preparing the PEIR).55 This email was in response to a June 26 email from Ricks to Carpenter and Wetter at DTSC asking, "Has there been any follow up on whether we should replace NASA's PRAs [Preliminary Remediation Areas] with the final remediation area? Also, we need to confirm whether they are officially revising to 650,000 cy or staying at 500,000 cy." Carpenter forwarded that email the same day to NASA's Zorba, saying, "Pete, Can you get us an update on the FRA [Final Remediation Areas] and the volume estimate question from Jason Ricks? Thanks, Paul C." Above is the entire June 29, 2015 email. As far as the public is aware, NASA provided no calculations for DTSC to review. What DTSC did in its draft PEIR is merely reported what NASA's estimate was, that it "is considered a greatest degree of impact scenario" with any actual volume likely to be less, and that the data in the NASA Soil Data Summary Report were reasonable to use in coming up with soil volume calculations.56 That is a far cry from independently "verifying" NASA calculations DTSC never saw.	Soil Quantity Estimates	

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
92	p	Gregory Fettus (NRDC, PSR, CBG)	**d. NASA also inflated soil excavation volumes by reversing its own prior position and now falsely asserting no soil treatment technologies could be employed at SSFL.** In its 2014 FEIS, NASA identified an array of on-site soil treatment technologies that could be used at SSFL and concluded that 36% of the contaminated soil (180,000 of the 500,000 cubic yards) could be treated on-site, rather than having to be disposed of off-site.57 Now in its DSEIS, however, NASA claims that significant new information has arisen that demonstrates that such soil treatment technologies "are not expected to meet AOC LUT cleanup criteria."58 NASA saysthis claim is based on an evaluation of treatment technologies, but does not cite to any evaluation document or supporting studies, does not include any such evaluation or studies in the DSEIS References, and has not included them on its webpage for DSEIS supporting documents. We have nonetheless obtained the May 21, 2018 document "NASA Final Soil Treatment Suitability Studies Summary."59 Its conclusions are precisely the opposite of what NASA claims in the DSEIS; the studies show various soil treatment technologies can successfully treat soil and reduce contaminant concentrations to AOC LUT limits. In its 2018 document, NASA examined six treatment options in the "NASA Final Soil Treatment Suitability Studies Summary. [Orginal letter contained summary of 2018 Soil Treatability Study] Thus, NASA's own soil treatment study concluded that five of the six technologies examined could reduce soil concentrations of Contaminants of Concern to the levels required by the AOC (LUT values). And there was no evidence that the sixth technology (landfarming) couldn't reduce soil concentrations, as it didn't involve either bench or field tests at SSFL and the studies it reviewed weren't designed to address the question of whether LUT levels could be achieved. In contrast to a few of the other reports cited above, we did find evidence that DTSC reviewed NASA's draft soil treatability studies summary report and approved its release as a final report. DTSC noted that the report concluded that landfarming, SVE, and thermal desorption should be considered for use in the SSFL cleanup. DTSC also noted that there were difficulties with the ISCO and bioventing studies that "hamper complete interpretations of those methods, and make firm conclusions about their applicability difficult (as the Draft Summary Report concludes)." NASA had, DTSC said, concluded that ISCO and bioventing were "not as effective or widely applicable as landfarming, SVE, and Thermal Desorption technologies."64 DTSC goes on to say, however, that ISCO and bioventing should not be discounted.65 Thus, DTSC and NASA agreed that three techniques were effective, and two others were also effective but not as effective as the first three, with DTSC saying they should nonetheless be included in upcoming Soil Remediation Action Implementation Plans. NASA's claim in the DSEIS that its evaluation showed that soil treatment techniques "are not expected to meet AOC LUT cleanup criteria" is thus flatly contradicted by the citations above. In fact, the NASA soil treatability studies summary report—which it did not cite or make available on its DSEIS website—concludes exactly the opposite. NASA basing its decision to do a Supplemental EIS on this supposed new information is arbitrary and capricious.	Soil Treatment Technologies	
92	q	Gregory Fettus (NRDC, PSR, CBG)	**e. NASA also falsely claims that laboratories can't detect contaminants at the cleanup levels.** Another reason NASA asserts it must prepare a Supplemental EIS and breach its AOC cleanup obligations is new information purportedly demonstrating that laboratories cannot detect contaminants at the AOC cleanup levels. This is false, and indeed is contradicted by NASA itself in the DSEIS and by DTSC. NASA identifies "Laboratory Screening Limitations" as one of the key reasons for the Supplemental EIS, asserting, "AOC LUT values are significantly below conventional laboratory capabilities; for example, levels of polycyclic aromatic hydrocarbons (PAHs), total petroleum hydrocarbons (TPHs), and dioxins are so low that laboratories cannot distinguish potential 'contamination' releases from natural 'background' concentrations of these types of constituents." However, just one page before this, NASA says, "Three years after the signing [of the AOC], DTSC developed LUT values based on a DTSC chemical background study and the method reporting limits (MRLs) of laboratory equipment (DTSC, 2013)."So, on one page NASA admits the LUT values are based on what laboratory equipment can detect, and on the very next page claims laboratory equipment can't detect those levels. As discussed earlier, NASA provides no citation to any source as support for the latter claim, identifies no reference in the References, and provides no document in support on its webpage for SSFL DSEIS supporting documents. It is an unsupported and unsupportable assertion. The AOC values are not below laboratory capabilities—they were set by DTSC based on what laboratories could reliably detect, as NASA admits in the DSEIS. The AOC states that, "Upon completion of the DTSC-led chemical background study, a 'look-up' table of the chemical cleanup levels will be prepared, which will include both local background concentrations as well as minimum detection limits for specific contaminants whose minimum detection limits exceed local background concentrations." When detection limits exceed local background, an exception to the requirement to cleanup to background applies. In those circumstances, the LUT defaults to the detection limit. The AOC defines minimum detection limits for chemicals as the "method reporting limit (or MRL), which is the lowest concentration at which an analyte can be confidently detected in a sample and its concentration can be reported with a reasonable degree of accuracy and precision." In preparing the "look-up table" (LUT), DTSC conducted a background study, which included determining laboratory method detection and reporting limits for each chemical considered. As stated in DTSC's background study, "A rigorous laboratory evaluation was conducted to identify laboratories that could consistently produce high-quality, defensible analytical data with the lowest achievable reporting limits (RLs) within a commercial laboratory environment." The subsequent LUT was based on background threshold values (BTVs) for chemicals for which MRLs were lower than the measured background values, MRLs for chemicals in the background study where MRLs exceeded background, and for the chemicals not in the background study, MRLs determined by DTSC based on a review of multiple lab's capabilities.74 As DTSC described its multi-lab study for determining MRLs, "DTSC reviewed and evaluated the MRLs from several different laboratories and from the results of recent and current investigation work conducted on the site (multi-lab MRL study). For all the chemicals that were not part of DTSC's chemical background study (e.g., volatile organic compounds), the Look-Up Table value is the chemical-specific MRL from the multi-lab study." DTSC concluded that "the multi-lab MRLs are routine and practicable." The actual Look-Up Table, in addition to giving the LUT value for each chemical of concern, identified the basis for the cleanup level for each contaminant: BTV (Background Threshold Value), BG-MRL (the Method Reporting Limit for the background measurements, if higher than background), and M-L MRL (the Multi-Lab MRLs from DTSC's survey of the capabilities of multiple laboratories, employed when the chemical wasn't part of the background study). Thus, there are no LUT values at concentrations that laboratories cannot detect, DTSC has formally determined that to be the case, and NASA in its DSEIS admits it. Yet, nonetheless, NASA elsewhere in the same DSEIS claims, without basis or citation, the opposite to be true.	Soil Quantity Estimates	

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
92	r	Gregory Fettus (NRDC, PSR, CBG)	**IV. NASA Inflates the Amount of and Impacts from Trucks Necessary for Excavation** By inflating the number of trucks supposedly necessary for the remediation to address the contamination NASA created at SSFL, the question arises whether NASA is exaggerating the number of trucks and length of cleanup required so as to create an argument for breaking the cleanup agreement it signed. However, the extraordinary increase in its estimates seems to have no factual basis.	Resource Concerns	
92	s	Gregory Fettus (NRDC, PSR, CBG)	**a. The FEIS and DSEIS both found a "negligible increase in traffic" from cleanup truck trips.** In its FEIS, NASA calculated the increase in daily truck trips that would be caused by the cleanup project and found that "project-related truck trips represent a negligible increase in traffic on the study roadways." [Original Comment contained summary of EIS findings] The largest increase in traffic would be on Woolsey Canyon Road, a short private road which for decades has served as the main access to the field lab. The second highest increase in traffic would be a mere 2% under the full excavation and 1% under the onsite treatment plan. Truck traffic, by NASA's own admission, is therefore a "negligible" concern. Even the above-cited numbers from NASA's FEIS are likely over-estimates. For example, for these calculations, NASA assumed all truck traffic entering and leaving the site would take Woolsey Canyon Road down to Valley Circle Boulevard to Roscoe Boulevard and from there head either north to State Route 118 or south to US Highway 101 on Topanga Canyon Boulevard. If there were efforts to disperse the traffic to reduce impacts in any one location, these numbers for several of the routes would be even lower. Additionally, NASA assumed that trucks leaving the site with soil for disposal would return empty, and entirely separate set of trucks would additionally enter the site with replacement soil and go back empty, whereas if one is trying to reduce truck impacts and save money, one would have trucks that hauled soil offsite return with replacement soil. One shouldn't add the trips of trucks hauling soil out and hauling soil in; they should be the same roundtrips.81 In the DSEIS, NASA reduced the daily number of truck trips assumed to 16 round trips daily, claiming it was limited to that amount. Were NASA correct, and trucks could only do 16 daily round trips to SSFL, then the increase in traffic from those trucks should be even lower than the increase NASA found in the FEIS, when it assumed more trucks per day. The DSEIS doesn't acknowledge such a reduction, in part because of two assumptions made. First, the DSEIS includes not just the trucks for hauling soil but also the cars for the SSFL workers.83 Secondly, NASA multiplies each truck by a factor of 2.5 and adds that figure to the workers' cars total.84 So NASA is not really estimating the increase in traffic due to the trucks, but to all cars that would access the site during remediation. In the DSEIS, NASA estimates, at peak traffic hour and even with including the workers' cars and multiplying each truck by a factor of 2.5, that the project would increase traffic on: – Roscoe Boulevard in one direction by 0.6% - 0.8% and in another direction by 1.6% - 1.7%, – Valley Circle by 1.3% - 1.7%, – Topanga Canyon by 0.4%, and – State Route 118 and 101 Freeways by 0.1%.These are all in the same range that NASA found in its FEIS, and again the DSEIS describes the impact as a "negligible increase in traffic."	Resource Concerns	
92	t	Gregory Fettus (NRDC, PSR, CBG)	**b. While the increase in daily traffic is still assessed as negligible by NASA, it inflates the number of truck trips and years necessary to complete its cleanup.** NASA in its FEIS estimated cleaning up all the contamination on its part of SSFL would take 23 months and could be completed by 2017, the date promised in the AOC.87 NASA now makes the spectacular new claim in the DSEIS that it will take more than 25 years of truck shipments to complete the cleanup.88 NASA now says it was wrong in its own FEIS, and that its error was not a few percent, or a factor of two, but that it will take more than thirteen times as long to conduct the shipments as it stated in its FEIS. The extraordinary claim, however, falls apart under scrutiny. As explained below, NASA, by inflating the amount of soil that requires excavation, and using a number of other sleight-of-hands efforts, has dramatically inflated the amount of trucks supposedly necessary to complete the cleanup to AOC requirements.	Resource Concerns	
92	u	Gregory Fettus (NRDC, PSR, CBG)	**i. False claim of 16 truck round trips a day** One of the ways in which NASA inflated the number of years it would take to do the cleanup is by falsely claiming that it is limited to 16 round trips a day: "A transportation and road agreement signed in 2015 [(the "Agreement")]89 limits the maximum number of daily truck trips associated with the project to 48 round trips per day. It is assumed that this quantity will be equally shared among the three responsible parties for the site, namely, Boeing, NASA, and DOE." NASA repeatedly asserts in the DSEIS that it "is limited to 16 round-trip truckloads (32 trucks total) per day, 250 days per year."91 However, the Agreement states that, "truck traffic will be staggered to allow a maximum of 96 truckloads departing the Site per day." Thus, NASA's nominal share would be 32 round-trips daily, not 16 as it claims. The Agreement further states "If one Party does not need its total number of Trucks that day, the other Parties are allowed to use those trips." Therefore, NASA is not even limited to the 32 round trips, given that it is unlikely that all three Parties will be conducting all of their cleanup activities simultaneously and thus at least some days NASA will be able to use more than 32 round-trips because another Party wouldn't be using their full allotment during that time. NASA calculated the time required for cleanup by assuming 16 truckloads of soil would leave the site per day, 250 days per year. Using these numbers and NASA's inflated soil volume estimates, NASA asserted that remediation would take 25 or more years. However, this is an exaggeration based on a false claim. If NASA used the correct estimate of 32 truck loads of soil per day, the estimated length of time required could be cut in half, all other factors remaining constant. That is to say, even with NASA's inflated soil volumes, and correcting no other misrepresentations NASA has made in the DSEIS, cleanup would not take longer than approximately 12 years.	Resource Concerns	

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
92	v	Gregory Fettus (NRDC, PSR, CBG)	**ii. "Expansion Factor"** NASA has additionally inflated its truck and cleanup time estimates by assuming that, despite 19 cubic yards of soil being a truck's actual capacity, a single truck could only hold 13.3 cubic yards. NASA says, without providing any support: "The truckload capacity is assumed to be 19 yd3; however, due to the expansion factor for excavated soil, 13.3 yd3 of excavated soil is equivalent to 1 truckload." This assumption alone artificially increases the number of trucks and the time for cleanup by 43%, a factor of 1.43 (19/13.3=1.43). As the Southern California Federation of Scientists showed in its DOE EIS scoping hearing testimony in 2014,95 this makes no sense because the soil would be compacted back to its normal density as it is put into the trucks. Subsequently, DOE, in its Final EIS, noted that NASA had not assumed an expansion factor in estimating the number of trucks needed, and that "the three parties [DOE, NASA, and Boeing] agreed to present soil volumes using the in situ quantities and not to apply an expansion factor." NASA also, in both its DEIS and FEIS, correctly used no expansion factor—it assumed each truck could carry 19 cubic yards of soil and used the "estimated volume of soil requiring excavation." But NASA has now tried—without providing an explanation for the change—to quietly alter this input into the calculations and use a large expansion factor in its DSEIS. NASA is arbitrarily decreasing the soil carrying capacity of each truckload.	Resource Concerns	
92	w	Gregory Fettus (NRDC, PSR, CBG)	**iii. Additional areas of inflation** NASA's own DEIS and FEIS assumed that with some use of on-site treatment techniques, 320,000 cubic yards of soil would need to be transported offsite for disposal; with no on-site treatment, the figure was 500,000. In either case, NASA estimated 23 months for completion. NASA now claims there will be 870,000 cubic yards of soil that will have to be hauled off-site, taking 99,098 truck trips and more than 25 years under the AOC cleanup. It bases this claim on several indefensible assumptions. • Additional 250,000 cubic yards of soil to be removed in areas where no contamination has been found. In the DSEIS, NASA added 252,311 cubic yards of soil in areas it has now designated as Extended Remediation Areas (XRAs),102 even though, as we demonstrated above, NASA has not a single measurements in those areas showing contamination. Indeed, all the measurements in those areas show no exceedances. • Assumes all soil down to bedrock or 20 feet must be removed, even if there is no evidence of contamination beneath the surface. For the Estimated Remediation Areas (ERAs), NASA indefensibly assumed that soil would be excavated to bedrock or up to 20 ft below ground surface, even if measurements show contamination only on the surface or if there are no subsurface measurements at all. • NASA assumes that all contaminated soil will have to be excavated and disposed of offsite, despite in situ and ex situ soil treatment technologies. In its FEIS, NASA identified a number of technologies that would allow contaminated soil to be treated on site, reducing substantially the amount of soil that would have to be trucked off-site for disposal. In its FEIS, NASA assumed that more than a third (36%) of the contaminated soil on its property at SSFL could be treated on site and not have to be disposed of offsite—with treatment employed, 320,000 cubic yards of soil would be transported offsite; without treatment, 500,000 cubic yards. • Dramatically increases the amount of backfill assumed. NASA claims in its DSEIS it will need 448,000 yd3 of backfill to be trucked in, as much as four times as much as set forth in its FEIS.105 There is no new information presented to justify this; NASA is merely changing its assumptions used in its calculations to further exaggerate the truck trips. In the DSEIS, NASA markedly inflates the backfill amount by assuming that all excavated soil at depths greater than two feet would require 100% replacement soil, whereas its own FEIS assumed one-third.106 There is no basis given for this change; indeed, it is not even identified as a change, but merely hidden in a footnote.107 Overall, NASA now assumes more than half of excavated soil will need to be backfilled, rather than the original estimate of 33%. Further, as discussed earlier, it has now inflated the amount of soil excavated, which also inflates the amount of backfill assumed. These unjustified increases in backfill estimates result in further overstatement of truck trips to and from the site and the amount of time it will take to complete remediation activities. • Double-counts trucks for removing contaminated soil and replacing with clean soil. NASA assumes trucks leaving the site with contaminated soil for disposal would return empty, and trucks going to the site with replacement soil would likewise come back down empty.108 Even just on an economic basis, this makes no sense, let alone if one is trying to minimize truck impacts. Trucks carrying soil off-site for disposal should return carrying replacement soil to the extent needed.	Soil Quantity Estimates	
92	x	Gregory Fettus (NRDC, PSR, CBG)	**c. Correcting for NASA's Errors i. Correcting for Actual Number of Truck Shipments Allowed Daily** If one were to calculate the length of time it would actually take NASA to achieve a full, AOC-compliant cleanup using its own equations and numbers from its own table, and merely uses the actual daily 32 roundtrips (64 one-way) allocated to NASA, rather than the erroneous 16 roundtrips, one gets a cleanup duration of: 12.39 years	Soil Quantity Estimates	
92	y	Gregory Fettus (NRDC, PSR, CBG)	**ii. Correcting for Actual Capacity of the Trucks** If NASA were to, as it accurately did in its FEIS, calculate based on the 19 cubic yard capacity of the trucks, rather than the 13.3 cubic yards/truck it erroneously used in the DSEIS, the total number of truck shipments for offsite disposal and to bring replacement soil would be (13.3 ÷ 19) x 99,098, or 69,368 trucks, and the time required would be: 8.67 years	Soil Quantity Estimates	
92	z	Gregory Fettus (NRDC, PSR, CBG)	**iii. Correcting for the Double-Counting of Truck Trips** NASA is currently assuming that all truck trips are empty in one direction (i.e., that trucks taking contaminated soil offsite for disposal all return empty, and that trucks bringing replacement soil up to the site all come back down empty). If NASA were to assume, as it should, that trucks carrying replacement soil up to the site would not go back down empty but would take contaminated soil for offsite disposal, the total number of truck round-trips would be reduced from the 69,268, as above, to 45,790109, and the time required reduced to 5.7 years: 5.72 years	Soil Quantity Estimates	

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
92	aa	Gregory Fettus (NRDC, PSR, CBG)	**iv. Correcting for Actual Soil Volume Requiring Excavation** If the new Extended Remediation Areas (XRAs)—for which there is not a single measurement showing contamination—were removed from the volume excavation estimates, the amount of excavated soil would be decreased from 870,000 to 617,689 yd3. This would reduce the total number of truck shipments to 32,510 [(617,689 ÷ 870,000) x 45,790 = 32,510] and the time to four years. If all the prior corrected assumptions were taken into account: the equation would look like this: [image can not be processed] In its DSEIS, NASA also inflated soil volumes by assuming for the Estimated Remediation Areas (ERAs) that all soil contamination went down to bedrock or up to 20 feet, even when measurements showed contamination only at the surface or there were no measurements below the surface. This unsupported assumption appears to have been largely responsible for increasing the estimate for these areas from the 500,000 yd3 in the FEIS to 617,689 yd3 used in the DSEIS. Using the more reasonable estimate from the FEIS reduces total truck trips to 26,316 [(500,000÷617,689) x 32,510 = 26,316] and time to approximately three years. Finally, in its DSEIS, with no new information relied upon to base its changed position, NASA now asserts no onsite treatment of contamination can be used, whereas in its FEIS it had identified numerous such treatment techniques and presumed they could reduce offsite shipments of soil for disposal by more than a third, to 320,000 yd3. Assuming the same use of such treatment approaches—which should be embraced to the maximum extent possible, as they reduce and mitigate offsite and onsite impacts—that NASA assumed in its FEIS, total truck shipments would be reduced to 16,836 [(320,000÷500,000) x 26,316 = 16,842] and cleanup time to approximately two years. This is the same timeframe as NASA itself estimated in its FEIS, but here assuming a daily truck limit that didn't exist when the FEIS was issued. After correcting for the many erroneous claims NASA makes in the SEIS, it is clear that the cleanup could, in fact, take roughly 23 months, as the original FEIS predicted. The claim that the cleanup will take 25+ years is based on misrepresentations and should be dismissed. Again, we note the incongruity of the environmental advocates suggesting that cleanup can be dramatically shortened as compared to the federal agency responsible for the contamination. But we stress for the record of this proceeding, the thorough cleanup necessary for this site was set out in the 2010 AOC and this DSEIS is simply a transparently misguided attempt to break out of the agreement.	Soil Quantity Estimates	
92	ab	Gregory Fettus (NRDC, PSR, CBG)	**d. Sensible Transportation Alternatives That Would Reduce Truck Impacts Are Ignored.** NASA estimated in its FEIS and in the DSEIS that cleanup to the AOC requirements would entail about two or three trucks per hour. That is likely less than the truck traffic in and out of SSFL during the decades of its operation. Nonetheless, there are ways to reduce truck impacts, but NASA has consistently refused to consider them. One is an enclosed conveyor system that would take the soil down to a rail spur north of SSFL for loading on trains, without passing a single house. The DSEIS eliminated this from consideration, despite its own conclusion that it was "technically feasible." The main argument given against a conveyor system is that it would take time to put in place, similar to the argument made in NASA's 2013 DEIS, which stated, "The time required to complete the prerequisite surveys, studies, and engineering/designs to support applications for required permits is a potentially significant constraint in terms of meeting the cleanup requirement date for SSFL."114 There is no small irony in this claim, since the 2017 deadline has come and gone, without soil cleanup even beginning. Had the process begun then to put the conveyor in place, it could be operational now and the cleanup close to done. NASA in the DEIS estimated trucking the soil would take 23 months. Now it claims more than 25 years. Constructing a conveyor system could get the cleanup done in a fraction of that time, avoiding the trucking issues. A second option is to use Edison Road, which comes out of the western part of SSFL, taking the shipments either to State Route 118, or to a railroad spur and loading intermodal canisters onto trains, in either case passing near only a few homes. NASA also failed to consider this alternative. A third alternative it refused to consider is to disperse the trucks over several routes, reducing impacts to any individual area. These alternatives are discussed in more detail in the SSFL Transportation Options Taskforce report, attached.	Resource Concerns	
92	ac	Gregory Fettus (NRDC, PSR, CBG)	**V. NASA Falsely Claims Suitable Replacement Soil for the Cleanup is Not Available** NASA gives as one of its primary reasons for preparing a Supplemental EIS that since the preparation of the FEIS in 2014, there has been "an identified lack of suitable replacement soil." This simply isn't true: the two investigations performed for NASA by its contractor CH2M HILL since the 2014 FEIS both identified multiple sources of suitable replacement soil. [Original Comment provided an assesement of the CH2M Hill 2015 Report]	Resource Concerns	

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
92	ad	Gregory Fettus (NRDC, PSR, CBG)	**VI. NASA Erroneously Claims Boeing's Parts of SSFL Will Be Cleaned up to Recreational Standards and That Would Justify NASA Breaking its Own Cleanup Agreement** NASA says that "Boeing has announced that it will clean up soil to a recreational risk-based standard," and that this poses problems were NASA to live up to its AOC commitments. However, just as NASA as the polluter cannot choose how much of its pollution it will clean up, neither can Boeing. The regulator, DTSC, has that authority, not the Responsible Party. DTSC has made clear that cleanup of the Boeing-controlled portions of SSFL must comply with the 2007 Consent Order that Boeing signed with DTSC, which requires cleanup plans consistent with the Standardized Risk Assessment Methodology 2 ("SRAM2"), which includes cleanup to standards of suburban residential with garden. SRAM2 suburban residential with garden Risk Based Screening Levels are lower than background for many chemicals. DTSC has also made clear that the Boeing cleanup must take into account all land uses allowed by Ventura County zoning and General Plan designations, which includes agricultural and residential. Ventura County has repeatedly stated that its land use designations allow a wide range of residential and agricultural uses there and that the site should be cleaned up so it safe for any of those uses. Thus, it is false to claim, as NASA does in it DSEIS, that there is significant new information that Boeing's part of the property will be cleaned up to a recreational standard, merely because Boeing says that is what it wants to do. Boeing doesn't get to decide, DTSC does. And buried more than a hundred pages later in the DSEIS, NASA admits "As of April 2019, the DTSC had not accepted Boeing's proposed recreational cleanup levels." While NASA further asserts that differing cleanup standards would pose "several seemingly unresolvable issues," NASA identifies only one such issue, and it is flimsy. NASA claims that if it were to clean up its property as required by the AOC and Boeing cleaned up its nearby property to a recreational standard, contamination could subsequently migrate onto the NASA property, requiring NASA to do further cleanup. However, that is not how the AOC works. Under the AOC, NASA is to clean up its contamination to AOC levels, at which point DTSC certifies the cleanup complete and prepares for NASA an Acknowledgment of Satisfaction. NASA's obligations under the AOC are then over and NASA would not be responsible for any contamination that migrates onto the NASA property.There thus is no significant new information about differing cleanup standards that could justify a Supplemental EIS or trying to breach the legally binding AOC. When NASA executed the AOC in 2010, it knew Boeing was not signing a similar AOC and the cleanup standard for its property would be different. Nothing has changed. This is simply one more claim of supposedly changed circumstances that melts away when scrutiny is applied.	Compliance with Law	
92	ae	Gregory Fettus (NRDC, PSR, CBG)	**VII. NASA Falsely Claims that the LUT Values Are Too Protective For Human Health** NASA made a promise and signed a legally binding agreement to clean the site up to background, the concentration of chemicals that would exist had NASA never contaminated the site. First, it does not matter if the AOC values were more protective than certain risk-based concentrations. NASA made a promise, it signed an agreement, and it needs to be held accountable. Furthermore, some LUT values are actually less stringent than the DTSC suburban residential garden risk based screening levels (RBSLs).162	Support for AOC	
92	af	Gregory Fettus (NRDC, PSR, CBG)	**VIII. NASA Misrepresents the Alternative Standards it Proposes to Use in Breach of its AOC** NASA's final claim of "significant new information" requiring a Supplemental EIS and arguing for breaching the AOC is its assertion that the AOC requirements exceed what would be done under a supposed risk-based cleanup. First, NASA provides nothing new in making this claim; everything NASA points to it knew when it signed the AOC. And second, its claims about the cleanup levels that would be required under a risk-based cleanup are inaccurate, as shown below.	Support for AOC	
92	ag	Gregory Fettus (NRDC, PSR, CBG)	**a. Alternative B** NASA calls its Alternative B "Revised Lookup Table Values." Lookup Tables are tables setting forth cleanup standards as required in the AOC, based on background values and detection limits. NASA has no authority to revise these values because under the AOC, DTSC—not NASA—sets the "Lookup Tables." Yet in this alternative, NASA proposes ignoring those legally required cleanup levels and substituting its own, far laxer levels, for seven key contaminants. The differences are large; if NASA were to skirt its AOC obligations with this proposal, it would abandon contaminants in Southern California at levels as much as three million times higher than required by the agreement it signed and to which it is bound. <Table 1: Comparison of NASA's Alternative B Cleanup Levels ["Proposed Revised Lookup Table (LUT) Values"] to the Levels NASA Promised to and is Required to Meet Under the AOC> . NASA misleadingly asserts that its proposed revised Lookup Table values are based on EPA Regional Screening Levels (RSLs) and other sources it has cherry-picked, which it claims are designed to protect for unrestricted release. But those don't include the garden pathway, which is supposed to be added in separately for the particular chemicals of concern at a specific site, and which produces markedly lower limits.165 Below in Table 2 we compare NASA's proposed revised Lookup Table values with the DTSC Suburban Residential Risk-Based Screening Level with SRAM-Based Garden. As one sees, the SRAM Suburban Residential levels are hundreds and thousands of times more protective than NASA's proposed revised LUT values. NASA's Alternative B, thus, not only is vastly weaker than the cleanup it is legally bound to by the AOC, but even if the AOC didn't exist, the standards NASA proposes in this alternative are orders of magnitude less protective than that required by its regulator DTSC to protect residents.167. <Table 2: Comparison of NASA's Alternative B Cleanup Levels ["Proposed Revised Lookup Table (LUT) Values"] to the Suburban Residential Levels in DTSC's Standardized Risk Assessment Methodology ("SRAM2 Update")>	Compliance with Law	

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
92	ah	Gregory Fettus (NRDC, PSR, CBG)	**b. Alternative** C NASA falsely claims its Alternative C is set to Suburban Residential Standards and is based on the DTSC-approved Standardized Risk Assessment Methodology ("SRAM"). In fact, NASA didn't actually use the DTSC SRAM Suburban values, but employed unspecified equations of its choosing from the SRAM and other sources and its own inputs.170 The actual derivations of its values are not disclosed. Most importantly, the values it puts forward are often hundreds of times higher (i.e., weaker, less protective) than the SRAM-based suburban residential risk based screening levels. One is required by the SRAM to include in the suburban residential standard the garden exposure pathway, and the SRAM provides screening levels based on the SRAM-based garden pathway. NASA failed to do so, which results in vastly less protective standards than required. Table 3 shows a few examples of the grossly less protective level of contamination NASA proposes to leave behind in its supposed "Suburban Residential" standard compared to the actual suburban residential standard in the DTSC-approved Standardized Risk Assessment Methodology for SSFL. <Table 3: Comparison of NASA's Alternative C Cleanup Levels ("Proposed Suburban Residential Cleanup Levels") to the Suburban Residential Levels DTSC in the DTSC-Approved Standardized Risk Assessment Methodology ("SRAM2 Update"). >NASA's Alternative C also would allow contaminant concentrations vastly higher than permitted under the legally binding cleanup agreement it signed.	Compliance with Law	
92	ai	Gregory Fettus (NRDC, PSR, CBG)	**c. Alternative D** Alternative D, the supposed "recreational" standard, is the weakest of all. It assumes someone is on the property only a few hours a week, whereas people are living nearby nearly 24 hours a day 7 days a week and would be potentially exposed to migration from SSFL of contamination NASA now wants to not clean up. The cleanup levels proposed by NASA under Alternative D are hundreds and thousands of times higher (less protective) than either the cleanup values NASA is required to meet under the AOC it signed or the DTSC-approved SRAM-based suburban residential levels.	Compliance with Law	
92	aj	Gregory Fettus (NRDC, PSR, CBG)	**d. NASA's proposed cleanup standards would harm ecological receptors.** NASA asserts in the DSEIS that its supposed suburban residential cleanup standards (Alternative C) and its recreational cleanup standards (Alternative D) would be fully protective of plants and animals at the site, so-called "ecological receptors," even though both are far weaker than what is required under the AOC. But NASA's own tables demonstrate that claim to be false. In Appendix 2D, for example, NASA presents its proposed recreational cleanup levels and its own asserted screening levels for harm to ecological receptors. Over and over again, the contamination levels NASA proposes to leave in place far exceed the levels NASA itself admits would pose risk to the ecological receptors, by factors of hundreds or thousands. We provide a few examples in Tables 4, 5, 6, and 7 below. <Table 4: Comparison of NASA's Alternative D Cleanup Levels ("Proposed Recreational Human Cleanup Levels") to Levels NASA's Own Alternative D Risk Assessment Admits Would Put Ecological Receptors at Risk> <Table 5: Comparison of NASA's Alternative C Cleanup Levels ("Proposed Suburban Residential Human Cleanup Levels") to Levels NASA's Own Alternative C Risk Assessment Admits Would Put Ecological Receptors at Risk>. Furthermore, the ecological risk levels NASA puts forward in its Appendices, without any basis provided as to how individual numbers were arrived at, are often considerably higher (less protective) than the Ecological Risk-Based Screening Levels in the DTSC-Approved SRAM2 Update. NASA says it has relied upon SRAM3, but SRAM3 was a proposal by Boeing which DTSC has officially rejected.172. <Table 6: Comparison of NASA's Alternative C Ecological Risk Levels ("Proposed Suburban Residential Ecological Risk Levels") to Ecological Risk-Based Screening Levels in the DTSC-Approved Standardized Risk Assessment Methodology ("SRAM2 Update")> 173. Similarly, as shown in Table 7 below, the levels of contamination NASA proposes to leave in the soil at SSFL under its Alternative B, "proposed revised LUT values," would for various chemicals be at levels far higher than the DTSC SRAM2 Update EcoRBSLs, i.e., place those ecological receptors at continuing risk. <Table 7: Comparison of NASA's Alternative B Cleanup Levels ("Proposed Revised LUT Values") to Ecological Risk Based Screening Levels in the DTSC-Approved Standardized Risk Assessment Methodology ("SRAM2 Update")>	Resource Concerns	
92	ak	Gregory Fettus (NRDC, PSR, CBG)	**Conclusion** NASA should withdraw its Draft Supplemental Environmental Impact Statement for the cleanup of the Santa Susana Field Laboratory and fully comply with the Administrative Order on Consent it signed in 2010.	Support for AOC	

* See Appendix 4A for responses by category

Agency Comments

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Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
1	a	Jean Prijatel (U.S. EPA)	The U.S. Environmental Protection Agency has reviewed the above-referenced document pursuant to the National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act. EPA previously reviewed the Draft EIS (September 30, 2013) and Final EIS (April 10, 2014) and provided recommendations regarding air quality and environmental justice impacts related to diesel truck trips associated with soil transport and disposal. The SDEIS identifies that following the publication of the Record of Decision (April 25, 2014), NASA completed soil investigations and other resource surveys that identified substantive new information since completion of the 2014 FEIS to comply with the 2010 Administrative Order on Consent for Remedial Action.1 NASA now estimates 870,000 cubic yards of contaminated soil may need to be excavated from the NASA-administered parcels of the Santa Susana Field Laboratory, compared with the previously estimated amount of 500,000 cubic yards, requiring 99,098 total truckloads of soil hauling, rather than 52,000 total truckloads.	General	
1	b	Jean Prijatel (U.S. EPA)	**Trucking and Construction Equipment Emissions**: Table 3.3-5 in the SDEIS states that the estimated annual average emissions from material loading and truck hauling would not exceed General Conformity *de minimis* and Prevention of Significant Deterioration thresholds. However, Table 3.3-6 indicates that the peak daily emissions from a maximum of 32 round-trip truckloads per day would exceed the Ventura County Air Pollution Control District's significance threshold for oxides of nitrogen. NASA has committed to comply with the District's permit requirements and purchase offsets in the affected air basins to meet the District's peak daily emissions threshold. The SDEIS also states that the joint Boeing-DOE-NASA transportation plan for the Field Laboratory sites will limit the project truck roundtrips to an annual average of 16 per day, with a peak maximum of 32 per day, which is far fewer daily truckloads than the 314 daily loads presented in the 2014 FEIS. EPA appreciates that NASA has committed to use newer model-year haul trucks or alternative-fueled construction equipment to reduce criteria pollutant emissions during material hauling and construction activities. Since soil cleanup activities may take place over a period of up to 25 years or more; it is reasonably foreseeable that newer technology and zero-emissions trucks may become available. **Recommendation**: EPA recommends that Air Quality Mitigation Measures BMP-2 be revised to include a commitment for use of Tier 4 diesel engines for soil transport. We also recommend that the clean-up plan and BMP-2 be revised to accommodate, and commit to, future emissions reduction technologies when available and feasible (zero-emission and near zero emissions haul trucks, etc.).	Resource Concerns	
2	a	Laki Tisopulos (Ventura County Air Polution Control District)	Thank you for the opportunity to review and comment on the above-referenced document. As the governmental local air agency responsible for regulating air emissions in Ventura County, we wish to submit the following comments on this project. The project site is south of Simi Valley in Ventura County and is therefore subject to our regulatory oversight for air quality. The Draft Supplemental Environmental Impact Statement (DSEIS) analyzes the potential environmental impacts of four action alternatives for cleanup activities of NASA-administered property within SSFL, varying in degree of soil cleanup levels according to expected land use after project completion and/or different standards ofrisk assessment exposures. A No-Action Alternative scenario is also presented, in which no additional air emissions would result from a soil cleanup activity beyond what has already been directed under the 2013 Interim Source Removal Action-National Pollutant Discharge Elimination System (ISRA-NPDES). Listed below are comments and recommendations to the DSEIS. **General Comments:** **Item 1-** The air emission estimations presented in Table 3.3-5 and Table 3.3-6 summarized emission calculations previously presented in the NASA SSFL FEIS in 2014. As stated in the DEIS, emission calculations are conservative and most probably overestimated as the emission factors used for the heavy-duty diesel transport trucks are from California Air Resources Board's (CARB) EMFAC2011-PL and newer lower emission factors are available from U.S EPA-approved models such as EMFAC2014 and EMFAC2017.	Resource Concerns	
2	b	Laki Tisopulos (Ventura County Air Polution Control District)	**Item 2-** In addition to the proposed air quality Best Management Practices and Mitigation Measures listed in Section 3.3.3, the District recommends an additional mitigation measure of requiring a minimum of Tier 4 EPA diesel engines for all off-road equipment in order to reduce NOx emissions to the greatest extent feasible. The mitigated NOx emissions as a result of this measure can also be quantified using the emission modeling methods presented in the DSEIS. The use of higher-tier diesel off-road equipment will not only reduce NOx emissions, but Diesel Particulate Matter (DPM) emissions. The California Air Resources Board CARB and EPA have designated DPM as a toxic air contaminant (TAC), which has been found to account for 70-80% of the overall cancer risk from mobile source emissions (CARB 2005 Land Use Handbook, South Coast AQMD MATES IV 2015 Study). In addition to the use of Tier 4 off-road equipment, the District also recommends the use of engine model year 2010 and beyond for on-road diesel equipment, pursuant to the CARB On-Road Heavy Duty Diesel Vehicle Regulation. A Regulation Fact Sheet can be found here: https://ww3.arb.ca.gov/msprog/onrdiesel/documents/fsregsum.pdf	Resource Concerns	
2	c	Laki Tisopulos (Ventura County Air Polution Control District)	**Item 3-** We recommend AQ BMP-1 to be modified to reflect standard mitigation practices of contributing to a Transportation Demand Mitigation (TDM) Fund Fee program for the reduction of mobile emissions in the regional area. Staff is not aware of any District rule requirements allowing purchasing Emission Reduction Credits (ERCs) to offset any NOx increases from mobile sources in Ventura County. Alternatively, a TDM Fund agreement can be reached between the District and NASA so that the District administers the funds for new projects specifically designed to reduce mobile emissions in the Simi Valley area (i.e. installation of EV charging stations, the upgrading of agricultural combustion equipment, etc.). Similar TDM agreements have been made for large industrial projects in the Simi Valley area. Additionally, the District has the knowledge and expertise to fund projects similar to those mentioned through our current incentives programs. Our agency is available to help you identify suitable air quality mitigation measures. If you have any questions, you may reach me at (805) 645-1440 or contact the District's Planning Division at 805-645-1427.	Resource Concerns	

*See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
3	a	Grant Cope (Department of Toxic Substances Control)	**I. NASA's DRAFT DOCUMENT CONTAINS IRREGULARITIES AND A REVERSAL IN APPROACH THAT CONFLICT WITH NASA's LEGAL OBLIGATIONS TO CLEANUP NASA SANTA SUSANA FIELD LAB PROPERTY.** NASA's Draft SEIS includes two irregularities on which we elaborate with more specificity in the following comments. First, in March 2014 NASA produced a final EIS for the cleanup, but later identified significantly more soil contamination on the site than evaluated in the document. This increase in volume required NASA to prepare the October 2019 Draft SEIS. While estimates of contaminated soil on site have increased, three of the four alternative cleanup scenarios presented in the 2019 Draft SEIS are estimated to cleanup less contamination than NASA proposed in 2014. Second, in 2012, the White House Council on Environmental Quality (CEQ) noted that NASA was legally bound by a 2010 Administrative Order on Consent (AOC), which requires a background cleanup standard at SSFL. Therefore, CEQ stated that cleanup alternatives in an EIS which did not comply with the AOC standards were infeasible. NASA's March 2014 Final EIS complied with CEQ's direction by analyzing actions that complied with the AOC. However, NASA's 2019 Draft SEIS includes three infeasible cleanup alternatives that would fail to comply with the AOC. The same three infeasible alternatives are also based on scenarios which propose to clean up less contamination than NASA proposed in 2014. NASA has failed to provide a rational explanation or data to support the Draft SEIS' irregularities and unexplained reversal. Therefore, the Draft SEIS is legally deficient. DTSC also reminds NASA that we will continue to hold NASA accountable for complying with the AOC.	Compliance with Law	
3	b	Grant Cope (Department of Toxic Substances Control)	**II.NASA HAS IMPROPERLY DEFINED THE PURPOSE AND NEED OF ITS PROPOSED ACTION IN THE DRAFT SEIS**. The Draft SEIS fails to describe compliance with the AOC between DTSC and NASA as a purpose or need of the SEIS. The AOC dictates NASA's cleanup process and cleanup levels for soils at SSFL. NASA should restate the SEIS's purpose and need to achieve compliance with the AOC. NEPA requires NASA to include a statement explaining NASA's purpose and need in proposing an action and alternatives at issue in the SEIS. (See 40 C.F.R. § 1502.13.) The purpose and need statement dictate the range of reasonable alternatives. (League of Wilderness Defenders-Blue Mountain Biodiversity Project v. Bosworth, 383 F.Supp.2d 1285 (D. Or. 2005).) Here, NASA's description of the Purpose and Need for Action of the Draft SEIS (Section 1.0) states the following: "The purpose of the Proposed Action is to use the best available science and technology to achieve soil cleanup swiftly and in a manner that reduces impacts to the community and protects public health and the environment. (Supp. EIS p. 1-10.)" NASA makes no mention of its obligations under AOC, which should be the priority and driving force behind NASA's SSFL cleanup. The AOC, which was agreed to and signed by delegates of NASA and DTSC, strictly defines NASA's obligation to clean up soils in SSFL Area II and Area I LOX to chemical background concentrations or reporting limits where no background value exists, on a point-by-point basis. Thus, the purpose of the proposed action must reflect NASA's cleanup commitments under the AOC. Moreover, NASA's 2019 description of the purpose and need is an unexplained reversal of the Purpose and Need for Action in NASA March 2014 Final EIS for Demolition and Environmental Cleanup Activities at SSFL. In 2014, NASA appropriately acknowledged its AOC commitments: "The purpose of the Proposed Action is to remediate the environment to a level that meets NASA's environmental cleanup responsibilities and to undertake the demolition actions necessary to support both remediation and property disposition of the NASA-administered portion of SSFL. Contamination is known to exist at NASA's SSFL property .. . Therefore, the Proposed Action is needed to protect human health and the environment, **to meet the requirements of the 2007 Consent Order and AOC** by the completion date of 2017, to reduce ongoing maintenance costs, and to prepare the property for disposition. (NASA 2014 Final EIS, p. 1-7) (emphasis added.)" Given this unexplained change, DTSC believes it is important to reiterate our commitment to holding NASA accountable for meeting its legal obligations under the AOC. NASA agreed to these enforceable requirements. DTSC will use all available authorities to ensure NASA complies with its obligations under the AOC. The purpose and need statement also misrepresents the actual need for the Draft SEIS, which is to augment the impact evaluations related to the substantial increase in NASA contaminant soil volumes since 2014. The statement's explicit promotion of swiftness of cleanup is of potential concern, when the statement omits mention of factors that balance swiftness, such as quality and thoroughness of cleanup. For these reasons, DTSC strongly requests that NASA reconsider the purpose and need for the proposed action.	Compliance with Law	

*See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
3	c	Grant Cope (Department of Toxic Substances Control)	**III. ALTERNATIVES SHOULD Focus ON HOW TO COMPLY WITH THE AOC IN THE LEAST IMPACTFUL MANNER, NOT WHETHER TO COMPLY WITH THE AOC.** NASA asserts that the Draft "SEIS is written per the requirements outlined in the ... AOC." DTSC disagrees. The Draft SEIS is flawed because it fails to consider alternatives within the bounds articulated by the AOC that governs NASA's cleanup of the SSFL site. NEPA is clear: "The purpose of an EIS is to 'provide full and fair discussion of significant environmental impacts and [to] inform decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.'" (40 C.F.R. § 1502.1). The alternatives section "is the heart of the environmental impact statement." (40 C.F.R. § 1502.14.) In order to fulfill its intended role of "sharply defining the issue and providing a clear basis for choice among options by the decisionmaker and the public," the environmental impact statement must "[r]igorously explore and objectively evaluate all reasonable alternatives." (Id. § 1502.14(a).) "The agency must look at every reasonable alternative within the range dictated by the nature and scope of the proposal." ('Ilio'Ulaokalani Coalition v. Rumsfeld, 464 F.3d 1083, 1095 (9th Cir. 2006); see a/so Muckleshoot Indian Tribe v. U.S. Forest Service, 177 F.3d 800, 812-13 (9th Cir. 1999).) Here, NASA has chosen to analyze a range of alternatives that are infeasible because they are contrary to NASA's legal obligations under the AOC. Three of NASA's alternatives directly contradict the agreed upon terms of the AOC. These are Alternative B (Revised Lookup Table Levels Cleanup), Alternative C (Suburban Residential Cleanup), and Alternative D (Recreational Cleanup). Under the AOC, DTSC will determine where NASA's contamination in soil exceeds background and is subject to remediation. DTSC will not consider the Draft SEIS' non-AOC compliant Alternatives in the final soil remedy selection and decision-making processes for NASA's areas. Thus, any alternative that does not comply with the cleanup goals outlined with the AOC is inconsistent with the purpose and need of the proposed action and should be rejected as unreasonable or infeasible. (See Headwaters, Inc. v. Bureau of Land Mgmt., 914 F.2d 1174, 1180 (9th Cir. 1990) ("Nor must an agency consider alternatives which are infeasible, ineffective, or inconsistent with the basic policy objectives .... ").) This identical issue previously arose in 2011 when NASA identified five possible alternatives for remediation, some of which were inconsistent with the AOC. In May 2012, DTSC wrote to NASA requesting that NASA "modify the scope of its NEPA process to align itself with the project that NASA is actually undertaking - a cleanup of the site to background levels of contaminants in compliance with the AOC." (Letter from Debbie Raphael, DTSC Director, to Allen Elliott, SSFL Project Manager, NASA (May 22, 2012), p. 1.) In response to an inquiry from Senator Boxer, the Council on Environmental Quality (CEQ) issued an opinion letter stating: "In this particular situation, where NASA has signed the Agreement and committed to a cleanup standard to background, nothing under NEPA or CEQ regulations constrains NASA from looking beyond cleanup to background, even though some may consider the analysis unnecessary and inconsistent with the agreement NASA signed with the State. However, there is no requirement that NASA consider alternatives that cleanup to other standards that differ from the agreement with the State. The Supreme Court has stated that the concept of alternatives must be bounded by some notion of feasibility, Vermont Yankee Nuclear Power Corp., v. NRDC, 435 U.S. 519, 551 (1978), and under the specific facts of the cleanup at this time, feasibility is most sufficiently defined within the scope of cleanup to background." (Letter from Nancy Sutley, CEQ Chair, to Honorable Barbara Boxer, U.S. Senate, (June 19, 2012), p. 1.) The position set forth by the CEQ seven years ago is equally applicable now. Despite this, NASA has developed a suite of alternatives that cannot achieve the cleanup requirements of the AOC, and thus cannot be applied at the SSFL site. Describing the impacts from non-applicable cleanup approaches is not relevant to the analysis if DTSC cannot, and will not, approve a cleanup to levels exceeding those articulated in the AOC.	Compliance with Law	
3	d	Grant Cope (Department of Toxic Substances Control)	Rather than select alternatives that do not actually comply with the AOC, NASA should have considered alternatives that could achieve the AOC-required standard of cleanup and how that standard could be met over time in the least impactful way. For instance, NASA has not provided a phased alternative, or one that considers the methods used for removal in sensitive areas. While the amount of soil removal is relevant to how cultural and natural resources may be impacted, the method, manner, and timing of soil removal is arguably equally if not more relevant. The worst-case scenario for soil removal has been broadly established through the investigation and should exist across all alternatives as the potential amount of material that will have to be removed to comply with NASA's cleanup obligations. What is not established is how NASA might approach removal of the soils at issue. For instance, NASA should have considered whether hand-tools and other less-impactful equipment can and must be used in sensitive areas. NASA should have analyzed whether soil cleanup phased in over a period of time can avoid unnecessary environmental damage, including to nesting and other migratory animals. This type of analysis could also inform decision about the potential range of impacts on locations with plants of significance, including whether such areas can be left untouched until less resource-heavy locations are cleaned so that re-seeding might occur before additional soil removal actions. Similarly, in areas of high-cultural or historic significance, and in particular areas of concern to Native American and Tribal Governments, NASA could have considered partnerships with those entities and their communities that would have allowed for the appropriate background cleanup to be achieved. NASA could have but failed to consider approaches that create a project with fewer and less severe environmental impacts, while complying with the AOC. Further, NASA fails to demonstrate that excavation and offsite disposal cannot be accomplished in a less harmful manner within the confines of the AOC's cleanup requirements. By its own words: "To obtain an understanding of the greatest potential impact by alternative and to provide decision makers with a comparative analysis by which to make a fully informed decision, it was assumed that excavation and offsite disposal would be the technology applied to the majority of the site. Consequently, the soil excavation quantities and truck traffic explained in Table 2.2-2 were used to analyze the greatest potential impact as a conservative assumption. (Supp. EIS p. 3-12.)" Relying on this worst-case-scenario assumption, and with no further information on how it might design contracts for offsite removal and disposal of soils in a way to be less impactful, NASA's document concludes that the AOC Alternative (Alternative A) is the most impactful to certain resource types because trucks will take out the most volume of soils under a background standard, and then focuses on how this can be mitigated if a lesser cleanup is applied. This approach is neither justified nor transparent, and not evidence of infeasibility under NEPA. By engaging in this approach, NASA has made it appear that the AOC is a problem that must be solved, when in fact the AOC is the driver for the cleanup and the binding document that governs it.	Soil Treatment technologies	

*See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
3	e	Grant Cope (Department of Toxic Substances Control)	Finally, in broadly stating the impacts as it has, NASA fails to disclose how leaving contamination at these sites could harm their long-term viability and use both by people and animals, suggesting that in order to preserve various resources, NASA's contribution to their contamination should be underscored. Thus, its "no project" analysis states that doing nothing is the least impactful to these resources simply because they would remain undisturbed, while Alternatives Band C suggest less soil removal will lead to less impacts. However, NASA fails to discuss how risk-based scenarios with and without potential home-grown produce consumption would be affected if Area I LOX and II are not cleaned to background standards. As a result, this false comparison masks the true issue. The question before NASA is not revisiting the cleanup standard that was NASA agreed to in 2010. The question is how to achieve that cleanup with varying levels of environmental impacts. NASA's approach does not answer the real question. Therefore, NASA's range of alternatives considered is infeasible and unreasonable. For these reasons, DTSC strongly requests that NASA revise the alternatives discussed in the Draft SEIS to once again align with the AOC.	Land Use Categorization	
3	f	Grant Cope (Department of Toxic Substances Control)	**IV. NASA SUPPLEMENTED ITS 2014 FEIS BECAUSE OF SIGNIFICANT NEW EVIDENCE OF CONTAMINATION, BUT PROPOSES A RANGE OF ALTERNATIVES THAT REDUCES NASA's CLEANUP REQUIREMENTS.** NASA states it issued the March 2014 FEIS and then conducted additional investigations that found "significant new circumstances," namely "substantially" increased volumes of soil that need to be cleaned up. The resulting 2019 Draft SEIS proposes a range of three infeasible alternatives that reduce soil cleanup volumes compared to its 2014 FEIS. (Compare 2014 FEIS, Table 2.2-6 with 2019 SEIS, Table ES-2). An agency must provide a rational explanation for a reversal of its direction. However, NASA provides no rational justification for its reversal; only discussion unsupported by analysis and alternatives outside the scope of NASA's legal obligations. DTSC believes that NASA must revise the range of alternatives to undertake actions that comply with the AOC.	Compliance with Law	
3	g	Grant Cope (Department of Toxic Substances Control)	**V. THE DRAFT SEIS USES HYPERBOLE TO DESCRIBE CLEANUP CHALLENGES WHILE ESCHEWING ANALYSIS AND IGNORING EXISTING FLEXIBILITIES.** DTSC disagrees with NASA's discussion contained in the Draft SEIS' section titled "Issues with Implementing the AOC Cleanup" (in the Executive Summary) and the expanded discussion in Section 2.2 (Action Alternatives) because they present an unbalanced discussion. These sections discuss six technical and logistical difficulties NASA foresees in implementing the AOC soil cleanup. NASA presents needless inflammatory phrases, such as "seemingly unresolvable issues," "severe environmental damage," and "potentially devastating effects." However, NASA fails to provide analysis of cleanups impacts using all of the AOC's provisions, including provisions that provide flexibility in making cleanup decisions. Histrionic writing is not analysis and does not serve to inform the public or decision makers. DTSC is committed to working with NASA to resolve all challenges and assure compliance with the AOC.	Support for AOC	
3	h	Grant Cope (Department of Toxic Substances Control)	**VI. THE DRAFT SEIS ALTERNATIVE B PROPOSED LUT REVISIONS ARE INAPPLICABLE TO THE SSFL SITE.** NASA's Alternate B proposes a set of revised AOC Look Up Table (LUT) values for seven contaminants and contaminant classes in soil in areas NASA is responsible for cleaning up at SSFL. The AOC sets out the requirements for creating the LUT values. NASA's proposed LUT values are inconsistent with the AOC's requirements. Therefore, DTSC disagrees with NASA's proposed LUT values and will not consider this alternative as a final cleanup option. DTSC has several reasons for rejecting NASA's alternative values. One central reason is that NASA's proposed modifications are inconsistent with the AOC's requirement to clean up to background. Moreover, NASA's alternative risk-based values do not adequately take into account ecological risk factors, which would result in lower concentrations and likely require more cleanup. In addition, NASA appears to have picked values that skew towards less protective analysis. For example, the TPH concentration used in the evaluation (1,000 milligrams per kilogram, cited to the Los Angeles Regional Water Quality Control Board) represents one of the higher values applied by the Board. Similar criticisms are applicable to other alternative values. In summary, the Draft SEIS failure to account for such factors seriously limits the accuracy and utility of the Alternate B evaluation.	Alternative Justification	
3	i	Grant Cope (Department of Toxic Substances Control)	**VII.THE DRAFT SEIS DISCUSSION OF SOIL BACKFILL ISSUES LACKS SUBSTANTIAL EVIDENCE.** NASA's Alternate B proposes a set of revised AOC Look Up Table (LUT) values for seven contaminants and contaminant classes in soil within NASA-administered areas at SSFL. The AOC sets out the requirements for creating the LUT values, and NASA's proposed modifications are inconsistent with these requirements. Therefore, DTSC disagrees with NASA's proposed LUT values and will not consider this alternative as a final cleanup option. In addition to their non-compliance with the AOC, DTSC has several technical objections to NASA's modified LUT values. One central objection is that NASA's proposed modifications are inconsistent with the AOC's requirement to clean up soil to background concentrations. Moreover, NASA's alternative risk-based values do not adequately take into account ecological risk factors, which would result in lower cleanup concentrations for some constituents and likely drive additional cleanup. In addition, NASA appears to have picked values that skew towards a less protective analysis. For example, the TPH concentration used in the evaluation (1,000 milligrams per kilogram, cited to the Los Angeles Regional Water Quality Control Board) represents one of the higher values applied by the Board. Similar criticisms are applicable to other alternative values. In summary, the Draft SEIS failure to account for such factors seriously limits the accuracy and utility of the Alternate B evaluation.	Alternative Justification	
3	j	Grant Cope (Department of Toxic Substances Control)	**VIII.DISCUSSION OF LABORATORY SCREENING LIMITATIONS IS INCOMPLETE AND PREMATURE.** The Draft SEIS claims that AOC-mandated LUT values for cleanup are lower than conventional laboratory screening capabilities, and that LUT values should be revised to more attainable levels. NEPA requires NASA to provide analysis and data for its blanket assertions in the Draft SEIS on this issue. However, NASA's discussion includes one short paragraph without sources or data. NASA does not propose reasonable approaches to addressing this issue, which can include conducting a new multi-lab survey to evaluate the current status of commercial laboratory capabilities and detection limits. Consequently, DTSC believes that NASA has failed to meet NEPA's minimum standards for presenting analysis and information that informs the public and decision-makers.	Alternative Justification	

*See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
3	k	Grant Cope (Department of Toxic Substances Control)	**IX. HEALTH BASIS OF AOC LUT VALUES** The NASA Draft SEIS states that risk-based cleanups provide an equivalent level of protection as AOC cleanups to background. NEPA demands that NASA provide sufficient evidence and analysis to inform the public and decision-makers about issues relevant to the proposed project. This statement is irrelevant since the governing order, the AOC, has already set the cleanup standard at NASA's areas at SSFL. Moreover, NASA's brief discussion on this point (page 2-8) is very general and oversimplified and in DTSC's opinion leads to confusion regarding public protection.	Reference Availability	
3	l	Grant Cope (Department of Toxic Substances Control)	**X. CONCLUSION** In conclusion, DTSC requests that NASA move to revise the Draft SIES to address the range of issues discussed in this letter. NASA must also be aware that DTSC is not open to considering NASA cleanup alternatives which are non-compliant with the AOC. DTSC is also will not renegotiate the binding AOC soil cleanup commitments to accommodate challenges NASA claims will be posed by the SSFL soil cleanup implementation. Any assumptions which are stated or implied in NASA's Draft SEIS document to this effect are erroneous. If you have any questions regarding DTSC's comments, please contact me at grant.cope@dtsc.ca.gov or (916) 328-0845, or my DTSC Branch Chief in charge of the SSFL Cleanup, Steven Becker, at steven.becker@dtsc.ca.gov or (916) 255-3717.	Support for AOC	

*See Appendix 4A for responses by category

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Elected Official Comments

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Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
1		Julia Brownley (US House of Representatives (D-26 CA))	I write to comment on the National Aeronautics and Space Administration (NASA) Draft Supplemental Environmental Impact Statement (EIS) for the clean-up of the Santa Susana Field Laborat01y (SSFL). I respectfully request these comments be included in the record. As you know, the SSFL is located along the Los AngelesNentura County border. Initially far fom population centers, SSFL was the site of rocket engine testing and nuclear experimentation. It is undisputed that toxic chemicals were used, spilled, and negligently dumped at SSFL. Additionally, in the early 1950s, an uncontained sodium reactor at the SSFL experienced a partial nuclear meltdown. Extensive site investigations of the NASA property indicate that chemicals from rocket testing and engine cleaning made their way into the surrounding soil, soil vapor, smface water, bedrock and groundwater. Some of the chemicals on NASA- administered property include solvents, petroleum products polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), dioxins, and metals. Clean-up of the SSFL is of critical importiance to me and my constituents. It is imperative that the federal government get this right so that we eliminate the potential significant health and safety risks for people who will continue to live nearby, and those who will be using the site in future years. That is why it is vitally important for NASA, and the other responsible parties, to adhere to the Administrative Orders on Consent (AOC) that were entered into with the State of California. I am deeply concerned that NASA does not intend to comply with the longstanding SSFL clean-up agreements. These agreements, which were supported by the state and the local community, were entered into in good faith and it is completely unacceptable for the federal government to refuse to comply with these clean-up agreements. As NASA reviews public comments on the Draft Supplemental EIS, I urge you to ensure the clean-up moves forward in an expeditious manner and to ensure the AOC agreements are fully upheld. Thank you in advance for your attention to my request and for your commitment to a full clean-up of this site.	Support for AOC	
2		Brian P. Gabler (City of Simi Valley Interim City Manager)	Thank you for the opportunity to review and comment on National Aeronautics and Space Administration's (NASA) Draft Supplemental Environmental lmpact Statement (SEIS) for Soil Cleanup Activities at Santa Susana Field Laboratory (SSFL). The City of Simi Valley supports a cleanup of the SSFL site to protect the public health of the community and recognizes the progress already made at the site. However, the SSFL site is contaminated from the years when the site was a functioning facility. The longer the cleanup activities take, the longer that our residents may be exposed to that contamination, therefore, the delayed cleanup efforts are disheartening. The health and safety of the City's residents are top priorities; therefore, the City of Simi Valley implores NASA to take immediate action to move foward with an expeditious, thorough cleanup that allows for future use of the site without risk. Should you have any questions, please contact Samantha Argabrite, Deputy City Manager, at (805) 583-6707.	Support for Risk Based Approach	
3	a	Robert M. Mahlowitz (City of Los Angeles Deputy City Attorney)	The City of Los Angeles appreciates the opportunity to review the National Aeronautics and Space Administration’s (NASA) Draft Supplemental Environmental Impact Statement (Draft SEIS) for Soil Cleanup Activities at the Santa Susana Field Laboratory. These cleanup activities shall be referred to as the “Proposed Project” throughout this comment letter. The City respectfully submits these comments, including and incorporating the accompanying Technical Memorandum on Comments on NASA’s Draft Supplemental Environmental Impact Statement for Soil Cleanup Activities, dated January 6, 2020, from Formation Environmental LLC, on the Draft SEIS (Technical Memorandum), for NASA’s review, consideration and response. **BACKGROUND** The City, on behalf of its residents, submits these comments based on its concerns regarding the inadequacy of the cleanup proposed to address radioactive and other contamination at the Santa Susana Field Laboratory (SSFL). The SSFL site is the location of significant environmental hazards and contamination, which were kept hidden from the public for decades. One of its nuclear reactors experienced a partial nuclear meltdown in 1959, causing releases of radioactivity into the air, and two other reactors experienced accidents with significant fuel damage. This, in addition to incineration of a wide array of radioactive and toxic chemical waste in open-air burn pits, dumping of trichloroethylene and perchlorate, and other contamination, from more than 50 years of operations, left the site polluted with radioactive and chemical contaminants. NASA administers two areas of the SSFL site, Area I and II.	Support for AOC	
3	a	Robert M. Mahlowitz (City of Los Angeles Deputy City Attorney)	In 2010, NASA entered into an Administrative Order on Consent for Remedial Action (AOC) with the California Department of Toxic Substance Control (DTSC) that requires all of the detectible radioactive and chemical contamination at its SSFL operations be cleaned up to background levels similar to those before the site was contaminated. Specifically, the AOC requires, "[T]he cleanup of soils at the Site shall result in the end state of the Site after cleanup being consistent with ‘background’ (i.e., at the completion of the cleanup, no contaminants shall remain in the soil above local background levels, with the exception of the exercise of the exemptions that are specifically expressed in the AIP). All response actions taken pursuant to this Order shall be performed so as to achieve this standard, in full compliance with the terms and conditions detailed in the AIP [Agreement in Principle], in accordance with workplans that have been submitted to and approved by DTSC . . . ." (AOC § 2.1 [emphasis added].) The AOC defines “soil” comprehensively as “saturated and unsaturated soil, sediment, and weathered bedrock, debris, structures, and other anthropogenic materials.” (AOC § 1.7.4.) The only items not included in the definition of “soil” under the AOC are “surface water, groundwater, air, or biota.” (AOC § 1.7.4.) The AOC requires disposal of all soil contaminated with radioactive contaminants above background at a licensed low-level radioactive waste disposal facility or authorized licensed lowlevel radioactive waste disposal facility at a DOE site. (AOC § 2.10.1.) The AOC makes clear that “‘Cleanup to Background Levels’ means removal of soils,” or “in situ or other onsite treatment of soils that is able to achieve the cleanup standards as specified in the AIP1” per DTSC determination. (AOC §§ 1.7.2.) Cleanup to Background Levels “does not include ‘leave in place’ alternatives” or burial or landfilling. (Id.) These commitments were important to the community, particularly the residents who live nearby and will be most directly affected by the clean-up. Earlier this year, NASA indicated that it intended to move forward with its soil clean-up obligations without full compliance with the AOC’s requirement that soils be cleaned up to background levels. Despite the immediate objections of DTSC to this approach, the Draft SEIS continues to propose soil remediation activities that fail to comply with NASA’s obligations under the AOC. As discussed in more detail below, the City objects to the Proposed Project, to the extent it violates the AOC and is contrary to law. NASA is legally bound to comply with all components of the AOC, including the requirement to clean up to background.	Compliance with Law	

*See Appendix 4A for responses by category

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3	b	Robert M. Mahlowitz (City of Los Angeles Deputy City Attorney)	**PROCEDURAL CONCERNS** The Draft SEIS is approximately 225 pages long, accompanied by nearly 1000 pages of appendices. National Environmental Policy Act (NEPA) regulations, 40 C.F.R. § 1502.7, mandate that "The text of final environmental impact statements . . . shall normally be less than 150 pages and for proposals of unusual scope or complexity shall normally be less than 300 pages." The Draft SEIS exceeds this standard, particularly given that it is purportedly intended to be a supplemental document and the original EIS needs to be revisited in order to understand the Draft SEIS. The short comment period (originally to December 9, 2019) was subsequently extended to an additional 30 days, but all falling within the November-January holiday season). This provides insufficient time to allow for adequate review. The proposed project is a component of one of the largest and most significant clean-up actions in the history of California. The issues involved are extremely complicated and NASA's short comment period makes it extremely difficult for members of the public to comprehend and respond to this new NEPA document. The subject is of importance to every citizen of Los Angeles and the surrounding region, and the City urges NASA to provide adequate opportunity for the public to review and provide feedback on the proposed activities.	Comment Period Extension Request	
3	c	Robert M. Mahlowitz (City of Los Angeles Deputy City Attorney)	The current environmental review does not comply with the National Environmental Policy Act, 42 U.S.C. §§ 4321 et. seq. An EIS must identify and provide a full and fair discussion of all significant environmental impacts caused by the proposed action. 42 U.S.C. § 4332; 40 C.F.R. § 1502.1. An EIS shall not serve as a means of justifying decision-making or policy direction already made. 40 CFR § 1502.2(g). An EIS shall describe the environment of the area. 40 C.F.R. § 1502.15. It shall also describe all direct and indirect effects and their significance. 40 C.F.R. § 1502.16. An EIS shall identify the means to mitigate adverse environmental impacts. 40 C.F.R. § 1502.16(h). Agencies must ensure professional and scientific integrity in the discussions and analysis in an EIS. Any methodologies used shall be identified and explicit reference to the scientific and other sources relied upon for conclusions shall be made in the statement. 40 C.F.R. § 1502.24. An agency must take a "hard look" at identifying and evaluating potential adverse environmental impacts. Neighbors of Cuddy Mountain v. U.S. Forest Service, 137 F.3d 1372, 1376 (9th Cir. 1998). An action will be set aside as arbitrary or capricious if the agency identified no "rational connection between the facts found and the choice made," if the "explanation for its decision [ran] counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983). Here, the Draft SEIS appears to be a post hoc attempt to justify NASA's intention to ignore the AOC requirements, not a "hard look" analysis of the environmental impacts of the proposed soil remediation activities in light of new information on the volume and scope of the cleanup. In doing so, NASA is not only violating the AOC but also fails to fully disclose the impacts of the proposed project. These deficiencies are fully discussed in the Technical Memorandum (attached as Exhibit A and incorporated fully here) and summarized briefly below. NASA's disregard for its legal obligations under the AOC is exacerbated by its apparent lack of any coordination with DTSC concerning the decisions that will be made based on the findings in the final environmental document. The AOC requires that NASA make its specific decisions on how to conduct the cleanup to background in accordance with NEPA and in coordination with DTSC. (AOC §§ 4.2.1, 4.3.) The Draft SEIS, however, is silent concerning how NASA plans to meet this requirement. NASA must revise the SEIS to adequately inform the public and decision-makers about how it will coordinate with DTSC to complete this Proposed Project.	Compliance with Law	
3	d	Robert M. Mahlowitz (City of Los Angeles Deputy City Attorney)	**SPECIFIC COMMENTS: A. The Newly Added Alternatives Fail to Comply with the Cleanup Standards in the Administrative Order on Consent.** NASA claims that new information regarding the volume and extent of soil contamination requiring removal under the original soil cleanup alternative (Alternative A - AOC Cleanup from 2014 EIS) requires re-examination of Alternative A and the addition of three new soil-cleanup alternatives (Alternatives B, C, and D). None of the three new alternatives will comply with the requirements of the AOC, thus, their inclusion violates NEPA. The alternatives analysis is the "heart" of the EIS process. 40 C.F.R. § 1502.4. NEPA requires an EIS consider reasonable alternatives to the proposed project. 42 U.S.C. § 4332(2)(C)(iii). Reasonable alternatives are limited to those alternatives that are "practical and feasible" from a legal, technical, economic and common sense standpoint. 40 C.F.R. § 1502.4. They should not be mere conjectural possibilities that cannot be implemented nor an option simply desirable from the applicant's standpoint. Here, the only new alternatives NASA included in the Draft SEIS are three alternatives that fail to satisfy the clean-up obligations imposed on the agency under the AOC. To the extent NASA included these alternatives because it would like to avoid its AOC obligations, such desires do not make these alternatives reasonable or overcome the legal bar to their implementation. Alternatives B, C, and D are not reasonable alternatives as a matter of law, thus, NASA has failed to comply with the requirements of NEPA. Moreover, the Draft SEIS fails to even acknowledge the fact that none of the alternatives except Alternative A meet the AOC-mandated cleanup standards, misleading the public about the validity and feasibility of these alternatives. The AOC outlines specific conditions that must be met in order to permit a deviation from the requirement to cleanup soil to background concentrations. The SEIS must state how and why these requirements will be met for any alternatives considered that do not result in cleanup to background concentrations, including a description of the processes and approvals needed prior to implementation. By leaving out this critical information, the Draft SEIS fails to adequately disclose the infeasible and unreasonable nature of these proposed alternatives. By including only new alternatives that ignore the AOC, NASA has further violated NEPA by failing to evaluate a reasonable range of alternatives. Indeed, NASA has failed to evaluate any other alternatives that comply with the AOC. See 40 CFR § 1502.14(a); Friends of Yosemite Valley v. Kempthorne, 520 F.3d l 024, 1038 (9th Cir. 2008) ("The existence of a viable but unexamined alternative renders an environmental impact statement inadequate.") Accordingly, the SEIS is fatally deficient and must be revised to include all reasonable alternatives that satisfy the requirements of the AOC.	Compliance with Law	

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3	e	Robert M. Mahlowitz (City of Los Angeles Deputy City Attorney)	**B. The Draft SEIS's Overestimated Soil Volumes Lack Evidentiary Support and Appear to be Manipulated to Avoid AOC Compliance.** As noted, NASA asserts the need to prepare the Draft SEIS is based on "significant new information" with respect to the soil volume requiring cleanup. However, this purported new information regarding the scope and volume of the contaminated soil appears to be purposefully overestimated, without sufficient evidentiary support, warranting cleaning up the site to levels less than what is required under the AOC. The Draft SEIS's estimated cleanup volume for Alternative A is 870,000 cubic yards, an increase of 60% from an earlier estimate of 550,000 cubic yards in the 2014 Final EIS. However, the Draft SEIS fails to provide sufficient technical support for this estimate, claiming only that it is a conservative approach. (See, e.g., Draft SEIS at 2-12.) Rather, the Alternative A volume estimate merely assumes that soil will be removed to the depth of underlying bedrock or to a depth of 20 feet below ground surface. No site-specific data has been presented in the Draft SEIS to support the assumption that soil contamination extends to those depths across the entire 220 acres targeted for soil excavation. A more rigorous analysis of excavation volumes, and/or a discussion of uncertainties in the volume estimates is required; without adequate evidentiary support for using this overestimate and assessment of the inherent uncertainties in relying on it, the Draft SEIS fundamentally misleads the public and decision-makers as to the footprint area and volume of soil that will ultimately be targeted for excavation. This fundamental flaw is not only a disclosure issue, but it also undermines the entire alternatives analysis. Although the soil estimates used for Alternatives B, C and D are similarly vague as to evidentiary support, the result of overstating the soil cleanup volume for Alternative A exaggerates the cleanup needs and costs for complying with the AOC cleanup to background requirements. Once again, NASA has impermissibly manipulated the Draft SEIS to justify its decision to ignore the legal mandates of the AOC.	Soil Quantity Estimates	
3	f	Robert M. Mahlowitz (City of Los Angeles Deputy City Attorney)	**C. The Draft SEIS Fails to Adequately Analyze Treatment Options for All Alternatives.** The Draft SEIS' analysis of treatment of specific chemicals under Alternative A as compared to the non-AOC compliant alternatives also demonstrates improper manipulation to create an unsupported justification for ignoring the AOC cleanup standards. For example, the Draft SEIS fails to identify whether any specific candidate chemicals could be effectively treated or distinct areas, per DTSC and AOC standards, where a viable treatment technology and/or in situ bioremediation could be relied on to address soil contamination instead of soil excavation and replacement. If the volumes of soil that could be effectively treated are significant compared to the estimate of soil volume to be removed from the SSFL site (870,000 yards), then many of the impacts associated with Alternative A may be overstated. For example, TPH is readily treated by monitored natural attenuation, and volatile organic compounds are usually remediated by soil vapor extraction. NASA must conduct additional soil treatability studies so that the Draft SEIS accurately reflects the reasonable range of cleanup options for Alternative A. This would also help address concerns of excessive trucking activities during cleanup consistently expressed, and ignored, by neighbors to the SSFL site located in the City of Los Angeles.	Soil Treatment Technologies	
3	g	Robert M. Mahlowitz (City of Los Angeles Deputy City Attorney)	Similarly, the Draft SEIS's discussion of Alternative A mentions the potential for radiological contamination of soil in the NASA cleanup areas, but fails to discuss that same possibility for the non-AOC compliant alternatives. Under the AOC, if radioactive contaminants are present in soil above the provisional radiological Look-Up Tables (LUT) levels, NASA is required to cleanup that soil, regardless of the source of that contamination. This requirement needs to be imposed on all alternatives, not just Alternative A, to provide an accurate comparison of the impacts and benefits of each option.	Radiological Contamination	
3	h	Robert M. Mahlowitz (City of Los Angeles Deputy City Attorney)	**D. The Draft SEIS's Analysis of the Newly Added Alternatives Fail to Use the Proper Cleanup Standards and Lack Technical Support** Even if it was proper to include alternatives that would not satisfy the AOC standards (which it is not), the analysis of Alternatives B, C and D are further deficient because the Draft SEIS does not use clean-up standards adopted by DTSC for the SSFL site. The descriptions of Alternatives B, C, and D are misleading because they refer to soil screening levels as accepted standards for soil cleanup at the project site, without any technical explanation or support for their selection. For example, screening levels identified as "Revised LUT levels" in Alternative B (i.e., EPA Regional Screening Levels, California EPA Human Health Screening Levels) and screening levels identified as "cleanup levels for soil at SSFL" in Alternatives C and D (i.e., site-specific screening levels from the 2014 Standardized Risk Assessment Methodology Rev. 2 Addendum) have not been approved by DTSC as soil cleanup standards for any areas at the SSFL site. Indeed, as provided in the DTSC and EPA guidance cited in the SEIS, these screening levels were not intended for adoption as soil-cleanup standards without further site-specific risk analysis. Yet, the Draft SEIS does not disclose this critical information to the public and decision-makers nor does it provide any justification for the use of these screening levels. The SEIS simply refers to them with as cleanup levels, without evidentiary support for using them, ignoring all applicable guidance. This is misleading and violates the public disclosure mandates of NEPA. The Draft SEIS further fails to provide any sufficient technical rationale for the selection of seven soil contaminants that have revised LUT levels for Alternative B except to say that these are "the seven contaminants that result in the greatest disproportionate level of cleanup" between the AOC (i.e., LUT) and alternative cleanup levels. Under the AOC, NASA does not have the option to modify the LUT levels in order to reduce the level of effort associated with soil cleanup. If revision of the LUT level for any soil contaminant is necessary for successful implementation of soil cleanup in accordance with the AOC, that must be demonstrated through objective technical arguments. The Draft SEIS fails in this regard. These same deficiencies are found in the Draft SEIS's analysis of Alternatives C and D. Further, the Draft SEIS states that each of the remedial alternatives provides equally beneficial protection of human health. However, for carcinogenic compounds, risk is generally understood to be proportional to concentration and exposure, so this statement is inaccurate. An assessment of the relative protection of human health should be provided for each alternative to adequately disclose the potential health impacts.	Alternative Justification	

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3	i	Robert M. Mahlowitz (City of Los Angeles Deputy City Attorney)	In closing, the City appreciates the opportunity to comment on the SEIS. The SEIS, however, does not adequately disclose and analyze the impacts of the cleanup and closure activities proposed, fails to enforce the applicable AOC cleanup standards and procedures, and fundamentally undermines longstanding NASA commitments for a full cleanup of SSFL. The public that resides in the area surrounding the site is entitled to the full and transparent disclosure of all activities and their impacts, and the assurance from NASA that all significant health risks will be identified and addressed. The SEIS does not meet these standards under NEPA and the AOC, and the City respectfully requests the SEIS be revised to address the City's comments and to ensure compliance with the AOC and federal law, and a new SEIS be recirculated for public review. If you should have any comments about anything in this letter, please contact me at 213-978-8205.	Compliance with Law	
3	j	Robert M. Mahlowitz (City of Los Angeles Deputy City Attorney)	**TECHNICAL MEMORANDUM: COMMENTS ON NASA'S DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT FOR SOIL CLEANUP ACTIVITIES**. Formation Environmental has reviewed the subject document for compliance with National Environmental Policy Act (NEPA) standards and consistency with NASA's soil-cleanup commitments for the Santa Susana Field Laboratory site. As noted by NASA, the Draft Supplemental Environmental Impact Statement (SEIS) was prepared to consider new information and a significant change in circumstances since the original EIS was finalized in 2014. Since 2014, the extent of soil contamination and future land use have been better defined. In light of that new information, NASA has updated and re-evaluated Alternative A (the "AOC Cleanup Alternative"), which was previously evaluated in NASA's 2014 Final EIS, and also included three new alternatives (Alternatives B, C, and D) for a comparative evaluation of environmental impacts. Overall, we find that the Draft SEIS does not fulfill the NEPA requirement to evaluate a range of reasonable alternatives because only one of the alternatives evaluated can be implemented in accordance with the 2010 Administrative Order on Consent (AOC). NASA is bound to comply with the soil-cleanup requirements included in the 2010 AOC, which include cleanup of contaminated soil to achieve the background conditions defined by the State of California's Department of Toxic Substances Control (DTSC). Each of the three new alternatives, Alternatives B, C, and D, includes soil cleanup criteria that are less stringent than DTSC's Look-up Table (LUT) values, as presented in the 2017 Draft Program Environmental Impact Report (PEIR), Appendix B-4. As such, Alternative A is the only alternative evaluated in the Draft SEIS that meets the requirements of the 2010 AOC. Given the soilcleanup requirements of the AOC, it is not reasonable to assume that Alternatives B, C, or D can be implemented. Additionally, agencies are required to prepare an EIS document that will promote meaningful public review and participation. When three of the four alternatives evaluated cannot be implemented in accordance with existing site-specific cleanup agreements, the public input on those alternatives is not meaningful. If Alternatives B, C, and D warrant further consideration, then the Draft SEIS must provide accurate context for their evaluation. The 2010 AOC outlines specific conditions that must be met in order to permit a deviation from NASA's requirement to cleanup soil to background concentrations. The Draft SEIS does not address how these conditions will be met for the three alternatives that do not cleanup soil to background concentrations. Further, the Draft SEIS does not fully disclose or explain the legal and regulatory processes and decisions that need to take place before Alternatives B, C, and D could be selected for implementation. In addition to these general observations, we have the following additional comments that are organized by topic, as indicated in the headings below.	Support for AOC	
3	k	Robert M. Mahlowitz (City of Los Angeles Deputy City Attorney)	**1. ALTERNATIVES B, C, AND D SOIL-CLEANUP CRITERIA** The descriptions of Alternatives B, C, and D are misleading because they refer to soil screening levels as accepted standards for soil cleanup at SSFL. 1. The screening levels identified as "Revised LUT levels" in Alternative B (i.e., EPA Regional Screening Levels, California EPA Human Health Screening Levels) and screening levels identified as "cleanup levels for soil at SSFL" in Alternatives C and D (i.e., site-specific screening levels from the 2014 Standardized Risk Assessment Methodology Rev. 2 Addendum) have not been approved by DTSC as soil cleanup standards for any areas at the SSFL site. This should be clearly stated in the SEIS.	Alternative Justification	
3	l	Robert M. Mahlowitz (City of Los Angeles Deputy City Attorney)	2. The SEIS description of Alternative B does not provide sufficient technical rationale for the selection of seven soil contaminants that have revised LUT levels except to say that these are "the seven contaminants that result in the greatest disproportionate level of cleanup" between the AOC (i.e., LUT) and alternative cleanup levels. Given the commitments made in 2010 AOC, NASA does not have the option to modify the LUT levels in order to reduce the level of effort associated with soil cleanup. If revision of the LUT level for any soil contaminant is necessary for successful implementation of soil cleanup in accordance with the AOC, that must be demonstrated through objective technical arguments. 3. Each set of screening levels referred to in these alternatives was originally developed to support further site-specific risk assessment, and ultimately the selection of appropriate, final, risk-based cleanup levels. They were not intended for adoption as soil-cleanup standards without further site-specific conceptual model development and risk analysis. The purpose, application, and limitations of the proposed screening levels should be described consistent with the source documents that are cited in the Draft SEIS. (a). The alternative cleanup level for total petroleum hydrocarbons (TPH) under Alternative B is one of several screening levels utilized by the Los Angeles Regional Water Quality Control Board. The application of this screening level depends on a site's soil type, depth to groundwater, and the nature of the TPH in question. Additional justification for the use of this screening level is required. (b). The alternative cleanup level for acetone (6.1 percent by weight) is based on protection of human health and does not consider protection of groundwater resources or burrowing animals, or potential nuisance effects. The selection of this standard should be supported by a more thorough analysis that considers potential adverse impacts via these pathways. (c). The alternative cleanup standard for dioxin should reference and be based upon applicable guidance from the DTSC, which is DTSC HERO Note 2 - Soil Remedial Goals for Dioxins and Dioxin-like Compounds, dated April 2017. If a different standard is proposed, its use should be justified through detailed risk analysis and approved by DTSC before assuming it can be implemented. (d). The Draft SEIS should consider all applicable guidance, including the DTSC's Human and Ecological Risk Office (HERO) guidance including, but not necessarily limited to, Note 3. DTSC-modified Screening Levels, dated April 2019. 4. The SEIS states that each of the soil-cleanup alternatives provides equally beneficial protection of human health. We note that for carcinogenic compounds, risk is generally understood to be proportional to concentration and exposure, so this statement is inaccurate. An assessment of the relative protection of human health provided by the various alternatives should be provided.	Alternative Justification	

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3	m	Robert M. Mahlowitz (City of Los Angeles Deputy City Attorney)	**2. UPDATED ESTIMATE OF NASA SOIL-CLEANUP AREAS AND VOLUMES** The Alternative A soil-cleanup volume of 870,000 yd3 (increased from an earlier estimate of 550,000 yd3 included the 2014 Final EIS) remains highly uncertain at this time, and the Draft SEIS does not provide adequate technical detail to understand the basis for this estimate. The soil cleanup volumes for Alternatives B, C, and D are similarly uncertain and poorly supported within the Draft SEIS. The Draft SEIS needs to clearly identify such uncertainties to allow for meaningful public review and participation in the NEPA process. In addition, certain assumptions developed by NASA to compute the new cleanup volume may result in an overestimate of the volume of soil that is reasonably expected to be targeted for removal and offsite disposal and overstatement of the negative impacts associated with Alternative A - AOC Cleanup. For example: **1.** The Alternative A volume estimate assumes that soil will be removed to the depth of underlying bedrock or to a depth of 20 feet below ground surface. No site-specific data have been presented in the Draft SEIS to support the assumption that soil contamination extends to those depths across the entire 220 acres targeted for soil excavation and removal. A more rigorous analysis of excavation volumes, and a discussion of uncertainties in the volume estimates, should be provided. 2. Biological-resource and cultural-resource "exception" areas that may be identified by DTSC within the NASA cleanup areas delineated in the Draft SEIS have not been considered. One or more of the possible exception areas identified by DTSC in their 2017 Draft Program Environmental Impact Report (PEIR) may be excluded from the soil cleanup requirements of the 2010 AOC, and as such, the area (and associated soil volume and severity of impacts) of soil cleanup may be less than the Alternative A estimate included in the Draft SEIS.	Soil Quantity Estimates	
3	n	Robert M. Mahlowitz (City of Los Angeles Deputy City Attorney)	**3.** As discussed below, the likely outcome that some areas can be remediated by in-situ treatment and/or Monitored Natural Attenuation is not considered. The possibility of the outcomes listed above should be considered in a more complete discussion of uncertainties associated with the Alternative A impact analysis. **3. SOIL TREATMENT ALTERNATIVES** Sufficient information is available to identify the specific contaminants and general areas of contaminated soil that could be targeted for treatment by one or more of the viable soil-treatment technologies identified in Section 2.1.1 and in Table 2.1-1 of the SEIS. However, the Draft SEIS does not identify specific candidate chemicals that could be effectively treated or distinct areas where a viable treatment technology could be relied on to address soil contamination in place of soil removal and replacement. As such, the Draft SEIS has not adequately evaluated the range of feasible alternatives. **1.** If the volumes of soil that could be effectively treated are significant compared to the estimate of soil volume to be removed from the SSFL site (870,000 yd3), then many of the impacts associated with Alternative A may be overstated. For example, TPH is readily treated by monitored natural attenuation and/or in situ bioremediation, and volatile organic compounds are usually treated by soil vapor extraction. **2.** Additional soil-treatability studies should be completed, areas targeted for soil treatment should be identified, and the reasonable range of soil-treatment outcomes should be assessed so that alternatives that include soil treatment can be identified and rigorously compared in a meaningful way.	Soil Treatment Technologies	
3	o	Robert M. Mahlowitz (City of Los Angeles Deputy City Attorney)	**4. RADIOLOGICAL CONTAMINATION OF SOIL** Per the 2010 AOC, NASA is responsible for cleanup of soil having radiological contamination above background levels, regardless of the source of that contamination. If radioactive contaminants are present in soil above the provisional radiological LUT levels, NASA is required to address those conditions, and the provisional radiological LUT levels are the required cleanup criteria. The Draft SEIS discussion of Alternative A mentions the potential for radiological contamination of soil in the NASA cleanup areas, but there is no similar discussion of potential radiological contamination in the other Alternatives. Further, the Draft Provisional Radiological LUT Values (from Appendix B of DTSC's 2017 Draft PEIR) have not been referred to in the Draft SEIS, and they are not included with tables of other soil-cleanup criteria presented in Appendix 2. This oversight needs to be corrected.	Radiological Contamination	
3	p	Robert M. Mahlowitz (City of Los Angeles Deputy City Attorney)	**5. SELECTION OF A SOIL CLEANUP ALTERNATIVE** The Draft SEIS does not explain how NASA will consult and coordinate with the California DTSC to make decisions based on the findings presented in their Final and Supplemental EIS documents. The 2010 AOC specifies: "NASA shall make its specific decisions on how to conduct the cleanup to background defined in this Agreement in accordance with the requirements of the National Environmental Policy Act of 1969 (NEPA), as amended (42 U.S.C. 4321 et seq.)."—Section 4.2.1, page 17 "DTSC and NASA shall work to coordinate the CEQA and NEPA processes." — Section 4.3, page 17 1. The SEIS should explain how NASA plans to issue a soil-cleanup Record of Decision while also meeting the requirements of the 2010 AOC for coordination with DTSC. For example, the 2010 AOC's Agreement in Principle states "The remedial action implementation work plan will be subject to DTSC review and approval." How will a conflict between NASA's ROD and DTSC's decisions under CEQA be resolved?	Compliance with Law	
3	q	Robert M. Mahlowitz (City of Los Angeles Deputy City Attorney)	2. The NASA EIS closely mirrors DOE's FEIS in that the same alternatives were considered/selected and neither agree with the cleanup to background directive of the AOC.	General	
3	r	Robert M. Mahlowitz (City of Los Angeles Deputy City Attorney)	**6. WILDFIRE EFFECTS** In the event of future wildfires, the soil cleanup alternatives that do not reduce the concentrations of chemicals of concern to background concentrations may negatively impact human health and the environment through dispersal of contaminants that remain in soil. Additional discussion of the potential for wildfire dispersion of the chemicals of concern should be included in the impact analyses for Alternatives B, C, and D.	Wildfire Concerns	

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Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
3	s	Robert M. Mahlowitz (City of Los Angeles Deputy City Attorney)	**7. SOURCE OF DIOXINS** The Draft SEIS suggests that the detection of dioxins is associated with the combustion of chlorinecontaining compounds during recent wildfires and states that dioxins "are not associated with previous or current SSFL activities." A substantiation for this statement, based on the types of dioxins (congeners) detected, is not provided. In addition, the statement wrongly suggests that if chlorinated compounds released by NASA were burned, leading to the generation of dioxins, NASA would not be responsible for their cleanup. This language should be corrected.	Wildfire Concerns	
4		Kathryn Barger (County of Los Angeles Board of Supervisors)	We are writing to urge the National Aeronautics and Space Administration (NASA) to advance the soil cleanup activities at Santa Susana Field Laboratory (SSFL) in Ventura County, California, as proposed in Alternative A of the Draft Supplemental Environmental Impact Statement (SEIS). Although the SSFL has been inactive for several years, various serious incidents have left radioactive and chemical contaminants in the soil, in airborne dust particulates, and in stormwater runoff. These contaminants have affected the air, soil, and water in nearby Los Angeles County communities and have posed a serious health risk to constituents for decades. These health risks will continue if a full clean-up of the site is not achieved in a timely manner. In the Draft SEIS, NASA has developed risk-based methodologies for cleanup involving several additional alternative methods that would leave a majority of the contamination in place. Only the original Alternative A provides for the full cleanup and is consistent with the legally binding Administrative Order on Consent (AOC) for Remedial Action negotiated and executed by the California Department of Toxic Substances Control (DTSC), the State's regulating entity, and NASA in 2010. The AOC clearly defines NASA's obligation to clean up soils at SSFL to background levels, or reporting limits if no background value exists, on a point-by-point basis. We are fully committed to holding NASA accountable to their commitment to DTSC for a full cleanup at this site.	Support for AOC	
5	a	Bennett Steve (Ventura County Board of Supervisors)	Thank you for the opportunity to review and comment on the subject document. It has been a longstanding position of the County of Ventura to seek that NASA, as an owner of land at SSFL, clean up contamination to the most protective standards, equivalent to background and consistent with NASA's agreed upon 2010 Administrative Order on Consent (AOC). Alternative A in the Draft SEIS is the only alternative that cleans the site to AOC requirements and as such is aligned with Ventura County's position to be protective of the public's health, our first priority.	Support for AOC	
5	b	Bennett Steve (Ventura County Board of Supervisors)	NASA's November 20, 2019 hearing portrayed the draft SEIS alternatives as having "no discernable differences to health and safety" even though risks would persist if alternatives other than Alternative A were selected. This is because the contamination that would be left on site by the other alternatives would continue to threaten the health and safety of people onsite and offsite during wind, rain, fire and other events. Recently SSFL had 57 violations of pollution standards from stormwater released offsite after the 2018 Woolsey Fire.	Wildfire Concerns	
5	c	Bennett Steve (Ventura County Board of Supervisors)	The types of contaminants found at SSFL have been linked to an increased risk of disease including cancer, thyroid disorders, lymphoma, and leukemia. Draft SEIS maps show that alternatives other than Alternative A would leave large areas of NASA's SSFL property contaminated. Entertaining any alternative other than Alternative A would break the legally binding terms of the AOC.	Compliance with Law	
5	d	Bennett Steve (Ventura County Board of Supervisors)	Furthermore, the current land use of the NASA property is open space. Section 8104-1.1 Open Space of the Ventura County Non-Coastal Zone Ordinance outlines the purpose and land uses of the Open Space Zone. NASA and Boeing incorrectly conclude that the future land use would be limited to recreational (DEIS, 2019, Executive Summary page 5, and Boeing, 2017a). The Open Space Zone in Ventura County allows for more than recreation, it also allows among other uses, agriculture and housing. Clearly, leaving contaminated soils with the potential for agriculture and housing would pose future health risks.	Land Use Categorization	
5	e	Bennett Steve (Ventura County Board of Supervisors)	It is of the utmost importance that the SSFL property be fully cleaned up to protect public health and safety. The Ventura County Board of Supervisors strongly recommends Alternative A ("AOC Cleanup") and opposes other alternatives that leave contaminants on site that are not consistent with levels stipulated in the AOC.	Support for AOC	

*See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
6	a	Linda Parks (Ventura County Board of Supervisors)	RECOMMENDATION: It is recommended that the Board of Supervisors submit a comment letter on NASA Draft SEIS for soil cleanup at SSFL reaffirming its position for full cleanup to background levels. DISCUSSION: The SSFL site, located at the eastern edge of Ventura County, is highly contaminated from activities related to large rocket engine testing, burning of toxic wastes in sodium burn pits, nuclear research, and a 1959 partial core meltdown of a small nuclear reactor on site. Toxic chemicals, Trichloroethylene (TCE), perchlorate, dioxins, radionuclides, mercury, lead, cadmium, asbestos, and other hazardous wastes have been found in soils, groundwater, and/or surface waters of the SSFL. These types of contaminants have been linked to increased risk of disease including cancer, thyroid disorders, lymphoma, and leukemia. According to the California Department of Toxic Substances Control (DTSC), potential exposure to toxic contaminants can occur from direct contact with soils, sediments, weathered bedrock, surface water, air, and groundwater at SSFL. The 2,850-acre SSFL site has been divided into four (4) areas for purposes of regulatory clean-up efforts and each area has been found to have contaminants in the soil, groundwater, and/or surface water. The contaminants found at the SSFL site pose a threat to human health and safety. These threats are well documented.1 (State of California, Environmental Protection Agency, DTSC August 2007 Consent Order for Corrective Action (P3-07 /08-003); Order to Perform Interim/Source Removal Action {ISRA) of Soil from the Los Angeles Regional Water Quality Control Board (RWQCB), December 3, 2008; Cohen, Y., et. al., 2006, "The Potential for Offsite Exposures Associated with Santa Susana Field Laboratory, Ventura County, California"; Morgenstern, H., J. Beebe-Dimmer, and S. Yu, 2007, "Cancer Incidence in the Community Surrounding the Rocketdyne Facility in Southern California.")	Support for AOC	
6	b	Linda Parks (Ventura County Board of Supervisors)	Additionally, the 2018 Woolsey Fire that originated at the SSFL site posed additional threats to health and safety related to smoke, ash and stormwater runoff. In early November 2019, NBC4 news reported that toxic runoff from SSFL exceeded safety standards. Test results show that the Woolsey Fire and the heavy rains that followed, allegedly spilled dangerous water, contaminated with toxic waste, into nearby neighborhoods. The Los Angeles Regional Water Quality Control Board has been monitoring runoff. Records showed that 57 times in the three months after the Woolsey Fire, chemicals and radioactive contamination spilled from SSFL at levels exceeding safety standards set by the State. These included dioxins, cyanide, arsenic, lead, and gross alpha radioactivity. According to NBC4, one day in December 2018, traces of lead were found to be 17 times the state safety limit in water leaving the site and entering Bell Canyon. Another record showed lead 10 times the legal limit leaving the site entering into Dayton Canyon. Lead and radiation have no known safe levels of exposure, underscoring why SSFL must be fully cleaned up as promised because until the contamination is fully cleaned up at its source, the public will remain at risk of exposure via offsite migration especially during wind, rain, and fire events.	Wildfire Concerns	
6	c	Linda Parks (Ventura County Board of Supervisors)	The Ventura County Board of Supervisors represents constituents in the vicinity of SSFL and oversees land use, and public health and safety aspects over portions of SSFL. In response to the Notice of Availability of NASA's Draft SEIS (84 FR 57,490, 10/25/2019) for its soil cleanup activities on SSFL, it is timely for our Board to provide comments pursuant to NEPA (National Environmental Policy Act). It has been a longstanding position of the County of Ventura to seek that NASA, as an owner of land at SSFL, clean up the site they own to the most protective standards, equivalent to background. As the Draft SEIS stands, Alternative A is the only alternative that aligns with the County's position. Furthermore, NASA entered into a legally binding Administrative Order on Consent (AOC) and has a legal obligation to implement Alternative A	Alternative Justification	
6	d	Linda Parks (Ventura County Board of Supervisors)	NASA's November 20, 2019 hearing on its Draft SEIS portrayed the draft SEIS alternatives as having "no discernable differences to health and safety." Yet despite this claim, health risks would persist in alternatives other than Alternative A because of the amount of contamination the other alternatives would leave on site. The attached maps from the Draft SEIS show the areas where contamination would be removed, with Alternative A (labeled "AOC Cleanup") removing contaminants from a significantly larger area than the other alternatives, including Alternative D "Recreational Cleanup."	Leaving Contamination Onsite	
6	e	Linda Parks (Ventura County Board of Supervisors)	Furthermore, the current zoning for the four NASA SSFL sites is open space. Section 8104-1.1 Open Space in the Ventura County Non-Coastal Zone Ordinance outlines the purpose and uses of the Open Space Zone, which allows for, among other uses, agriculture and housing. Clearly, leaving contaminated soils with the potential for future housing and agricultural uses, poses health risks. Boeing and NASA incorrectly conclude that the future land use for SSFL is limited to recreation (DEIS, 2019, Executive Summary page 5, and Boeing, 2017a).	Land Use Categorization	
6	f	Linda Parks (Ventura County Board of Supervisors)	It is recommended that the County Board of Supervisors send the attached comment letter expressing our long-held position for full cleanup of SSFL to levels equivalent to background, support for Alternative A ("AOC Cleanup") in the Draft SEIS, and opposition to the other alternatives that leave the site contaminated. This letter has been reviewed by County Counsel, the Resource Management Agency, and the County Executive Office.	Support for AOC	
7	a	Brad Sherman (Member of Congress)	Last month, NASA released its Draft Supplemental Environmental Impact Statement (EIS) for the Santa Susana Field Lab (SSFL) cleanup. NASA, along with the Department of Energy (DOE) and the Boeing Company, has not only a shared responsibility to fully clean up the site, but also to ensure full mitigation of and protection from any potential exposure to toxic substances. In your September correspondence to me, NASA acknowledge its obligation to fully uphold the 2010 Administrative Orders on Consent (AOC} and the 2007 Consent Order for Corrective Action (CO). However, the Draft Supplemental EIS for the SSFL has raised legitimate concerns among community members regarding the Administration's commitment to achieving a cleanup that is fully protective 'of public health and the environment.	Support for AOC	

*See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
7	b	Brad Sherman (Member of Congress)	The Woolsey Fire started on the property of the Santa Susana Field Lab (SSFL), burning 96,949 acres and destroying more than 1,000 homes. Along with the direct impacts, the release of smoke and subsequent stormwater runoff, are reminders of the potential for off-site migration of contaminants left on-site. While the California Department of Toxic Substances Control (DTSC) reported that they found, "no radiation levels above background levels, and no elevated levels of hazardous compounds other than those normally present after a wildfire," increased levels of lead, dioxin, cyanide, and alpha radiation were found in subsequent stonnwater runoff. 1 (See NBC 4 News; "'Toxic Runoff from Sama Susanna-Exceeded Safety Standards", Nov.8, 2019, https://www.nbclosangeles.eom/news/local/Toxic-Runoff-from-Santa-Susana-Exceeded-Safety-Standard LosAngeles-564700332.html) I have fought for the highest possible funding of NASA's Environmental Compliance and Restoration (ECR) Program, in order to fund a full cleanup of the Santa Susana site, and I urge NASA to renew its publicly stated commitment to a full cleanup and to take further steps to ensure that the community, is fully protected from future runoff, wildfire, or other disasters that have the potential to increase exposure to toxic substances which can cause cancer and other harmful health impacts.	Wildfire Concerns	

*See Appendix 4A for responses by category

Tribe Comments

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Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
1	a	Kenneth Kahn (Santa Ynez Band of Chumash Indians)	The Santa Ynez Band of Chumash Indians ("Tribe" or "Chumash") has made a preliminary review of the above-mentioned SEIS and make the following comments based on the attached excerpts with page numbers included for your convenience. OVERVIEW: 1. THE TRIBE REQUEST A SIXTY (60) DAY EXENTION OF THE COMMENT DEADLINE TO COMPLETE OUR REVIEW OF THE OVER 200 PAGE DOCUMENT.	Comment Period Extension Request	
1	b	Kenneth Kahn (Santa Ynez Band of Chumash Indians)	2.THERE IS NO ANALYSIS OF WHETHER SEIS IS APPROPRIATE OR WHETHER A NEW EIS IS REQUIRED 23 CFR § 771.130 Supplemental environmental impact statements. (A) A draft EIS, final EIS, or supplemental EIS may be supplemented at any time. An EIS must be supplemented whenever the Administration determines that: (1) Changes to the proposed action would result in significant environmental impacts that were not evaluated in the EIS; or (2) New information or circumstances relevant to environmental concerns and bearing on the proposed action or its impacts would result in significant environmental impacts not evaluated in the EIS. (B) However, a supplemental EIS will not be necessary where: (1) The changes to the proposed action, new information, or new circumstances result in a lessening of adverse environmental impacts evaluated in the EIS without causing other environmental impacts that are significant and were not evaluated in the EIS; or (2) The Administration decides to approve an alternative fully evaluated in an approved fmal EIS but not identified as the preferred alternative. In such a case, a revised ROD must be prepared and circulated in accordance with§ 771.127(b). (C)Where the Administration is uncertain of the significance of the new impacts, the applicant will develop ap propriate environmental studies or, if the Administration deems appropriate, an EA to assess the impacts of the changes, new information, or new circumstances. If, based upon the studies, the Administration determines that a supplemental EIS is not necessary, the Administration must so indicate in the project file. (D) A supplement is to be developed using the same process and format (i.e., draft EIS, final EIS, and ROD) as an original EIS, except that scoping is not required. (E)In some cases, an EA or supplemental EIS may be required to address issues of limited scope, such as the extent of proposed mitigation or the evaluation of location or design variations for a limited portion of the overall project. Where this is the case, the preparation of a supplemental document must not necessarily: (1) Prevent the granting of new approvals; (2) Require the withdrawal of previous approvals; or (3) Require the suspension of project activities, for any activity not directly affected by the supplement. If the changes in question are of such magnitude to require a reassessment of the entire action, or more than a limited portion of the overall action, the Administration must suspend any activities that would have an adverse environmental impact or limit the choice of reasonable alternatives, until the supplemental document is completed.	Compliance with Law	
1	c	Kenneth Kahn (Santa Ynez Band of Chumash Indians)	CEQ, Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations 46 Fed. Reg. 18026 (March 23, 1981) As amended (1986) 32. Supplements to Old EISs. Under what circumstances do old EISs have to be supplemented before taking action on a proposal? A. As a rule of thumb, if the proposal has not yet been implemented, or if the EIS concerns an ongoing program, EISs that are more than 5 years old should be carefully reexamined to determine if the criteria in Section 1502.9 compel preparation of an EIS supplement.	Compliance with Law	
1	d	Kenneth Kahn (Santa Ynez Band of Chumash Indians)	COMMENTS TO SPECIFIC SECTIONS AND SEIS EXCERPTS: DEFERRING RECORD OF DECISION FOR CLEANUP MAY REQUIRE UPDATED STUDIES: p. ES-1, see also p. 1-1: In March 2014, NASA prepared the Final Environmental Impact Statement [FEIS] for the Proposed Demolition and Environmental Cleanup Activities at SSFL (NASA, 2014a). After the required 30-day wait period, NASA issued a record of decision (ROD) to move forward with demolishing facilities at SSFL (NASA, 2014b). When the 2014 FEIS was published, a decision was made to defer issuing RODs for the cleanup of soil and groundwater until further investigations, analysis, and planning could be completed.	Compliance with Law	
1	e	Kenneth Kahn (Santa Ynez Band of Chumash Indians)	ADDITIONAL OPPORTUNITY TO COMMENT MUST BE MADE AVAILABLE AFTER THE PREFERRED ALTERNATIVE IS IDENTIFIED: p. ES-6, see also p. 1-10 and 1-11: Selection of Preferred Alternative CEQ regulations at 40 CFR Section 1502.14(e) require an agency to identify its preferred alternative, if one exists, in the draft SEIS. At this time, NASA does not have a preferred alternative. However, NASA will identify the preferred alternative in the final SEIS.	Comment Period Extension Request	
1	f	Kenneth Kahn (Santa Ynez Band of Chumash Indians)	CEQ, Forty Most Asked Questions Concerning CE Q's National Environmental Policy Act Regulations 46 Fed. Reg. 18026 (March 23, 1981) As amended (1986) 4b. Does the "preferred alternative" have to be identified in the Draft EIS and the Final EIS or just in the Final EIS? Section 1502.14(e) requires the section of the EIS on alternatives to "identify the agency's preferred alternative if one or more exists, in the draft statement, and identify such alternative in the final statement ... "This means that if the agency has a preferred alternative at the Draft EIS stage, that alternative must be labeled or identified as such in the Draft EIS. If the responsible federal official in fact has no preferred alternative at the Draft EIS stage, a preferred alternative need not be identified there. By the time the Final EIS is filed, Section 1502.14(e) presumes the existence of a preferred alternative and requires its identification in the Final EIS "unless another law prohibits the expression of such a preference."	Alternative Justification	

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
1	g	Kenneth Kahn (Santa Ynez Band of Chumash Indians)	POST 2014 CONSULTATION IS REQUIRED FOR THE PROGRAMMATIC AGREEMENT DUE TO SEIS: p. ES-9: National Historic Preservation Act Section 106 Consultation The NHPA requires NASA to consult with federal, state, and local agencies, Native American tribes, other organizations, and members of the public having a potential interest in the Proposed Action. In 2014 NASA entered into a Programmatic Agreement, per Section 106 of the NHPA, with the California State Historic Preservation Officer (SHPO), Advisory Council on Historic Preservation (ACHP), and Santa Ynez Band of Chumash Indians (Appendix 3.1A).	Resource Concerns	
1	h	Kenneth Kahn (Santa Ynez Band of Chumash Indians)	ADDITIONAL POST WOOLSEY FIRE CULTURAL RESOURCE STUDIES ARE REQUIRED: P. 1-7, see also p. 3-137: On November 8, 2018, the Woolsey Canyon Fire burned portions of SSFL. On November 9, 2018, DTSC requested assistance from the Response Team, including federal, state, and local agencies, and coordinated with the Response Team to assess the impacts of the fire on SSFL. On November 21, 2018, the fire was 100 percent contained after burning 96,946 acres in Ventura and Los Angeles Counties. In December 2018, DTSC published an Interim Summary Report, summarizing the work completed in November 2018 to address concerns about the impacts from the fire (DTSC, 2018a).	Resource Concerns	
1	i	Kenneth Kahn (Santa Ynez Band of Chumash Indians)	THE REQUEST FOR EXCESS PROPERTY BY TRIBE/INTERIOR IS STILL PENDING: p. 1-9: After consideration and review of its current and future needs, NASA concluded it had no further need of the property it administers at SSFL. In accordance with statutory requirements, NASA notified Congress in April 2009 of its intent to declare the land "excess." In September 14, 2009, NASA submitted a "report of excess" to the GSA regarding the property. GSA conditionally accepted NASA's report pending NASA's certification that remedial action necessary to protect human health and the environment with respect to hazardous substances on the property has been completed, or that the Governor concurs with the suitability of the property for transfer in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Section 120(h)(3)(C).	Resource Concerns	
1	j	Kenneth Kahn (Santa Ynez Band of Chumash Indians)	CULTURAL RESOURCE STUDIES MUST BE MADE OF ALL BACKFILL MATERIAL: p. 2-2: Backfill material would be acquired from an onsite or offsite source, when available. A backfill material investigation was completed in June 2014 at five local sand and gravel pits in Ventura County, California, and surrounding areas (NASA, 2015a)	Resource Concerns	
1	k	Kenneth Kahn (Santa Ynez Band of Chumash Indians)	CULTURAL RESOURCE STUDIES MUST BE DONE ON ALL ROADWAYS AND STAGING AREAS: p.2-8: Where cleanup areas are separated from existing roadways, NASA would develop temporary access roads on SSFL. Figure 2.2-1 shows where staging and stockpile areas might be located to minimize impacts to the surrounding environment.	Resource Concerns	
1	l	Kenneth Kahn (Santa Ynez Band of Chumash Indians)	THERE ARE NO AGREED UPON MITIGATIONS FOR SACRED SITE/EO 13007 /TCP VIOLATIONS: p.3-7: 3.1.1.1 Indian Sacred Site In December 2012, NASA received notice from the Santa Ynez Band of Chumash Indians of the tribe's designation of land, including NASA-administered areas of SSFL, as an Indian Sacred Site (Armenta, pers. comm., 2012) in accordance with EO 13007 (1996). This EO states that, for lands designated as sacred sites, agencies managing federal lands shall: (1) Accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and (2) Avoid adversely affecting the physical integrity of such sacred sites. Where appropriate, agencies shall maintain the confidentiality of sacred sites. NASA is limited by EO 13007 from disclosing the sacred site boundaries. For the purposes of this SEIS, the boundary for the sacred site encompasses all of NASA's portion of SSFL. p.3-12 & 13: Per EO 13007, agencies managing federal lands shall "avoid adversely affecting the physical integrity of such sacred sites."	Resource Concerns	
1	m	Kenneth Kahn (Santa Ynez Band of Chumash Indians)	RADITIONAL CULTURAL PROPERTY INCLUDES BOTH ARCHEOLOGY AND FLORA/FAUNA: P.3-7: 3.1.1.2 Traditional Cultural Property In accordance with the 2014 Programmatic Agreement (Appendix 3.1A) and based on the Ethnographic Overview of the Native American Communities in the Simi Hills and Vicinity (Lawson et al., 2017), NASA completed an NRHP nomination of the Burro Flats Cultural District, which is eligible for listing in the NRHP as a traditional cultural property (TCP) in 2018 and sent it to the California State Historic Preservation Officer (SHPO) for review and comment. The boundaries of the TCP are confidential. For the purposes of this analysis, the TCP is defined as the entirety of SSFL. As of August 2019, the TCP nomination was under review with the California SHPO. The local Native American communities have indicated that the area included in the Burro Flats Cultural District TCP was important to their communities historically, as described through their oral histories, and is significant to the beliefs, customs, and practices of today's communities. This area has fresh water and plentiful flora, including plants traditionally used for celebrations and ceremonies (Lawson et al., 2017). The Burro Flats Cultural District TCP is eligible for listing on the NRHP for its association with events important to the history of local Native American communities: the creation of the world, a time when people were animals, the great flood, and the celebration of the winter and summer solstices. The local Native American communities consider the area significant and believe the area retains all aspects of integrity. Its primary significance is derived from archeology, ethnic heritage, art, and religion. It is significant in the areas of Ethnic Heritage: Native American and Religion for its association with ceremonial solstice events. Contributing features to the TCP include landforms, outcrops, overhangs, hills, rock shelters, creeks, springs, the viewshed, the flora, the fauna, open spaces, and the sky above SSFL (Lawson et al., 2017).	Resource Concerns	

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
1	n	Kenneth Kahn (Santa Ynez Band of Chumash Indians)	BURRO FLATS SITE IS STILL UNDEFINED AND REQUIRES ADDITIONAL CONSULTATION: P. 307: 3.1.1.3 Archeological Resources Fifty-four NRHP-eligible or listed archeological sites have been identified within the APE, including the Burro Flats Site (CA-VEN-1072), which is listed on the NRHP. Forty-one sites are located within the archeological district and 13 sites are located within the APE but outside the district. NASA conducted an Extended Phase I investigation in the footprint of the cleanup and remediation areas (NASA, 2016), as identified at that time. Non-intrusive field testing was undertaken in 2015 to delineate the outer boundaries of the Burro Flats Site in accordance with the testing plan (NASA, 2015b). Although the results of the non-intrusive testing were inconclusive, observations made during the removal of the vegetation in preparation for testing made it possible not only to delineate the outer surface boundaries of the Burro Flats Site, but also to refine the boundaries of loci within the site (NASA, 2016).	Resource Concerns	
1	o	Kenneth Kahn (Santa Ynez Band of Chumash Indians)	NASA FAILS TO ADDRESS DTSC ARCHEOLOGICAL DISTRICT REOMMENDATION: p 3-8: 3.1.1.3.2 Archeological District Based on the analysis of GIS data and the data derived from the California Historical Resources Information System (CHRIS) literature search, SSFL contains a significant concentration of sites that are related geographically, as well as by site type, indicating there is an NRHP-eligible archeological district at SSFL. Because of the sensitivity of the archeological sites, the boundaries of the archeological district are confidential. NASA has identified a discontinuous archeological district extending across SSFL Administrative Areas II, Ill, and IV that is eligible for listing in the NRHP.	Resource Concerns	
1	p	Kenneth Kahn (Santa Ynez Band of Chumash Indians)	NASA CANNOT UNILATERALLY REDUCE BURRO FLATS BELOW 25.02 ACRES: p 3-8: 3.1.1.3.1 Burro Flats Site (CA-VEN-1072) The Burro Flats Site (CA-VEN-1072) is 11.74 acres, the majority of which are located on NASA-administered property in Area II; the remainder is located on Boeing-owned property. Notable features of the Burro Flats Site include pictographs, petroglyphs, mortars, stone tool production sites, and habitation sites. Although the Burro Flats Site has been subject to some disturbance, its overall integrity is good because SSFL operated as a secure research facility, closed to the public, which protected the Burro Flats Site from vandalism and the effects of commercial development. The first archeological investigations at the Burro Flats Site was an archeological testing program done by the Archaeological Survey Association of Southern California in 1953 and 1954. The Burro Flats Site was first systematically recorded in 1959 (Rozaire, 1959) and was resurveyed in 1972 by Franklin Fenenga (Fenenga, 1972). The boundary of the site was enlarged to 25.02 acres by the Ventura County Heritage Board in 1975 and was accepted by the National Park Service (NPS) and listed on the NRHP in May 1976. 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 (Corbett et al., 2016a). 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 (Corbett et al., 2016b). The updated nomination is currently under review with the California SHPO.	Resource Concerns	
1	q	Kenneth Kahn (Santa Ynez Band of Chumash Indians)	NASA IS REQUIRED TO SUPPORT CHUMASH ARCHEOLOGICAL DISTRICT: p 3-19: In addition, the Santa Ynez Band of Chumash Indians has submitted an NRHP nomination to the California SHPO for an archeological district that is larger than the one NASA has determined eligible and includes NASA-administered areas. The California SHPO has not concurred with the archeological district submitted by the Santa Ynez Band of Chumash Indians-submitted.	Resource Concerns	
1	r	Kenneth Kahn (Santa Ynez Band of Chumash Indians)	ADDITIONAL CONSULTATION IS REQUIRED FOR NATIVE AMERICAN ARTIFACTS AOC EXCEPTION: p 3-11: The 2010 AOC allows for consideration of exceptions subject to DTSC's oversight and approval that aim to achieve a cleanup as close to background as practicable. An exception was provided in the 2010 AOC for "Native American Artifacts that are formally recognized as Cultural Resources" (DTSC, 2010). NASA will work with DTSC to identify whether impacts to the Burro Flats Site, Burro Flats Cultural District, archeological district, or Indian Sacred Site can be minimized under this exception. Stipulations in the 2014 Programmatic Agreement (Appendix 3.1A) describe the process for requesting the exception (Stipulation II1.D), overriding the exception (Stipulation II1.E), and deciding the appropriate cleanup methodology (Stipulation II1.E) in sensitive areas (Stipulation II1.F).	Resource Concerns	
1	s	Kenneth Kahn (Santa Ynez Band of Chumash Indians)	CLEANUP CANNOT IMPACT BURRO FLATS WITHOUT VIOLATING ARPA AND NHPA: p 3-14: 3.1.2.1.2 Archeological Resources Burro Flats Site The location of the Burro Flats Site is confidential and is not disclosed in this document. Roughly 5.7 acres of the Burro Flats Site would be impacted by soil excavation and offsite disposal as part of the cleanup activities under Alternative A if an AOC exemption is not issued. The disturbance from the excavation and removal of soil to another location would impact the Burro Flats Site because of the loss of the cultural materials within that volume of soil. Archeological resources, loci, and features of the Burro Flats Site would be damaged or removed from the site because of soil excavation and offsite removal. Archeological artifacts lose their significance when removed from their location and context.	Resource Concerns	
1	t	Kenneth Kahn (Santa Ynez Band of Chumash Indians)	IMPACTS TO TEST AREA HISTORIC DISTRICTS ARE CUMULATIVE WITH ARCHEOLOGY: p 3-15: Individually Eligible Structures Because remediation areas could be located under existing structures, this technology could require historic structures in remediation areas to be removed to reach contaminated soil. The Alfa, Bravo, and Coca Test Area Historic Districts have remediation areas that correspond to the locations of individually eligible structures. The removal of individually eligible structures to excavate and remove soil would result in significant, negative, and permanent impacts on cultural resources under NEPA and a finding of adverse effect under Section 106 (Cultural Impact-6).	Resource Concerns	

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*	Attachments
1	u	Kenneth Kahn (Santa Ynez Band of Chumash Indians)	CURRENT PA FAILS TO ADDRESS NEW SEIS CLEANUP DETAILS: p 3-19: The 2014 Programmatic Agreement includes mitigation measures to address the impacts and adverse effects from demolition and soil and groundwater cleanup at NASA-administered areas of SSFL. No additional mitigation measures beyond those identified in the Programmatic Agreement would be required to address the identified effects of Alternative D.	Resource Concerns	
1	v	Kenneth Kahn (Santa Ynez Band of Chumash Indians)	ALL NATIVE AMERICAN TRIBES NEED TO BE PRESENT DURING MONITORING: p 3-20: Cultural Mitigation Measure-4 (All Action Alternatives): Native American monitoring - NASA will use archeological and Native American monitors to oversee field sampling, vegetation clearing, and grounddisturbing activities within Burro Flats Site and the buffer area defined by NASA in 2008 for management purposes, as well as within any other known archeological sites, and will coordinate, where feasible, any sampling within Burro Flats Site Boundary with the boundary determination work. This mitigation measure is ongoing	Resource Concerns	
1	w	Kenneth Kahn (Santa Ynez Band of Chumash Indians)	NATIVE AMERICAN FLORA AND FAUNA IMPACTS ARE CUMULATIVE WITH ARCHEOLOGY AND TCP: p 3-26: 3.2.1.3.4 Biological Species of Native American Concern A number of plant and wildlife species found on SSFL have been identified as species of concern to Native American tribes. The list of species, the reason for their significance, and their distribution are provided in Table 3.2-4.	Resource Concerns	
1	x	Kenneth Kahn (Santa Ynez Band of Chumash Indians)	MUTLIPLE FIRES ARE CUMULATIVE IMPACTS THAT ARE NOT ADDRESSED: p 3-137: Woolsey Canyon and Topanga Wildfires: SSFL is an area prone to wildfires because of its warm weather and dry climate. In September 2005, 2,000 of the 2,849 acres of SSFL, including most of NASA-administered Area II, burned in the 24,000-acre Topanga Wildfire (NASA, 2014a). Many site structures were damaged or destroyed; however, none of the structures were individually NRHP-eligible or contributing resources to historic districts. After the fire, BMPs were implemented to decrease the amount of soil, ash, and burned vegetation migrating from the site. In 2018, the Woolsey Canyon Fire occurred in Simi Valley. Wildfires produce some toxic chemicals, including dioxin, from the burning of brush and building materials. Consequently, some of the dioxin found in the remediation areas could be associated with the Topanga or Woolsey Canyon wildfires. The 2005 Topanga Wildfire and the 2018 Woolsey Canyon Fire are both past actions that affect the NASA-administered property (DTSC, 2018a)	Resource Concerns	
1	y	Kenneth Kahn (Santa Ynez Band of Chumash Indians)	MULTIPLE CLEANUPS BY DOE AND BOEING AND DTSC ARE NOT ADDRESSED: p 3-138: 3.10.2.1.1 Cumulative Impacts to Cultural Resources The Action Alternatives would contribute to cumulative impacts on cultural resources. Cultural resources at SSFL have been, and would continue to be, impacted by previous and future actions, particularly grounddisturbing activities such as soil excavation and test stand removal, which could impact archeological deposits. The cumulative impacts of NASA, DOE, and Boeing activities would result in increased significant and negative impacts to cultural resources at SSFL (Cumulative Impact-1).	Resource Concerns	
1	z	Kenneth Kahn (Santa Ynez Band of Chumash Indians)	NON-RENEWABLE NATURE OF ARCHEOLOGY MUST BE ADDRESSED: p. 3-145: Archeological resources and historic resources have been documented on the NASA-administered property at SSFL. These cultural resources are analyzed in Section 3.1 of this SEIS. These resources are considered non-renewable and, if affected, the impact would be irreversible. NASA will continue to consult with SHPO, ACHP, tribes, and the consulting parties to develop appropriate mitigation measures for addressing the impacts to cultural resources. Consultation will culminate with measures to address the adverse effect to historic properties stipulated in the ROD.	Resource Concerns	
1	aa	Kenneth Kahn (Santa Ynez Band of Chumash Indians)	NEW TRIBAL CONSULTATION IS REQUIRED FOR SEIS: p 4-2: 4.4.1 Tribal Consultation The NHPA requires consultation with Native Americans who have religious and cultural attachments to properties. This mandatory consultation was conducted throughout the NEPA process for the FEIS. In addition, in accordance with 2014 Programmatic Agreement Stipulation II.A., the Sacred Sites Council was created by NASA and representatives of federally and state-recognized tribes in the SSFL area "with an interest in the protection of Native American sites on NASA SSFL" (NASA, 2014c). The Sacred Sites Council serves to advise NASA on matters of interest to the tribes. It operates independently of NASA and contacts NASA on an as-needed basis. The Sacred Sites Council remains in effect until the 2014 Programmatic Agreement expires in 2024 or until the parties agree it is no longer needed (NASA, 2014c). No additional tribal consultation is required as a part of this SEIS.	Resource Concerns	
1	ab	Kenneth Kahn (Santa Ynez Band of Chumash Indians)	SANTA YNEZ CHUMASH WAS NOT CONSULTED FOR THIS TCP DOCUMENT AND REQUESTS A COMPLETE COPY: p 6-4: Lawson, Natalie, Jennifer Whiteman, Dorothea Theodoratus, and local Native American Communities. 2017. Ethnographic Overview of the Native American Communities in the Simi Hills and Vicinity. Prepared for National Aeronautics and Space Administration, George C. Marshall Space Flight Center, Alabama.	Resource Concerns	
1	ac	Kenneth Kahn (Santa Ynez Band of Chumash Indians)	Thank you for the opportunity to comment on this SEIS. Please contact Sam Cohen, Government Affairs and Legal Officer (scohen@sybmi.org) if you have any additional questions or comments.	General	

* See Appendix 4A for responses by category

Oral Comments from Public Meetings

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Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*
1	a	Robert McLain	I worked at -- started out in Atomics International in the reactor physics group in 1961, and I retired out of Rocketdyne in 2004. And I was called back out of retirement for the last Space Shuttle run. I was -- did the experimental electronics and nuclear instrumentation for the reactor physics group before my last semester of college, and that required experiments in all of the startup -- or what do you call them? Pre-reactor experimental units. And during that time I was sent to the Hallam nuclear reactor in Lincoln, Nebraska, where I redesigned the -- some of the electronics to stop the spurious instrument scrams they were having. And so that reactor was shut down shortly after, but they had 600 instrument scrams where they started up the reactor and then this noise came online, and then it would shut it down. And it was two causes. One was what they call the startup channels. There was statistical noise and we redid the startup chamber by using a pulse transformer and -- to get 500 feet, and then there was radiation hardened electronics there. And then they had instrumentation on the thermocouples. They were powered by the 817-volt AC lines. And then in the Midwest, where you have transients going from power strikes down, well, what happened is there would be a 1-volt transient and the magnetic amplifiers would say there's a 600-volt thermal transient on the line, and it would shut it down. So after we got that thing running, then it ran for a little bit. Then they decided they didn't -- they went to the government from -- the government shut the thing down. It wasn't -- the main cause is it wasn't how much money they were going. It was how many times they were going. And it probably was a good thing that they did shut it down because it was a sodium graphite, which was like a Chernobyl design. So -- but that was one of the first jobs I had there. And after that I did robotics for nuclear reactor inspection vessels, and I had a -- we had a system there.	Cancer Concerns
1	b	Robert McLain	The main thing I would complain about is -- there's like three or four things is, one, I was in the original epidemiology study that had to be redone. And that's where my whole ire started on this whole -- because of the scientific fraud that was put into the process. And I don't think the way the public has gone it's never gone away. What happened is they called Bob Tuttle, who was the finest nuclear statistician that the company ever had, they called him back out of retirement to handle the data that they already had inside the company to present to this Dr. Morgenstern. And I was actually in the building, where my office was, where they were in the next office over. And he came in and gave these grad students, like, advanced study courses and told them how to handle all this data because he was that good at it. And because he could look at data when his reactor was running and then he would call you up and tell them this instrument is bad. That's how good he was. But after he got all this data, Dr. Morgenstern came in and says I'm not going to -- I'm only going to handle the radiation exposure that people had while working on the hill. And there was one person that was the director of operations of the SGR where they had the meltdown. He had 73 man years of radiation exposure. And he -- Morgenstern threw out all but one and a half years of it, and he claimed -- and then all the nuclear reactor operators on the hill were from the Navy submarine, because they were already trained nuclear reactor operators. And all of them had like 400 or 500 times because you can't avoid radiation on a submarine. The other thing is the concern of the company about the dangers and precautions of nuclear radiation because the company policy all during the time I worked at the company is that you had a limit on radiation. If you received half of that dosage in a three-month period, they wouldn't let you go near radiation. And then I was in the reactor physics group, and I was sent in as an engineer to do their work for them only when somebody got more. And these guys were PhD's in nuclear physics, and then they stood back and if you made a wrong move after... Okay. That's good. Stop them from all this fraud stuff. And so the other thing is -- I have 40 years of experience, and I'm trying to expose some of the fraud that went on that I observed. But the other thing is I was at the CT machine on the hill when they did the radiation survey. And I verbally talked to the guy that did the survey at the time. And he said for about all the area there was more Radon coming out of the sandstone mountains than there was background radiation, and all these people want this stuff cleaned up to the, you know, past background radiation, which is essentially -- and, yeah, one of the buildings -- another anecdote is one of the buildings...	Cancer Concerns
2	a	Haakon Williams	I'm here tonight to testify because I am outraged that NASA is proposing to break its cleanup agreement at the Santa Susana Field Lab. In 2010 NASA signed an administrative order on consent, the AOC, with the California Department of Toxic Substances Control, DTSC, committing to clean up all contamination at its portion of the Santa Susana Field Lab to background levels, in essence returning the site to the condition it was in before NASA so heavily polluted it. The AOC is legally binding, and NASA does not have the authority to choose not to comply with it. Furthermore, even were the AOC not to exist, NASA, the polluter, does not have legal power to determine how much of its pollution it will clean up. That authority is delegated under the Resource Conservation and Recovery Act to DTSC. NASA does not have discretion to either disobey the AOC it signed or orders by DTSC, which has insisted on a full cleanup. NASA has now issued a draft Supplemental Environmental Impact Statement, the SEIS, proposing to breach its obligations under the AOC and DTSC's directives and instead choose to leave the majority of its contamination not cleaned up. This is illegal and a direct threat to public health and the environment.	Support for AOC

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*
2	b	Haakon Williams	NASA asserts it is preparing the supplemental EIS because of significant new information, primarily that it has discovered that there is much more contamination on its property than it previously estimated. NASA has discovered that there is 75 percent more contaminated soil than it had thought. One would think that such a discovery of more pollution would result in more cleanup; however NASA has instead proposed to radically reduce the amount of cleanup it does, even as it admits that it contaminated its property more than it had previously realized. The AOC NASA signed and to which it is legally bound requires cleanup of 100 percent of the pollution NASA created over decades of sloppy and irresponsible environmental practices. NASA is now proposing to breach those commitments and instead leave up to 88 percent of the contaminated soil not cleaned up. I have a chart. This is the different alternatives NASA proposes under its SEIS. Alternative B, Alternative C, Alternative D all leaving vastly more contamination than the zero percent of contamination it was supposed to leave under the AOC. This is in volume. It gets worse when you look at acreage. Up to 88 percent of the contamination under Alternative D would be left on site. The amount of contaminated soil that NASA now proposes to walk away from can be seen in maps prepared by NASA. Here, the purple is the amount of soil that NASA has said is contaminated on the site and that it would have to clean up that it is legally mandated to clean up under the AOC. As you can see under Alternative B, C, and D -- maybe you can't see it on D because there's hardly any purple on that map -- NASA is proposing to leave very much of the contamination on the site.	Soil Quantity Estimates
3	a	Taylor Altenbern	So just to reiterate, it is extremely unacceptable what NASA is proposing in its SEIS. They should be held accountable to the legally binding agreements that they made in 2010. So I will be discussing how NASA dramatically misrepresents the alternative standards it proposes to use in breach of the legally binding AOC.	Support for AOC
3	b	Taylor Altenbern	So NASA's revised lookup table values proposed under Alternative B are as much as 3 million times less protective than the AOC lookup table values, which is what they agreed to in the legally binding agreement.Similarly, NASA's proposed revised lookup table's values don't include a garden and are as much as thousands of times less protective than the standardized risk assessment methodology residential with garden cleanup levels which were approved by DTSC for the cleanup, specifically for Santa Susana. NASA falsely claims its Alternative C cleanup levels are based on the SRAM when, instead, NASA used its own inputs to produce cleanup levels hundreds of times higher than DTSC's approved SRAM cleanup levels. Alternative D, the supposed recreational standard, is the weakest of all. It assumes someone is on the property only a few hours a week, whereas people -- people here tonight -- are living nearby, nearly 24 hours a day, 7 days a week, and would be potentially exposed to migration contaminants migrating from Santa Susana that NASA now does not want to clean up. Those cleanup levels proposed by NASA are hundreds and thousands of times higher, meaning less protective, than either the cleanup levels NASA is required to meet under the AOC it signed or the DTSC-approved SRAM based suburban residential levels. SRAM is the Standardized Risk Assessment Methodology. And those were cleanup levels that DTSC approved. So NASA's proposed cleanup levels are not only not protective of human health, but they also will harm ecological receptors. So NASA asserts in the draft SEIS that its suburban residential cleanup standards under Alternative C and its recreational cleanup standards proposed in Alternative D, admittedly far weaker than what it is required to do under the AOC, would nonetheless be fully protective of plants and animals at that site, the so-called ecological receptors. But its own tables demonstrate that claim to be false. NASA's residential cleanup levels far exceed its own ecological risk by thousands, as much as 6000, 1000, hundreds of times. NASA's residential standards are not protective of ecological receptors as NASA falsely claims them to be. NASA's recreational cleanup levels proposed under Alternative D also far exceed its own ecological cleanup levels. So recreational standards are not protective of ecological receptors, again as NASA continues to claim them to be. Additionally, NASA's proposed revised lookup table values are much less protective than the SRAM ecological risk based screen level. So I think you're seeing a pattern here. And finally, NASA's ecological risk values, which it proposed themselves, are much weaker than the DTSC SRAM ecological cleanup standards.	Alternative Justification
4	a	Michael Rincon	It's like the beach. So I want to comment on NASA grossly inflating soil cleanup volume so as to be able to push for weaker cleanup standards. NASA asserts in its draft SEIS large volumes of soil would be needed to be excavated to meet the cleanup requirements in the legally binding agreement it entered into the State in 2010. In order to build a case for breaking that agreement, NASA has heavily inflated those figures. It has done so with an indefensible assumption that wherever there is soil contamination in the surface, soil would have to be removed down to bedrock or 20 feet below ground surface, BGS. Wherever there are measurements showing the contamination, it is just at the surface. NASA, nonetheless, assumed all the soil above bedrock or down to 20 feet would have to be removed, where there are no measurements showing contamination beneath the surface. NASA again assumes all soil down to bedrock or 20 feet BGS would be removed. NASA knows this is an absurd assumption, grossly inflating the volume estimates and quietly admits as much. These numbers represent the upper levels of expected excavated soil quantities. Yet it uses these inflated numbers to create the false impression of moonscaping and huge numbers of trucks, al to the end of trying to get out of cleaning up the contamination its environmentally reckless operations at SSFL created and which it is bound to remediate by the cleanup agreement it executed with the State in 2010. The conclusion is that NASA's environmentally irresponsible activities over decades badly contaminated its portion of SSFL so bad that they didn't even know the extent of it until recently. And even then I'm very, very uncertain that that's the actual extent of the contamination. There may be more.	Soil Quantity Estimates
4	b	Michael Rincon	In 2010, NASA signed a legally binding agreement to clean up all its contamination at SSFL, returning the site to the condition it was in before NASA had even been there and polluted it. Lastly, that cleanup of soil was supposed to be completed by 2017, but NASA dragged its feet and the promised cleanup has not even begun.	Support for AOC
5	a	Maria Caine	First of all, I'm extremely disappointed that NASA won't let us present in front of everybody today.	Public Meeting Format

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*
5	b	Maria Caine	I'm furthermore very disappointed in their EIS proposals, especially because we just last year had the Woolsey Fire, and since that fire there have been 57 exceedances of pollution limits relating to surface water leaving Santa Susana Field Laboratory which were reported in the period after November 8th. The limits exceeded were established by the Los Angeles Regional Water Quality Control Board and Boeing's national pollutant discharge elimination system permit as essential to protect public health and the environment. The increase in the number of exceedances were attributed to the fire. There were 10 exceedances at Outfall 1 on the site, 27 exceedances at Outfall 2, 10 exceedances at Outfall 8, 2 exceedances at Outfall 9, 10 exceedances at Outfall 11, 1 exceedance at Outfall 18, and 1 exceedance at the Arroyo Simi receiving water location. Of those exceedances, there was copper, iron, lead, selenium, zinc, cyanide, dioxins, gross alpha radioactivity, E-Coli, manganese, arsenic, nickel, sulphate, and nitrate. Cyanide was found at 1.6 times their limit, dioxins at 6 times the limit, and gross alpha was found at 60.7 picocuries per liter, which is 5 times the limit. Water leaving outfalls 1, 2, 11, and 18 drain into the Bell Creek, which runs through the Bell Canyon neighborhoods in Los Angeles County before entering the Los Angeles River. Water from Outfall 8 drains into Dayton Canyon Creek, passing through the housing development in Dayton Canyon before entering the Los Angeles River. Water from Outfall 9 passes through the children's camp at the Brandeis-Bardin Institute before entering the Arroyo Simi, the main water course through Simi Valley. So zinc was found at 430 micrograms per liter, manganese at 920 micrograms per liter, nickel at 170, which is almost twice its legal limit, 52 for copper, and 88 micrograms per liter of lead when the limit is 5.2. Dioxins were found at 1.7 to the negative 10 micrograms per liter, which is above the legal limit of 2.8 to the negative 8 micrograms per liter. So the Boeing and Regional Water Quality Control Board both concede that the increased number of exceedances in the period following the fire was due to the fire, which among other things burned vegetation on 80 percent of the site, increasing the amount of contamination in the soil that was picked up by storm water passing over the polluted soil and carrying the contaminants offsite in the storm water runoff. This is not to say that there were no exceedances in the period before the fire. There were roughly 350 exceedances from 2006 to the time of the Woolsey Fire and no year without exceedances, but they increased markedly in the wake of the fire.	Wildfire Concerns
5	c	Maria Caine	Boeing, the Department of Energy, and NASA, the parties responsible for the contamination at SSFL, all signed legally binding agreements to clean up SSFL by 2017. Not only has the promised cleanup not been completed, it has not even begun. And now all three responsible parties have announced their intentions to break the agreements and instead leave behind the great majority of their contamination not cleaned up. Until SSFL is fully cleaned up as required by the cleanup agreements executed by the parties responsible for the contamination there, NASA, Department of Energy,and Boeing, there will be continued risk of contamination migrating offsite.	Support for AOC
6		Denise Duffield (Associate Director of Physicians for Social Responsibility Los Angeles)	Migration of contaminants from the Santa Susana Field Laboratory in the period following the Woolsey Fire and implications for NASA's SEIS proposals to break its 2010 agreement to clean up NASA's toxic pollution. Fifty-seven exceedances of pollution limits relating to surface water leaving SSFL were reported in the period after the November 8th Woolsey Fire. The limits exceeded what were established by the Los Angeles Regional Water Quality Control Board and Boeing's national pollutant discharge elimination system permit as essential to protect public health and the environment. The increased number in exceedances were attributed to the fire. There were exceedances -- 6 exceedances at Outfall 1, 27 exceedances at Outfall 2, 10 exceedances at Outfall 8, 2 exceedances at Outfall 9. I'm going to talk about NASA and the spread of the Woolsey Fire and implications for NASA's SEIS and breach of cleanup commitments. NASA awarded itself a silver medal for its quick actions during the Woolsey Fire for leaving the site within ten minutes of the fire starting. But does NASA have responsibility for the fire's catastrophic spread? And NASA's failure to meet its legal obligations for a full cleanup of its contamination by 2017 did result in migration of pollutants offsite. The Woolsey Fire began on NASA land at the Santa Susana Lab on November 8, 2018. It began on NASA's property, just south of NASA's ELV complex. And there's a map where you can see the location. The fire burned vegetation on 80 percent on the contaminated SSFL site. This resulted in potential airborne release of the contaminants during the fire and subsequently increased the amount of contamination in the SSFL soil that was picked up by storm water passing over the polluted soil and carrying the contaminants offsite in the storm water runoff at levels in excess of legal limits. The fire was not put out quickly and instead spread all the way to the ocean, burning nearly 97,000 acres and destroying more than 1600 homes and other structures, while killing four people. Why was the fire not promptly suppressed at the point of origin? Besides the question, which is still unresolved, of what started the blaze, there is a separate question of whether there were avoidable failures that contributed to the fire getting out of control, resulting in one of the most damaging conflagrations in the state's history. A large fire station with multiple engines had been located close to where the fire broke out but was torn down. Had it still been there and operational, there is a significant question whether the fire would have been put out quickly and never spread. The former station was equipped with multiple modern fire engines and as the L.A. Times reported, "In the past, the lab had a robust fire crew and a 6630 square foot fire station equipped with about five fire engines and trucks, including two brush rigs." After discontinuation and demolition of that large, well-equipped fire station near where the fire occurred, Boeing left one small, less modern and less capable fire truck stationed at the entrance to SSFL, which has now been revealed to have been broken down before it could even reach the fire, per the L.A. Times. By the time the fire broke out in late 2018, the stations, along with fire hydrants and sprinklers across variouslocations in Area 2, had been removed from the site. One hydrant, which can be seen when using NASA's own virtual tour program, was located just across the road from the fire's point of origin. As part of Phase 2 of its cleanup, NASA removed water storage tanks and associated pipelines in the Skyline Road area. The tanks had a combined capacity for 2,270,000 gallons of water. After their demolition, NASA staged two small 20,000 gallon water tanks in the central part of Area 2. That is one percent of the original water capacity they had torn down.	Wildfire Concerns

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*
7	a	Briana Jahnsen	The Los Angeles Times reported that first responders on the front lines of the Woolsey Fire struggled during those first critical hours, stymied by communication breakdowns and a scarcity of air tanker support, equipment, and firefighters. Furthermore, they uncovered through radio transmissions that firefighters sent by the Los Angeles Fire Department were frustrated with the lack of a plan and resources on the scene, including being "hampered by a lack of water at the Boeing facility." Would water to fight the fire have been more available had the Skyline tanks still been operational and the fire hydrant and piping not removed, had the fire station near the origin of the fire still been there, and had the one ancient remaining truck station at the entrance to the site not broken down before getting to the fire, could the catastrophic spread of the fire been prevented? The Woolsey Fire, the spread of which NASA may have contributed to, released contamination into the environment.	Wildfire Concerns
7	b	Briana Jahnsen	NASA broke its commitments to clean up SSFL by 2017. The promised soil cleanup hasn't even begun. Now, with its SEIS, NASA proposes completely violating the legally binding cleanup agreement it signed and leaving the great majority of the contamination not cleaned up. Until SSFL is finally cleaned up as required by the cleanup agreement signed by NASA, there will be continuing risks of contaminants migrating offsite from fires and otherwise. NASA, live up to your cleanup obligations.	Support for AOC
8	a	Robert Dodge (President of Physicians for Social Responsibility Los Angeles)	NASA is legally committed to a complete cleanup of the Santa Susana Field Lab. That said, NASA is trying to break out of its cleanup agreements and release a draft Supplemental Environmental Impact Statement, or SEIS, for public review.	Support for AOC
8	b	Robert Dodge	It proposes leaving as much as 80 percent of the site not cleaned up. NASA's property is contaminated with TCE, perchlorate, PCBs, dioxins, heavy metals, and other toxic chemicals that can cause cancer and other harmful health effects. As physicians, we see the health effects from failure 24 every day. When the rain comes, contaminants migrate offsite to the surrounding communities in levels exceeding the EPA's safe levels. When the fires come, like the Woolsey Fire, which started on the field lab site, toxins are aerosolized and migrate offsite to the surrounding region.	Leaving Contamination Onsite
8	c	Robert Dodge	For many of these toxins, there is absolutely no safe level exposure, and all levels will impact the health of our children and vulnerable communities and populations in the surrounding area. NASA, how long are you willing to do nothing, promoting a sham cleanup and allowing the health and well-being of our community to remain at risk?	Alternative Justification
8	d	Robert Dodge	We are urging NASA to keep its commitment to clean up all of the contamination by selecting Alternative A, which is the entire full cleanup as NASA has promised.	Support for AOC
9	a	Jeni Knack	The SEIS is illegal. NASA's attempt to usurp State authority and determine on its own what contamination it will clean up is illegal. It is the State's domain to decide what should be cleaned up at SSFL. They signed an agreement, a legally binding agreement, in 2010 which stated that they would clean up to background levels of contamination. That is Alternative A. We should all be pushing NASA to stick to Alternative A. That is the AOC agreement. Alternative B would leave 50 percent of contamination on site. That's our next best offer, folks. That's a terrible offer. We need to get them to stick to what they agreed to. It's a legally binding agreement. To break that agreement is to break RCRA laws.	Support for AOC
9	b	Jeni Knack	This hearing, me yelling at the top of my lungs, Dan being kicked out, is breaking NEPA laws. We have a right to comment on the SEIS. NASA did not even give all of their data. Seventy-five percent of their references on their appendices are not available to the public. You do not have access to the fine print. That is what they do not want you to know. That's why we're here. That's why we're not mic'd. That's why we're yelling. That is a NEPA infraction. They are breaking the law. This is all illegal. Please write your letters. Call your representatives. Call the Best Western. Call NASA. Pick up the phone.	Public Meeting Format
10	a	Dorri Raskin	I'm really concerned about -- first, this setup sucks. And it's real hard to hear people, and I prefer where we have a meeting and people give public comments.	Public Meeting Format
10	b	Dorri Raskin	Second, we did this thing before where NASA showed all their various options, even though it was violating the AOCs. We need to clean up to the AOCs completely. Period. It's a legal binding contract. Why NASA is refusing is wrong. They have to clean up. I've been trying to clean up the site for more than 29 years. And I'm concerned about public health. And I remember last time NASA had all this list of why we shouldn't clean upcompletely. And at the very end, on the other side, it said we need to clean up fully because of public health. And that is what I'm saying. Clean up completely. It's time for NASA to do the right thing. Stop violating the contract, and we don't need more people to get sick.	Support for AOC

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*
11	a	Dawn Kowalski	To start with, I think this format for a meeting is ridiculous. We've said that so many times. There's no information gets out to anybody. It's a complete waste of everyone's time.	Public Meeting Format
11	b	Dawn Kowalski	Secondly, the DTSC is in control of this cleanup. Where are they? Why isn't this cleanup happening? The AOCs were signed. Nobody put a gun to anyone's head. They were signed nine, ten years ago. This process should be happening and have happened already. It was meant to be finished in 2017. What are we now, 2019, at the end of 2019? And still no cleanup. It's an absolute farce. There's children that are really severely ill. Nobody gives a shit about them. You know? And it's time to clean this mess up. And I've been coming to meetings since May of 1989 I think it was when we started. It's over 30 years now. Most of the people we started with are dead, you know. And, you know, I'm 70 now. I was in my 40s when I started this process. And am I going to live to see it cleaned up, you know? So I just want to make sure that DTSC does its job and NASA, who made the mess, clean it up. I think that's fair. And the AOCs have to be followed.	Support for AOC
12		Cindi Gortner	My comment is that my family would like the contamination to be cleaned up as was agreed in the AOCs, and I'm disturbed to find that NASA is not planning on doing so. My father worked his entire career at NASA, and NASA is very dear to us. But this is disturbing. And we think that it's a financial issue, and that's really not okay. So please clean up as promised to the AOC cleanup standard.	Support for AOC
13		Lily Gortner	I mean, I don't really have much to say. Just clean it up. I don't want any more cancer scares. Like, there was -- a couple weeks ago, I almost -- like, there was a chance that I have cancer. It's been -- I've been doing a lot of testing. But it wouldn't surprise me. Because, like, I was eating all the dirt right near that area. If that dirt's got toxins in it, that's not safe. So it's the same thing I said to one of the main senators, I think. I don't care about money. I will make a thousand bake sales. The main priority has to be safety.	Cancer Concerns
14	a	Marie Mason	I've lived in this community for 50 years, and I have been working for the cleanup of this site for 30 -- almost 31 years now, since 1989. I think it just needs to be cleaned up. I think they need to do Alternative A. They signed the AOCs. Nobody put a gun to their head. It was signed at the federal level. I think they have to honor their commitment that they made in 2010 and clean up this area and get moving on this instead of doing more studies.	Support for AOC
14	b	Marie Mason	I think this is really harmful to the community that there's a public meeting that there's really no way for the public that doesn't have a background to even know what's going on. I've talked to three people. They're new. They're looking at these boards. What are they going to -- what question are they going to ask? They don't -- I said, well, go ask a question. She said, "I don't know what question to ask. I'm not a chemist. What do I know? I thought somebody was going to tell me what was going on, and then I could respond to whatever they were going to tell me." So I think this is really not the way the government intended it to be unless you want to keep secrets. Because I think that when you're mandated by law to have a hearing, this is not a hearing. This is like a dog and pony show telling people to come and sit and talk to you. I mean, nothing personal, but that's really what this is. And if you don't have a background -- I mean, I could go on and on for 31 years of meetings. But if you're a new person that's a young mom, which this woman was, and she's scared to live here, she has a right to hear what they're going to do, not be handed some pieces of paper and a bunch of storyboards. That's like a disservice. NASA knows better. NASA can do better. They go to the moon. We got people sitting up in space. So to act like we can't clean some stuff off the ground for 31 years of my life has been -- it's ridiculous. Where there's a will, there's a way. So I think that it's time for the federal government to get with the program and at least realize this is a sham and they need to have a real public hearing so people can really hear what's happening. Without community people having to get kicked out of meetings because they're trying to tell the truth. That's like the country that I don't really want to live in. That's kind of sad to me. This is a place that's turning into we'll just pretend and let you look at some storyboards and then everybody can go away and we've fulfilled our obligation under the law, which really you've done a big disservice to the people that live here and the people who are scared. And it's no fun to be a scared young mom, because I was one of those scared young moms. That's why I've been doing it for 31 years. And it's not fair to the people that live here.	Public Meeting Format
15		Melissa Bumstead	I'm a resident of West Hills and the mother of a two-time cancer surviving daughter who is nine years old. The first thing I would like to say is that I find it absurd that I should have to petition my government for the right to live in environment that is not toxic and radioactive contaminated. That should be an American right. And as an American citizen, I am disgusted that this is -- NASA is an American federal agency doing this to the people as if we don't matter. I first learned about the Santa Susana Field Lab the first time my daughter was diagnosed with cancer in 2014. She was four years old. And I kept meeting families while at the hospital who live only miles from my home. Statistically that's impossible. Childhood cancer is exceedingly rare, with only 15,000 new cases every year. So even to find 50 kids within 20 miles is far above the national standard. So clearly the site is posing a risk, especially when you take the statistics of the Breast Cancer Mapping Project that shows our community has a higher invasive breast cancer rate compared to the rest of California. And we have the report by Dr. Morgenstern, who proved that there is a 60 percent higher cancer incidence rate for residents living within two miles of the site. To use a risk-based assessment is inhumane, especially if you see what children have to go through for cancer treatments. We have buried four friends from the community who were under the age seven. And I do not understand why the risk could be taken, because we're people and not statistics.	Cancer Concerns

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*
16		Melissa Ospina	I am for A, 100 percent cleanup. I am 55. I moved into the Santa Susana Knolls when I was 21 years old. I lived in a house on Rainey Road that was on 100 percent well water when I was pregnant with my children. All three of my children have had medical problems. My oldest daughter had her teeth removed at UCLA Dental Center when she was two years old. My middle daughter that I was pregnant with while I was living at the house on well water had Hodgkin's lymphoma at the age of 17 from the perchlorates, I assume, in the waters being endocrine disruptors. And my youngest daughter has Nevis Versatelia (phonetic) and auto immune. I've lived in the Santa Susana Knolls all these years, and all of my friends have passed away from different cancers and my neighbors, I don't have any best friends left anymore. All of my girlfriends died of rectal cancer. And most of my neighbors, I've gone to their funerals. I want 100 percent cleanup. I've watched this whole thing play out for all of these years. I know all of the lies that have been told. I'm the girl from the book, which is what -- Barbara, Dawn, Holly, and Marie wrote a journal called Loss of Innocence, and it starts off with a phone call from a young girl calling in concerns with her well water. That girl was me. I'm now 55 years old. I waited all these years, and I found out, yes, the water is bad. It affected my family in a horrible way. I want it cleaned up so no other family ever has to go through what my family and my children have had to go through. I don't think it's fair for any of the families that live in the Santa Susana Knolls in my neighborhood. I do not think it's fair that we have to live always wondering if we're safe or not. I think 100 percent cleanup is what we deserved, and we deserved it years ago. And they should have to stick with what they agreed to in 2010, which was 100 percent cleanup. And I also feel that they should be responsible for everybody's medical bills also, but that's a whole 'nother situation. But 100 percent cleanup, Option A, is what needs to happen.	Cancer Concerns
17	a	Alex Jasset (Physicians for Social Responsibility L.A)	First of all, I have to say that I'm appalled at the format of this so-called hearing that seems specifically designed to suppress public comment, in direct violation of the spirit of NEPA.	Public Meeting Format
17	b	Alex Jasset (Physicians for Social Responsibility L.A)	Second, in order to protect public health, NASA must abide by the AOC cleanup by sticking with Alternative A. Anything less would leave significant pollution that they created on site, where it will inevitably migrate offsite like it did during last year's Woolsey Fire. The time for a full cleanup is long overdue, and I urge NASA to stand by the AOC cleanup agreement and commit to Alternative A.	Support for AOC
18		Janet Murphy (Resident of Ventura County)	I'm a resident of Ventura County for nearly all my life. My family moved to Simi Valley when I was two years old. My three children were born in Simi Valley, and the eldest is residing three miles from the Santa Susana Field Lab with her family and two young boys, my grandsons. I'm here for them and also for those that have died too young and needlessly and have suffered far too many diseases. Today, I'll read a mission statement and vision statement of NASA's. It states: "NASA is an investment of America's future. As explorers, pioneers, and innovators, we boldly expand frontiers in air and space to inspire, serve America, and to benefit the quality of life on Earth." Part of the mission, it states, "Preserving the environment, we study the Earth as a planet and a system to understand global change, enabling the world to address environmental issues." I'm extremely disappointed that NASA is not living up to their vision and mission. NASA must adhere and begin the promised cleanup plan set in the AOC and do this before you go back to the moon in 2024. The thousands of people that live around the hill will never completely know if the cancers that have occurred or are just developing are from the toxic soup of chemicals and radionuclides of SSFL. They deserve a full and safe cleanup. What we know today is that NASA and the Department of Energy have a legal binding agreement to do a complete cleanup of areas 1 and 2. Please apply the brilliant minds of NASA and use your advanced technology to better our Earth home. Keep your promise. Do what's right. Alternative A is the only option that is feasible, the only option that I support.	Support for AOC
19	a	Angela Smith (Resident of Woodland Hills)	Seven years ago my then ten-year-old son was diagnosed with cancer. And when I was in the hospital, I put something on Facebook saying -- because there were so many kids with the same sort of very rare cancer in our immediate area and I couldn't understand why this was. And somebody said, well, it's obvious why this is. It's about the Santa Susana nuclear meltdown, which I knew absolutely nothing about. So as a mother of a child with cancer, who thankfully is now fully recovered and he's standing over there, I just think it's an absolute disgrace, A, that the public doesn't really know about the situation. I lived in Woodland Hills for three years and knew absolutely nothing about the situation. Well, it's absolutely unacceptable that the situation is allowed to continue with a continuing contaminated site. It's just absolutely beyond my -- it's beyond my understanding that that could even be a possibility.	Cancer Concerns
19	b	Angela Smith (Resident of Woodland Hills)	In this day and age, it's outrageous that nine years ago a cleanup agreement was reached and it's still not happened. NASA are still denying. Tonight NASA denied to me that they breached any deadlines. Their defense was, well, we've never been fined for missing a deadline.	Support for AOC

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*
19	c	Angela Smith (Resident of Woodland Hills)	In the meantime, people are getting cancer and people are dying. And I know many children who passed away from cancer from this immediate area. So I'm absolutely outraged, and I just think that it's a shameful situation for anyone in government making environmental policy to allow this situation to continue. No matter what the cost, the site needs to be cleaned up as fast as possible and the people who pussyfooted around and taken all of this time should be punished, should be penalized. These companies should not be allowed to put profits before the health of the population.	Cancer Concerns
19	d	Angela Smith (Resident of Woodland Hills)	Also, it's outrageous that this meeting was in this format and that public comment wasn't available beyond just talking to a court reporter, lovely as you are to talk to. But seriously, it's a shameful situation.	Public Meeting Format
20		Chico Ryder	I'm 17 now. But when I was 10, I was diagnosed with cancer. And I used to play soccer on one of the fields that are contaminated. And we attribute some of that time on the fields to the reasons why I was diagnosed. And, yeah, I just think it's outrageous that they're not taking their responsibility to clean it up properly and in a timely manner. And, yeah, I think they should maybe listen to the people who want it to be cleaned up. And to me there are multiple reasons, valid reasons, that it should be cleaned up.	Cancer Concerns
21		William Bowling	I want NASA to keep their promise with the AOC and adhere to Alternative A.	Support for AOC
22		Melissa Hunt	I have a child who died of cancer on Valentine's Day 1999, and I do not believe for a second that it's because of SSFL -- or Santa Susana Field Laboratory. My husband worked there. He took a Geiger counter in to work, and in no way, shape, or form was there any radiation. He doesn't believe that that is why our child died of cancer. It's because everybody's born and is going to die. So we're not afraid of the laboratory, we are not afraid of the cleanup, and we're grateful for all that NASA did for this country and what Boeing did. And it's not their fault that people get sick.	Cancer Concerns
23		Christine Rowe	I want to say that I support the cleanup to Alternatives 3 -- or actually it's C and D. The C is consistent with the 2007 consent order. I believe the AOCs are not legal because they were written to comply with the state law, SB 990, and SB 990 was found to be unconstitutional. And, therefore, we need to go back to the drawing board, and I believe all parties should be tied to the 2007 consent order. So because of the increased soil volume that has been discovered and -- my primary concern is risk. And I support the letter from the federal EPA written to NASA in 2014 that said they believe in cleaning up the radionuclides to background and cleaning up the chemicals based on risk, and that the site cleanup should be consistent sitewide because if you clean up NASA and the DOE portion to one cleanup standard and clean up the Boeing side to a lesser standard, than the minute you have the rain or whatever, it will just become re-contaminated. So you need to be consistent. You also have to consider the impact on the community, the EPA said, of the traffic, both on the local community and on the receiving communities, especially consider that these landfills are in environmental justice communities, and some of the areas that these trucks are traveling, even locally, are going through environmental justice communities. We also have to consider the water. The soil -- the amount of water that you have to hose down when you're digging and hauling, the amount of energy, and the more diesel emissions and all these things contribute to our greenhouse gas emissions. And so also I'd like to see this site cleaned up in my lifetime. A suburban residential standard would take eight years. The AOC would take 25. And I see just nonstop litigation occurring right now. There was a lawsuit that started in August 2013 that is ongoing and under appeal, and I believe that has also delayed the cleanup of this site. Again, my focus is to protect the residents of West Hills and the surrounding communities. I'm a West Hills resident of 41 years. I did hear the tests, you know, engine tests and stuff when they were going on from my home.	Support for Risk Based Approach
24		Altenbern	NASA's draft SEIS is illegal, and it violates the legally binding AOC cleanup agreement that was made in 2010. The other alternatives being proposed in the SEIS, alternatives B, C, and D, are not acceptable. They are not protective of human or environmental health. The standards being used in those alternatives do not protect ecological receptors as NASA claims them to do. NASA admits it has discovered there is much more contamination than it previously knew, and yet what it's doing is to propose cleaning up far less than it promised. So-you know, that's kind of a nonsensical argument. What they should be doing is sticking to the initial agreement that was made in 2010, which is to clean up to the lookup table values and to agree to clean up the acreage that was initially promised. So just to close, NASA must comply with the legally binding agreement to fully clean up Santa Susana contamination, and they are violating the AOCs. That is what the community desires, and it's the only thing that's going to protect the environment.	Alternative Justification
25	a	Ryan Valencia (district director for Assemblywoman Christy Smith)	I want to thank NASA for putting together this presentation for the community. This type of engagement is incredibly important to ensure that all the facts are out there and that -- we're glad that you have diligently been working on getting an SEIS that takes in public input.	Public Meeting Format

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*
25	b	Ryan Valencia (district director for Assemblywoman Christy Smith)	Our position has been pretty clear, that we want our federal partners to be working with our state partners as strong as possible, that we try to reach a full cleanup, and that the misconceptions do get straightened out. And that only works when we have transparency such as what we see tonight; however, what we do want to ensure as well is that the obligations and promises that were made in 2010 to our state partners is upheld and that soil remediation, that that money is not a roadblock to ensuring the safety and health and well-being of Simi Valley and the surrounding communities that we represent.	Support for AOC
26	a	Jeni Knack	I read something today, and it was a document from the DTSC to NASA in 2012. And that document basically told NASA when they originally put out their EIS that considering different alternatives out of the AOC was not allowed. They were instructed to figure out how to complete the AOC but not whether to. So we're back here again. Increased soil volumes or not, it's still not permissible for NASA to change the parameters or to even consider deciding their own cleanup, the extent of the cleanup.	Alternative Justification
26	b	Jeni Knack	So I'm disappointed that we are here looking at misleading alternatives. I took pictures of the posters last night, and I was very upset that some of them contained falsehoods. So the health and safety board is incredibly misleading. It says that all of these alternatives have no difference in terms of health risks for the communities. There is a board that says that contamination does not go off site. But we know that that's not true. We know that there are 57 exceedances just in two quarters after the Woolsey Fire from the rains. I don't know how it's allowed that they would put untruths in print and present it to the community. I'm extremely concerned.	Cancer Concerns
26	c	Jeni Knack	And the other thing that I'm concerned about is that in their draft, the references to the appendices, there's 75 percent of those unavailable to the public to read. So I'm concerned about not being able to read the fine print. Not that most of the people in this room have time to, but it is a NEPA infraction to not allow us to see how they're making their decisions and what data that those decisions are based on.	Reference Availability
27	a	Christina Walsh	I went to last night's meeting, and I have read all of the report and about 230 pages of the appendices. And I've seen most of the figures, and I really appreciate the boundary -- I don't know how to describe it other than, like, the southern notch of -- above COCA, which would be just to the south of COCA that is beyond the boundary that is also outlined as if it's going to be -- NASA's taking responsibility beyond it's boundary. That was an area I found. I'm very appreciative to Elliott and to Peter Zorba for taking it seriously and making sure that it's still on the radar there. We could taste silverware when we were there. So I think it's very important. I like Alternative B. I like the concept. I actually described a similar idea, picking specific constituents that you could do differently, do smarter, and look at other levels. I'm still not altogether comfortable with dioxin, especially, like, the TCDB congener. It's one of the most toxic things known to man. I think that's one that we need to look at that toxicity ratio on that.	Support for Risk Based Approach
27	b	Christina Walsh	Finally, the report itself and the summary, I appreciated the summary. It made clear what's on the table, what decisions are being analyzed. And I have read the Navigating NEPA, and I think it's really sad that there's very few people that seem to be sitting in this chair actually participating in the actual process by shaping how the cleanup looks. To me, if you want to be afraid of trucks and you want all the trucks forever and ever and ever, that's simply -- it doesn't work. It's an oxymoron, literally. I don't want to be 80 years old when this is finally done. I think that the most serious areas need to be removed using trucks and that we need to look at other solutions in situ and ex situ in order to reduce the number of trucks. Presenting a false narrative about a conveyor belt over at children's camp is, I think, even offensive because everybody knows that studying that, we can spend millions, but nobody's going to ever approve that, especially because there's already been litigation with Brandeis, where they settled and received millions of dollars and exchanged land. That's what the northern buffer zone was. So the idea that they would then approve toxic waste moving over the heads of babies, it just is fake. It's a fake solution. The transportation plan that was put out in the public sphere sat out there incorrectly, a complete false narrative to scare people about trucks and traffic, for five years. And that was a great way to rile up the local neighborhoods to fill an auditorium and make people afraid about being five minutes late to work on Valley Circle. That map didn't even show the orange line, it was so old. And it pretended that we would go through Bell Canyon, a six percent grade. No trucks can do that. Certainly not hundreds per day. So I hope for real solutions. I think NASA has been a leader in that way among the three parties, and I hope that continues. This report is promising.	Resource Concerns
27	c	Christina Walsh	But I also think that the soil profile is very shallow, so I have difficulty with buying the 870 -- the estimates, I feel, are exaggerated. I think NEPA is misused in that way because all the responsible parties know how to navigate it. And you exaggerate all the impacts and scare the crap out of people, excuse me, and then you can divide a community pretty well. And our community has been divided for several decades thanks to that man telling a completely false narrative, I think, about radiation here in the NASA room. So it's like come on. He wants it to be a glowing green failure because that suits his narrative just fine. But I live at the two-mile mark, and I would like a tangible -- not just a paper cleanup that politicians wave around. I want a real one.	Soil Quantity Estimates

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*
28	a	Daniel Hirsch (President of the Committee to Bridge the Gap)	I'm the retired director of the Program on Environmental and Nuclear Policy at the University of California Santa Cruz and president of the Committee to Bridge the Gap, the organization which 40 years ago disclosed that a partial nuclear meltdown had occurred at the Santa Susana Field Lab that the government had kept secret for 20 years up until that point. I've been working to try to help the community get the site cleaned up ever since. Yesterday, NASA prohibited members of the public from testifying about the flaws in the Supplemental EIS and physically blocked, putting their bodies between a PowerPoint projector and the screen so that the testimony could not include exhibits that would show how NASA was lying in its Supplemental EIS and how it was breaking the legally binding cleanup agreement it had signed in 2010. This was supposed to be a public hearing. Public hearings are generally in a large room with chairs, a hearing officer at the front, microphones where members of the public get up to speak, and where the rest of the public, the news media, elected officials and their staffs can hear what is said. NASA is so scared of public comment that they have turned this hearing on its head so it's no hearing at all, just posters with NASA people standing next to them and no ability for there to be testimony of the sort that you have at a hearing. And as I said, they physically blocked the presentation of PowerPoint slides, turned off a PowerPoint projector that people themselves had brought, and physically blocked the public from being able to exercise its rights under the National Environmental Policy Act.	Public Meeting Format
28	b	Daniel Hirsch (President of the Committee to Bridge the Gap)	And then, frightened about what I was about to reveal about NASA's involvement in the fire that began at NASA's property, burning all the way to the ocean because of NASA having torn down a fire station that was a few feet away, getting rid of the modern fire trucks, tearing down the two million gallons of water tanks, fire hydrants, all of which led what should have been a one-acre fire into almost 100,000 acres, destroying 1600 structures, and killing four people. NASA was frightened about us revealing that and showing the photographs of the fire station that they tore down and the tanks they tore down, and so they prohibited the fundamental right of showing that and then had roughly eight police officers remove me from the meeting, where I was standing in line about to be able to speak to you as court reporter. It took a real act of fear on the part of NASA that the truth would come out. The irony is that their actions to suppress the truth will just make it much more well known.	Wildfire Concerns
28	c	Daniel Hirsch (President of the Committee to Bridge the Gap)	Fundamental point, NASA signed a legally binding agreement to clean up all the contamination, and they are now proposing to ignore that legally binding agreement and leave the vast majority of the contamination not cleaned up. Their argument for doing so is that they've discovered new information that there is 75 percent more contamination at the field lab than they had known. Any logical person would say that that means, therefore, they have to do more cleanup. But NASA is using that as some kind of twisted excuse for -- (comment interrupted by protestor). Were you able to get any of that or not, his? It should be part of the record because the person was criticizing the way this is done, that no one can hear the testimony of others. It's not a true public hearing. NASA is violating the National Environmental Policy Act and is showing that it is terrified that if the public could hear what it is doing they would never, never accept it. That contamination on their site is among the most polluted places in the country. It's on top of a mountain, with half a million people living within ten miles beneath. And NASA's contamination keeps migrating off site and continues to place children at risk of childhood cancer, adults at risk of all sorts of health problems because NASA is breaking its word. If they had cleaned the site up by the deadline they had agreed to 2017, the fire that occurred in 2018 couldn't have released any contamination. But they haven't even begun to clean up. And so the fact that there isn't a real hearing, the fact that they blocked people yesterday from doing PowerPoint, and today clever NASA has decided to put up its own projector, shows that this is an agency that knows it cannot withstand scrutiny and the only way it can function is a Soviet-style puppet machine in which the people have no real ability to speak out. It shows their fear of being -- their lies disclosed. The tragedy is that people will die because of it and the people who live near the site will be exposed to the contamination that NASA now proposes to simply wash its hands of and walk away from.	Support for AOC
29		XXX Walsh	I wanted to show -- so there's two figures in the -- so this one is the proposed Figure 2.2-1, Alternative A. And this figure is Alternative B. It's Figure 2.2-2. And when I looked at this one I was very pleased, and I wanted to show you because I'm not sure how to say this. But see beyond the NASA border, this area is what I call the sliver of Area 3. I'm very pleased that they are taking responsibility and it's on there. And this was the notch that I was talking about down here to the south of the COCA. But this is a shrunken outline from Alternative A. Right? Which is the widest. But on that one, it doesn't go past those boundaries. So my comment is that is inconsistent. And my question is: Which one is true? Because either you take responsibility on both or maybe not. That's my question. Why is there a discrepancy in those.	Support for Risk Based Approach

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*
30		Caroline Reiser (Natural Resources Defense Council)	I'm here tonight to represent the thousands of members that we have located here in Southern California and their interest in a healthy and clean environment. The Santa Susana Field Laboratory is one of the most contaminated sites in California, and it's really just one of the many that are located across the nation. After decades of housing nuclear reactors and test projects, releases and spills have contaminated the soils, the water, and the buildings with toxic and radioactive contamination. And that contamination has not remained on site. It has migrated off site. And that has led to workers and community experiencing cancer morbidity and mortality rates that are higher than the average. So NRDC has been engaged at this site for decades, and we expect the federal government to clean up the mess that it's made. We will remain engaged until that happens. We believe California is taking the right steps currently. Governor Newsome, the Department of Toxic Substance Control, and Cal EPA are working to ensure that NASA and the Department of Energy are meeting the requirements that these agencies agreed to under the AOC, and these are binding legal requirements. Unfortunately, with this Draft Environmental Impact Statement, NASA seems to be ignoring those legally binding requirements. But NASA has no authority to gripe about those requirements. Even if the AOC did not exist, under the Resource Conservation and Recovery Act, RCRA, NASA, as the polluter, doesn't get to decide how much pollution it cleans up and how much it abandons in place. Those decisions are in the hand of the regulator, which is the Department of Toxic Substances Control in California. And this is not just a local issue. It's a federal issue as well. We see federal agency polluters think that they can adequately regulate by self-regulation. This is especially a problem with radioactive contamination, which currently is a privileged pollutant exempt from the standard environmental laws. But self-regulation does not work, and it has to end. So NRDC has put before Congress an idea to normalize radioactive contamination under environmental laws. Only with strong external regulation will sites like Santa Susana Field Laboratory eventually be fully cleaned of toxic and radioactive contamination.	Support for AOC
31		Holly Huff	Well, I just want to make a comment on this so-called meeting, because I don't consider this a meeting. I don't like -- these board kind of meetings, you're lucky if someone's standing there that could explain it, and it's just not a meeting. I mean, you can't say things that you would say about things that aren't true. I'm very displeased with this setup. It doesn't work.	Public Meeting Format
32	a	Dawn Kowalski	I just want to say that I'm very disappointed with this kind of format. You know, it's a complete waste of time, everybody's time. And I just also wanted to say that I was very disturbed that free speech was stifled last night and a complete display of ridiculousness took place when Dan was escorted out by eight Simi Valley policemen. I mean, that was just wrong. He knows more about the site than all of the NASA people put together and multiplied by ten. He's brighter than most of them. And it's just too bad.	Public Meeting Format
32	b	Dawn Kowalski	NASA should be listening to DTSC. DTSC is meant to be telling NASA what to do, not NASA trying to tell everybody else what they're going to do. And they signed the AOCs, and the AOCs need to be followed. And I'm disgusted with NASA.	Support for AOC
33	a	Dorri Raskin	First, I want to complain that this is supposed to be a public comment period, and I think it's not. It would be nice to hear what other people have to say with their comments and then you could react.	Public Meeting Format
33	b	Dorri Raskin	I also feel very strongly that NASA's idea of doing the different options, that that's illegal, that they signed a legal binding contract, an agreement in 2010 that says that they have to clean up to the AOCs. They can't choose which one. Polluters don't have a right to choose which one to use. They have to do "A," AOC. I'm concerned about the contamination that's going off site. And I'm concerned about people getting various cancers. I'm concerned about the chemicals, like Perchlorate, TCE, dioxins, metals. And you get learning disabilities for children, birth defects. Kids are getting cancers. And I feel that the polluter has to take the responsibility to clean up the site fully. They need to clean up to the AOCs. And they can't leave anything here. As I said, the way this is set up, it's bad for people who have disabilities. It just should have been a meeting where people do public comments.	Support for AOC
34		Janet Murphy	NASA, a publicly funded entity, hosts public meetings at private venues, provides a court reporter to receive testimony on the concerns of a public document, circumventing the public forum process. Whereas the public and those impacted by the non-cleanup of SSFL are unable to hear from those that have analyzed the data, unable to share our collective experiences and knowledge. It's a disservice to our communities. I and many are extremely disappointed by this seemingly orchestrated event to silence those that want the full cleanup and the legal binding AOC agreement which we want fulfilled. Alternative A is still the only way.	Public Meeting Format
35	a	Denise Duffield	The first thing I want to do is object about the process for this hearing. This is supposed to be a hearing for a legal document. Nobody -- there's no sign here that even says "court reporter." How are people supposed to know that they can officially weigh in on something when there's nobody telling them that you're even here.	Public Meeting Format

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*
35	b	Denise Duffield	How can people make informed comments on a document when all there are is basically propaganda posters from NASA? How can people make an informed decision when NASA refused to make publicly available 75 percent of the references in the SEIS and the appendices? That means they'll say according to this study over here or this report over here, but they won't make it available. Even the Department of Energy made its references available. And that's where we found a lot of dirt. They would say natural attenuation, which is doing nothing, will take 70 years for this chemical. And we would go find that reference, and that's not at all what it said. So we can't make informed public comment when NASA refuses to make available 75 percent of the references. Elected officials and the media can get no sense of where the community's at by having us do this instead of us being at a microphone and you typing.	Reference Availability
35	c	Denise Duffield	What NASA's doing right now is illegal. They don't have the legal authority to decide. The polluter doesn't get to decide how much of its contamination it cleans up. That is through the Resources and Recovery Act -- Resources and Recovery Conservation Act, RCRA, delegated to the regulator, DTSC. DTSC decides. NASA signed a binding agreement to clean up all of the contamination. Every single one of these alternatives violates that. In 2012, DTSC Director Debbie Rafael sent a letter to NASA telling them that if they were going to do an EIS, which they do not have to do, per NEPA, because NEPA is triggered by discretionary actions, this isn't discretionary when you signed a legally binding cleanup agreement. So DTSC told NASA if you're going to do this anyway, you are to make your document about how you'll clean up to background, not whether to, and you shall not consider any other alternatives. And they did it anyway, not once, but now twice. A recreational cleanup standard would leave 88 percent of the contamination on site and would continue to keep nearby communities at risk.	Compliance with Law
36	a	Bonnie Klea	I used to work up there. Got cancer. In 2000, President Clinton passed a compensation program for the Department of Energy workers. I helped all the workers get their claims paid, over 4000 cancer claims. Some workers had two cancers. And I even had the NASA people come to my house. They were dying of cancer. They weren't covered. But I can tell you that so many people got sick, and now we've got our second round of babies who are sick. Our first group of babies all were born with cancer in their eyes. Boeing paid them. Made them leave. Made them leave the city. And now we have a bunch of children, 50 so far that have been counted and then she stopped counting, who have Leukemia. With the workers, the number one cancer was lung. Number two cancer was bladder. A lot us got sick in the same year, 1995. I've had a lot of people coming to me that had cancer, bladder cancer, and I was told in negotiation with Department of Labor and NASA that it wasn't related to our job. And I said, well, you have to read the Beir study, Beir VII, which has it in that book that bladder cancer is caused by radiation. Beir VII definitely says in there that their studies of the Japanese show bladder cancer was very radioactive, caused by radiation exposure, even very small doses. So that's what I've been doing for 25 years. And now I'm very disappointed in NASA. Signed a cleanup agreement to clean it all up, and now they want to cut it back.	Cancer Concerns
36	b	Bonnie Klea	Very upsetting because the mountain is 1000 feet above our houses. All the canyons around that hill have been populated. Ran off in the fires and the rains we just had. It ran off. Was in the smoke. That smoke went everywhere. And it's going to keep happening because I've been here 50 years, and that hill has burned several times.	Wildfire Concerns
37	a	Rhea Caine	Basically, I am super disappointed in this EIS. In 2010, NASA signed an agreement. They said they would have the site cleaned up by 2017 and they would follow the AOC and the lookup table values. And now, very similar to what we have tried to see the other agencies do to get out of their commitment, they are proposing these alternatives which are completely illegal. They signed their document. The EIS should be looking at how they can best achieve the lookup table values and the Alternative A in this document, and it should just have alternatives for how to mitigate any of these issues they are claiming Alternative A has.	Support for AOC
37	b	Rhea Caine	Furthermore, I have read some of the document. I've had questions going around talking to people here at this meeting. And often, when I am told answers, they are in reference documents to the EIS, not in the EIS itself. When I ask to see these reference documents, I'm told I won't get them for at least another couple of weeks. So the comment period closes on December 9th. And so I don't know how anybody's supposed to be able to give an informed comment when we don't get access to this documentation before the comment period is closed. It just feels like another way that NASA is making sure that we can't actually give comments on this extremely broken EIS.	Reference Availability
38		Alysia Deza	I live in the east end of Simi Valley in Corriganville on Smith Road. We have an active well in our yard -- water well -- and after the Woolsey Fire, we had our water tested, sampled. They did find Plutonium 239/240 in our well water along with Strontium 90, regular Strontium. The main thing is Plutonium is the most fearsome isotope known to man on this planet, and it should not be there. And the only place it could have come from is Santa Susana Field Lab. We had a hair sample of my son done. He's in the 97th percentile of Uranium. Strontium, Barium, different metals, which should not be there. I mean, that doesn't have any business being in my son's hair. He has multiple nodules on his thyroid gland. Our property's an acre, just under an acre. There are four different individual thyroid problems. The lady who lived there before for 23 years had thyroid cancer, died of Leukemia. Animals and humans are different, yet similar. Our dog had Addison's, which is thyroid disease. Had to have her put down. She had rare cancer. I can't pronounce the name, but it's only due to toxic chemicals. Our cat had hyperthyroidism, which is cancer of the thyroid in cats, in animals. And then my son having multiple nodules on his thyroid gland. Four different ones on one property, that's not normal by any means. He also has gastroparesis, which is very unusual. Something needs to be done. I mean, this is not acceptable by any means. It's not right. And our house is the entrance to Corriganville, which is a wildlife reserve which is also the entrance to the Boy Scout camp. Manganese was over five times the amount. Manganese is a neurotoxin, and it affects your memory. Can you tell? Your memory, long term, short term, and brain fog, and it's not always reversible.	Cancer Concerns

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*
39		Lauren Hammersley (resident of Simi Valley)	I've been living in Ventura County my entire life. I was raised in Moorpark, California, and I've raised my five children in Simi Valley less than 7 miles from the Santa Susana Field Lab. My daughter, Hazel, was diagnosed with a rare form of childhood cancer. It's called neuroblastoma. It was in 2013 when she was only two years old. They don't know the cause of it yet. They don't believe it's a hereditary thing. We tested for all the mutations that would indicate it was a familial genome issue, but it wasn't. So we're suspecting that it could be environmental or something that happened when she was developing in utero. She got cancer for five years on and off. She had to face it three separate times. She had to go through chemotherapy, an eight-hour surgery, a stem cell transplant, which led her to the ICU, where she almost didn't make it. She was sedated for four weeks in a coma. Came out, she couldn't walk, she couldn't talk. She had to relearn how to do everything. But she made a full recovery. Then she had to go through radiation, 20 different rounds on a two-year-old's body. And then she had to go to immunotherapy six months. And while it's new and innovative, it's still harsh on her body. And we were told that even if she was cured she had a 90 percent chance of having life threatening side effects from the treatment she received to save her life. That can include heart disease, fertility problems, brain issues, kidney problems, all sorts of organ failure. And we thought we had it, but on the third time -- sorry. On the third time, the cancer just grew beyond what we could treat, and we lost her in March of last year at only seven years old. And during the time that she was in treatment, we met so many families, and I was so thankful for the support system. But what was really surprising was how many lived in my backyard. My friend Melissa, who you'll probably hear from tonight and you may have heard from yesterday, she and I started noticing how many kids in our neighborhoods had cancer. Cancers that they shouldn't have. Cancers that were rare. Cancers that were killing them. I've been to more funerals for children than I could count, and I don't want to go to another. But when we started to notice, we started to contact people, and more and more people came and gave us information. And we said that there is a cluster. We reached out to Hal Morgenstern, who's an epidemiologist, and he did a study in the '90s that indicated in adults there's a 60 percent higher incidence rate of cancer in my community. They've never done such a study for children. So we've been trying to do it on our own. But when we started to figure this out, we realized there must be something that's causing it. And whether or not it caused my daughter's cancer, I'll never know. Because she's not here, we're not able to test her, her blood or her tumors anymore. But what I do know is I am certain it has caused several in our community. And I don't want any other family to face what we had to face. Even those who haven't lost their children know that the life of a child with cancer is something you don't ever want to live with. And so when we noticed that the Santa Susana Field Lab didn't live up to the agreements that they were making to clean up the site, we said we had to do something. So we come to these meetings and we support the people who are fighting for the health of our children and for our children's children. And we are here tonight because it seems as though NASA wants to back out of the AOC agreement and go with either Alternative C or D. But they're not giving us any indication as to why. They're just saying there are significant impacts, but they're not telling us what those significant impacts are with the AOC cleanup. And then we come down to Alternative D, and they're saying there's no significant impacts, like this is going to be better for us. But I ask my daughter, and I know, that that's not better for my community. So I wanted to be here, not to be an activist that scares people away. I want to be somebody who says I care about the children in my community, and what they're proposing to do does not protect the children in my community.	Cancer Concerns
40	a	Melissa Bumstead	My name is Melissa Bumstead. I am a 15 nine-year resident of West Hills. I would like to say how disappointed I am in the presentation today. I feel very insulted by some of the blanket statements that are made assuming that I would not be able to understand the facts in the data that has been used to make these decisions and that it's not being disclosed by NASA to the public. I may be a regular person, but I'm still intelligent enough to understand when things are being hidden, and that completely lowers my trust in NASA. When I was seven years old, we got up at 4:00 a.m. to go to Lancaster to watch a NASA shuttle land. My mom's close friend was an astronaut on that shuttle. And it was the highlight of my childhood. To not feel that I can trust NASA and feel that they are not on the side of the children who look up to them so much is a huge discouragement to me. That's my sign said, "Et tu, NASA," because I feel like I've been stabbed in the back by a close friend.	Public Meeting Format
41		Melissa Ospina (Simi valley resident)	I lived at <address> in the Santa Susana Knolls, Simi Valley, 93063. And I lived there when I was in my twenties, having children, and all of my children were born with illnesses. And one of my daughters had Hodgkin's Lymphoma. My concerns now are that in the cleanup process there is going to be recontamination because of airborne chemicals, because of trucks not being covered properly, passing our houses. In the past, when things were cleaned up on the hill, I witnessed it being done improperly repeatedly, and I'm very concerned about that. And I'm concerned about my kids getting sick again. I have kids with autoimmune disease. So I'm not very with A, B, C, or D. I'd like to see everybody, as a community and scientists and NASA and Boeing and Rocketdyne and Rockwell and DOE, DTSC, EPA -- I'd like to see everybody actually work together to come up with a solution that is safe for everybody. Because for the last 32 years my family has just been being subjected to chemicals over and over and over, whether it was in the 100 percent well water that we were drinking -- and then I moved away from that house into a different home only to find out that Golden State Water is still adding the same contaminated water into my home. I just think that there can be another solution to it, that we haven't found the right cleanup yet. I know that Simi Valley means Valley of the Winds, and a lot of the chemicals are airborne chemicals. I just don't trust that it's going to be cleaned up properly. And my kids and myself, we only get one life. And we would like to choose our destination, not have somebody choose it for us.	Cancer Concerns
42	a	Briana Jahnsen	So I kind of just wanted to say I think it's really interesting and kind of, I mean, not appropriate that they made an agreement to the AOC and they have, like, signed a legally abiding contract and they broke that contract, because it was supposed to be cleaned up by 2017, and they broke the contract with no repercussions. And I think that's really interesting.	Support for AOC

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*
42	b	Briana Jahnsen	But it just doesn't make any sense to me why all these other alternatives are seen as more positive than Alternative A, which is the initial decision that was made on the cleanup. It seems like there's bias with the other alternatives, because it makes it a little easier, probably less expensive, whereas Alternative A is going to be the safest option. Whereas they're saying that Alternative A is going to remove too much dirt and then it'll be hard to, like, rehabilitate all the natural life that was there before when it doesn't really make any sense because there's so much toxic chemicals that are left on the property that I think it's harming the environment more and the people surrounding that environment. It just doesn't make any sense to me.	Alternative Justification
42	c	Briana Jahnsen	But also, there's so much evidence that there's all these families that have been affected by the chemicals, from mothers with their kids having cancer and all these diseases that are coming up from surrounding areas. It's very clear that it is dangerous, but they're making it seem like it's not.	Cancer Concerns
42	d	Briana Jahnsen	Another thing that I wanted to mention, though, is the public hearing situation, how it's one on one with a court reporter versus having people go in front of the public and speak, it seems like they're hiding something by not giving people that opportunity to speak to the public and to speak to the officials and get their opinion comments back. And when we asked the people that are standing in front of these boards, they said that this would be a more intimate way of discussing things. But it sounds like it's just to keep everyone from hearing the truth of what people's opinions are.	Public Meeting Format
43		Alysia Deza	I want to tell you to tell these people to clean this up. In all seriousness, I want Alternative A. Period. Because I'm just too sick and tired. It's not cool. Everybody I meet anymore has cancer or has had cancer, or they know somebody. One of their family members have passed from cancer. Their animals have passed from cancer. I mean, my son and I, my family, knock on anything, we don't have cancer that we know of yet, because we've had many health issues. And this is not the new norm. I refuse to accept that this is the new norm. It's not. Anywhere else, it's not like this. I live within a mile to two miles from the Santa Susana Field Lab. I also live 6.3 miles of Aliso Blowout Well SS-25. I'm downwind of it. So I'm getting double dosed where I am.	Cancer Concerns
44	a	David Troy III	The procedure of this meeting, public meeting it's termed. My understanding is that environmental impact statements have requirements concerning public hearings. If this is intended to take the place of a public hearing, it is a fraud. There are many things deficient in this kind of a meeting. I, as a public citizen, come here expecting to listen to professionals who speak. And I'm not listening to the professionals of the community. All I get are the defendants, basically. We're talking about a polluter talking to us. And I don't get to hear the other side. Now, I understand I can wait until the final paperwork comes out and it will be able to be read. And that doesn't get it. I want to hear what other people are saying. I learn by that.	Public Meeting Format
44	b	David Troy III	I have heard testimony about people who've died from different things. Now, off site, I actually have learned about, for example, there's a garden just downwind from there, the Orcutt Ranch, which is a recreational spot now owned by, I believe, the city, maybe the county. Every member of that family died of cancer. Oh, dear me. Maybe just a coincidence. Well, now, the NASA site has different chemicals, and I might do a second comment with regards to the NASA site itself specifically. But people talking and giving these hearings, and listening to the people talk, teaches us. Also helps us with by listening to the professionals that do comment. I believe that this contaminated site needs to be cleaned up 100 percent. The games being played are very good at making it difficult to figure out. I can't see why our population here -- I am ten miles as the crow flies from this place. This is my water. When the Santa Ana winds blow, this is my air, my dust. I don't see why I have to live with this contamination.	Cancer Concerns

* See Appendix 4A for responses by category

Comment Number	Segment Letter	Name (Affiliation)	Comment	Response Category*
45		David Carey	My family owns property just above us here in Dayton Canyon, very close to the boundary of the SSFL. I'm familiar with the SSFL layout. I've seen a lot of things that are on exhibit here. I've been to the Burro Flats cave. I've seen the rocket test stands. I've seen the burn pits. And I've got a feeling for where things are generally. I don't know it as well as probably some people do, but I know how, you know, the water drains and the canyons flow and, you know, all that kind of stuff. My concern is I'm hoping that NASA doesn't follow the example of what contaminated land has typically been turned over as parks. I've seen it happen over here at Chatsworth Park South. That used to be the Roy Rogers kind of a fun area back in the '50s. There was a shooting range there. Buckshot, clay pigeon shooting range. There was trout ponds, catfish ponds, a golf course. Kind of hiking trails, horseback riding. And the City of L.A. took ownership of it when the Roy Rogers family decided they wanted to let go of the property, and the City of L.A. just took over the land without cleaning it up and turned it into a park. Twenty years or so later, I was at a DTSC meeting discussing the SSFL, back like in 2007 or so, and they were saying there's a shooting range next to the front gate up at SSFL that was needing to be cleaned up. A lot of buckshot, you know, here and there, and I saw that. It's near Sage Ranch on the border of Boeing, and I walked that property with DTSC before, and I was scratching the side of my head saying, you know, you guys, that's small potatoes to what we have at the end of Devonshire Street in Chatsworth at Chatsworth Park South. That is where Roy Rogers had a shooting range with multiple stations, where they would blast the clay pigeons out of the sky. And when I was growing up there, there would be literally yards deep of lead near the tree wells, where the water would erode around the tree. There would just be yards and yard of buckshot and clay pigeon pieces, a conglomerate mixed. And at one point in time before the City of L.A. took ownership in -- I believe it was '73, we had some pretty good rainstorms where the City was trying to grade it to be a grassy glade, the shooting range park. Well, a big rain came. After, you know, 20 inches of rain or whatever it was, it picked up this conglomerate, the material of clay pigeons, mud, buckshot, and moved it out the front entrance of the park, down Devonshire as far as Topanga Canyon where the elementary school is at. That's where I was attending. So what I'm saying is I know that this idea of turning contaminated land into parks equals the park not getting cleaned up properly and being dealt with later down the road. I've seen it at the Wiley Canyon, in Towsley Canyon on the Santa Clarita side of Oat Mountain. There's an old oil field there that Chevron took over, and the county took over that land as a park. And to this day, they consider it artifacts, historical park, and they leave the oil pits for the kids to wander into on a mountain bike, hiking, trail running, open. And since it's an artifact historical park, they leave the oil out, this contamination out, as is, for, you know, the community to enjoy as a park, which I think is completely preposterous, ridiculous. And I think that's what's going to happen with the SSFL if we just turn this land over and don't go through, you know, Alternative A. Endeavor for Alternative A. If it takes 25 years or longer, revisit it later, as things will be revisited, as cleanups always are, and be openminded to that. So not just foreclose and say, oh, we're done, we're going to do Alternative, you know, less than A and walk away, and it's a done deal, end of discussion, you know. Because it's going to come back and haunt us later, just like the example I gave you with Chatsworth Park South and the Towsley Canyon problem. We own property here in Dayton Canyon above where the drainage comes out off of SSFL. We're very familiar with the affects of that. So I encourage you guys to not just use the park or open space example as the scapegoat, trying to get out of a, you know, long multi-decade endeavor to get this place made safe and cleaned up. Because we're going to learn more technology. As we go on, we learn how -- smartphone technology today. There's satellites that you guys have that discover things on Mars. You can find things that you can't find on land with the burrows or hand sampling. So be openminded to taking care of the land the way it was before you guys got there. I know it's a tough job.	Support for AOC

* See Appendix 4A for responses by category

Form Letter Comments

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Comment Number	Name (Affiliation)	Comment Response Category= Support for the AOC & Leaving Contamination
1	Jasmine Peralta	I am deeply concerned by NASA's Draft Supplemental Environmental Impact Statement for cleaning up contamination at the Santa Susana Field Lab, which proposes leaving up to 80% of the contaminated soil in NASA's portion of SSFL not cleaned up. This contamination includes highly toxic chemicals such as trichloroethylene, perchlorate, dioxins, heavy metals, and other hazardous chemicals which migrate offsite, posing a risk to those who live in the area around SSFL. In 2010 NASA signed a legally binding cleanup agreement with California, committing to clean up all of the contamination, to background levels, by 2017. But NASA failed to even start the cleanup, let alone complete it. I urge NASA to comply with its agreement to clean up all of the contamination at SSFL. NASA must live up to the law and the commitments it made to undo the toxic mess it created through years of sloppy environmental practices and negligence. Clean it up, all of it, as promised, so that public health and the environment are protected from exposure to SSFL's dangerous contamination.
2	zane ellis	SAME TEXT- CONFIRMED
3	Sophie Millar	SAME TEXT- CONFIRMED
4	Eleanor Powell	SAME TEXT- CONFIRMED
5	Andrea Jaramillo	SAME TEXT- CONFIRMED
6	Kayla Schaffer	SAME TEXT- CONFIRMED
7	Josiah Edwards	SAME TEXT- CONFIRMED
8	Armando Rendon	SAME TEXT- CONFIRMED
9	Angela Creaghe	SAME TEXT- CONFIRMED
10	Mary Bahan	SAME TEXT- CONFIRMED
11	Angela Sanchez	SAME TEXT- CONFIRMED
12	Airha Cueto	SAME TEXT- CONFIRMED
13	Alejandra Murrillo	SAME TEXT- CONFIRMED
14	Alexandra Williams	SAME TEXT- CONFIRMED
15	Alexis Laserna	SAME TEXT- CONFIRMED
16	Alyssa Hernandez	SAME TEXT- CONFIRMED
17	Amanda Kozak	SAME TEXT- CONFIRMED
18	Amy Buelow	SAME TEXT- CONFIRMED
19	Amy Tellez	SAME TEXT- CONFIRMED
20	Anca Barjopanu	SAME TEXT- CONFIRMED
21	Ashley Gonzalez	SAME TEXT- CONFIRMED
22	Ashley Hanna	SAME TEXT- CONFIRMED
23	Ashley Pedone	SAME TEXT- CONFIRMED
24	Ashley Tamez	SAME TEXT- CONFIRMED
25	Brandy Brown	SAME TEXT- CONFIRMED
26	Breeana Roseman	SAME TEXT- CONFIRMED
27	Brianna Deloughery	SAME TEXT- CONFIRMED

* See Appendix 4A for responses by category

Comment Number	Name (Affiliation)	Comment Response Category= Support for the AOC & Leaving Contamination
28	Brittany Dunn	SAME TEXT- CONFIRMED
29	Brittany Griner	SAME TEXT- CONFIRMED
30	Brittney Dunbar	SAME TEXT- CONFIRMED
31	Brooklyn Hall	SAME TEXT- CONFIRMED
32	Bryan Andujo	SAME TEXT- CONFIRMED
33	Caitlyn Maryon	SAME TEXT- CONFIRMED
34	Carla White	SAME TEXT- CONFIRMED
35	Carly Seefong	SAME TEXT- CONFIRMED
36	Caroline Goodfriend	SAME TEXT- CONFIRMED
37	Cayla Burkhart	SAME TEXT- CONFIRMED
38	Chelsea Halbert	SAME TEXT- CONFIRMED
39	Chelsea Thompson	SAME TEXT- CONFIRMED
40	Chelsey Visic	SAME TEXT- CONFIRMED
41	China Crocker	SAME TEXT- CONFIRMED
42	Claire Patishall	SAME TEXT- CONFIRMED
43	Corey De La Rosa	SAME TEXT- CONFIRMED
44	Daniel Templeton	SAME TEXT- CONFIRMED
45	Daniela Aguirre	SAME TEXT- CONFIRMED
46	Daniela Hurtado-Mur	SAME TEXT- CONFIRMED
47	Darrian Springsteadah	SAME TEXT- CONFIRMED
48	De'Andra Wizzart	SAME TEXT- CONFIRMED
49	Jennifer Liepman	SAME TEXT- CONFIRMED
50	Emilie Hennig	SAME TEXT- CONFIRMED
51	Emily Campos	SAME TEXT- CONFIRMED
52	Erica Muller	SAME TEXT- CONFIRMED
53	Erica Root	SAME TEXT- CONFIRMED
54	Ghida Zahr	SAME TEXT- CONFIRMED
55	Izabella Quinones	SAME TEXT- CONFIRMED
56	Jane Rudosky	SAME TEXT- CONFIRMED
57	Janesya Gonzalez	SAME TEXT- CONFIRMED
58	Jessica Dos Santos	SAME TEXT- CONFIRMED
59	Jessica Perez	SAME TEXT- CONFIRMED
60	Jessica Resciniti	SAME TEXT- CONFIRMED
61	Jo Anna Shuba	SAME TEXT- CONFIRMED
62	Jocelyn Fox	SAME TEXT- CONFIRMED
63	Kamryn McCoury	SAME TEXT- CONFIRMED
64	Karen Espinossa	SAME TEXT- CONFIRMED
65	Karlee Cross	SAME TEXT- CONFIRMED
66	Kayla Ricco	SAME TEXT- CONFIRMED
67	Khamrie Danielsen	SAME TEXT- CONFIRMED

* See Appendix 4A for responses by category

Comment Number	Name (Affiliation)	Comment Response Category= Support for the AOC & Leaving Contamination
68	Kiara Molina	SAME TEXT- CONFIRMED
69	Kimberly Huemmer	SAME TEXT- CONFIRMED
70	Kristen Merson	SAME TEXT- CONFIRMED
71	Kristina Khoury	SAME TEXT- CONFIRMED
72	Kristina Lane	SAME TEXT- CONFIRMED
73	Kylee Slavens	SAME TEXT- CONFIRMED
74	Lanna Ferreira	SAME TEXT- CONFIRMED
75	Lauren Bullington	SAME TEXT- CONFIRMED
76	Leah McGowan	SAME TEXT- CONFIRMED
77	Lindsay Yannacacos	SAME TEXT- CONFIRMED
78	Lucy Ochoa	SAME TEXT- CONFIRMED
79	Luis Ramirez	SAME TEXT- CONFIRMED
80	Lynn Reed	SAME TEXT- CONFIRMED
81	Manny Favela	SAME TEXT- CONFIRMED
82	Mariah Torres	SAME TEXT- CONFIRMED
83	Mariella Testa	SAME TEXT- CONFIRMED
84	Mary Griffin	SAME TEXT- CONFIRMED
85	Melissa Ellis	SAME TEXT- CONFIRMED
86	Michelle Clements	SAME TEXT- CONFIRMED
87	Milhem Abuali	SAME TEXT- CONFIRMED
88	Mohamed Hassanein	SAME TEXT- CONFIRMED
89	Naghma Achekzai	SAME TEXT- CONFIRMED
90	Nailah Geter	SAME TEXT- CONFIRMED
91	Natasha Eaton	SAME TEXT- CONFIRMED
92	Nicole Gilmore	SAME TEXT- CONFIRMED
93	Nicole Marohn	SAME TEXT- CONFIRMED
94	Paola Bernal	SAME TEXT- CONFIRMED
95	Raquel Loia	SAME TEXT- CONFIRMED
96	Rose Leslie	SAME TEXT- CONFIRMED
97	Salma Cervantes	SAME TEXT- CONFIRMED
98	Sam Quero	SAME TEXT- CONFIRMED
99	Samantha Dominguez	SAME TEXT- CONFIRMED
100	Sara Duque	SAME TEXT- CONFIRMED
101	Scott Perkins	SAME TEXT- CONFIRMED
102	Shelby Parks	SAME TEXT- CONFIRMED
103	Sofia Pastrana	SAME TEXT- CONFIRMED
104	Soleil Rodriguez	SAME TEXT- CONFIRMED
105	Sonia Singh	SAME TEXT- CONFIRMED
106	Stephanie Suozzo	SAME TEXT- CONFIRMED
107	Suzette McCann	SAME TEXT- CONFIRMED

* See Appendix 4A for responses by category

Comment Number	Name (Affiliation)	Comment Response Category= Support for the AOC & Leaving Contamination
108	Taylor Adams	SAME TEXT- CONFIRMED
109	Teresa Beltran	SAME TEXT- CONFIRMED
110	Teri Cresong	SAME TEXT- CONFIRMED
111	Tori Goodwin	SAME TEXT- CONFIRMED
112	Tracy Simmons	SAME TEXT- CONFIRMED
113	Trey Grandison	SAME TEXT- CONFIRMED
114	Trisha Morgan	SAME TEXT- CONFIRMED
115	Veronica Torres	SAME TEXT- CONFIRMED
116	Victoria Haff	SAME TEXT- CONFIRMED
117	Whitney McCoy	SAME TEXT- CONFIRMED
118	Xavi Sanabria	SAME TEXT- CONFIRMED
119	Yarichana Ramirez	SAME TEXT- CONFIRMED
120	Yvette Torres	SAME TEXT- CONFIRMED
121	Zyannah Cummings	SAME TEXT- CONFIRMED
122	Carolina Oliva	SAME TEXT- CONFIRMED
123	Mindy Schaurer	SAME TEXT- CONFIRMED
124	Gabriella Cristelli	SAME TEXT- CONFIRMED
125	Dr Anne Decker	SAME TEXT- CONFIRMED
126	Elizabeth Kazmierczak	SAME TEXT- CONFIRMED
127	Sara Gonzales	SAME TEXT- CONFIRMED
128	Jordan Speshock	SAME TEXT- CONFIRMED
129	Nicole Cole	SAME TEXT- CONFIRMED
130	Mikaela Burgess	SAME TEXT- CONFIRMED
131	Lynda Barrios	SAME TEXT- CONFIRMED
132	Cerys Powell	SAME TEXT- CONFIRMED
133	Carly Smith	SAME TEXT- CONFIRMED
134	Abdul Halimi	SAME TEXT- CONFIRMED
135	Jamie Dammann	SAME TEXT- CONFIRMED
136	Anna Allman	SAME TEXT- CONFIRMED
137	Kasey Johnson	SAME TEXT- CONFIRMED
138	Devon Rathbone	SAME TEXT- CONFIRMED
139	Maria Cabrera	SAME TEXT- CONFIRMED
140	Tatiana Perez	SAME TEXT- CONFIRMED
141	Courtney Hogan	SAME TEXT- CONFIRMED
142	Rachel Capper	SAME TEXT- CONFIRMED
143	Mallory Sirratt	SAME TEXT- CONFIRMED
144	Brittany Graber	SAME TEXT- CONFIRMED
145	Jennifer Munoz	SAME TEXT- CONFIRMED
146	Isabel Jensen	SAME TEXT- CONFIRMED
147	Rachael Monette	SAME TEXT- CONFIRMED

* See Appendix 4A for responses by category

Comment Number	Name (Affiliation)	Comment Response Category= Support for the AOC & Leaving Contamination
148	Kristina Haran	SAME TEXT- CONFIRMED
149	Lori Cresong	SAME TEXT- CONFIRMED
150	Keylla Boy	SAME TEXT- CONFIRMED
151	Stephanie Genera	SAME TEXT- CONFIRMED
152	Brittany Schultz	SAME TEXT- CONFIRMED
153	Michael Gilbault	SAME TEXT- CONFIRMED
154	Cindy Munoz	SAME TEXT- CONFIRMED
155	Mary Munoz	SAME TEXT- CONFIRMED
156	Brooke Brunscher	SAME TEXT- CONFIRMED
157	Ann Conway	SAME TEXT- CONFIRMED
158	Heather Gibson	SAME TEXT- CONFIRMED
159	Ellen Parker	SAME TEXT- CONFIRMED
160	Nicole Boyd	SAME TEXT- CONFIRMED
161	Jazmine Huckaby	SAME TEXT- CONFIRMED
162	Samantha Mockford	SAME TEXT- CONFIRMED
163	Kerry Wilson	SAME TEXT- CONFIRMED
164	Michael Lawler	SAME TEXT- CONFIRMED
165	Camille Davenport	SAME TEXT- CONFIRMED
166	Julie Kester	SAME TEXT- CONFIRMED
167	Athena Vlachos	SAME TEXT- CONFIRMED
168	Danelle Larsen	SAME TEXT- CONFIRMED
169	Ashley Gluhanich	SAME TEXT- CONFIRMED
170	Margery Brown	SAME TEXT- CONFIRMED
171	Heather Reddick	SAME TEXT- CONFIRMED
172	Kathryn Lockwood	SAME TEXT- CONFIRMED
173	Holloe Sanders	SAME TEXT- CONFIRMED
174	Kim Depenbrok	SAME TEXT- CONFIRMED
175	Stephanie Soto	SAME TEXT- CONFIRMED
176	Stephanie Lozano	SAME TEXT- CONFIRMED
177	Magdalena Bieszczad	SAME TEXT- CONFIRMED
178	Morgan Weiss	SAME TEXT- CONFIRMED
179	Rita Riemer	SAME TEXT- CONFIRMED
180	Michelle Peterson	SAME TEXT- CONFIRMED
181	Jolana Knupp	SAME TEXT- CONFIRMED
182	Natalie Harrison	SAME TEXT- CONFIRMED
183	Alison Kinney	SAME TEXT- CONFIRMED
184	Nayely Alonso	SAME TEXT- CONFIRMED
185	Crystal Provenzano	SAME TEXT- CONFIRMED
186	Cassandra Moreno	SAME TEXT- CONFIRMED
187	Kaelyn Nobles	SAME TEXT- CONFIRMED

* See Appendix 4A for responses by category

Comment Number	Name (Affiliation)	Comment Response Category= Support for the AOC & Leaving Contamination
188	Eva Cetta	SAME TEXT- CONFIRMED
189	Tracy O	SAME TEXT- CONFIRMED
190	Cassie Valentine	SAME TEXT- CONFIRMED
191	Deborah Brown	SAME TEXT- CONFIRMED
192	Jill Majeres	SAME TEXT- CONFIRMED
193	Lauren Corcoran	SAME TEXT- CONFIRMED
194	Andrea Marquez	SAME TEXT- CONFIRMED
195	Rachel West	SAME TEXT- CONFIRMED
196	Corrine Marconi	SAME TEXT- CONFIRMED
197	Garry Star	SAME TEXT- CONFIRMED
198	Katy Salinas	SAME TEXT- CONFIRMED
199	Linda Martinez	SAME TEXT- CONFIRMED
200	Tina Vendela	SAME TEXT- CONFIRMED
201	Holly Huntley	SAME TEXT- CONFIRMED
202	Michelle Moore	SAME TEXT- CONFIRMED
203	Tina King	SAME TEXT- CONFIRMED
204	Kimberly Lightfoot	SAME TEXT- CONFIRMED
205	Rebecca Turner	SAME TEXT- CONFIRMED
206	Rosemarie Coffey	SAME TEXT- CONFIRMED
207	Nancy Rogate	SAME TEXT- CONFIRMED
208	Trisha Matthews	SAME TEXT- CONFIRMED
209	Rick Wayman	SAME TEXT- CONFIRMED
210	Mechelle Langley	SAME TEXT- CONFIRMED
211	Cristina Boykins	SAME TEXT- CONFIRMED
212	Mike Maple	SAME TEXT- CONFIRMED
213	Jamie BERENS	SAME TEXT- CONFIRMED
214	Jane Bandler	SAME TEXT- CONFIRMED
215	Nazbeygom Adl	SAME TEXT- CONFIRMED
216	Brenda Duenas	SAME TEXT- CONFIRMED
217	Cindy Afable	SAME TEXT- CONFIRMED
218	Patty Bonomo	SAME TEXT- CONFIRMED
219	Kimberly Dudow	SAME TEXT- CONFIRMED
220	Cynthia Strout	SAME TEXT- CONFIRMED
221	Scott Furbershaw	SAME TEXT- CONFIRMED
222	Dayana Olive	SAME TEXT- CONFIRMED
223	Fernanda Monteon Ibarra	SAME TEXT- CONFIRMED
224	Neena Deibler	SAME TEXT- CONFIRMED
225	Gary Schwimmer	SAME TEXT- CONFIRMED
226	Jadine E Leecocke	SAME TEXT- CONFIRMED
227	Addie McLaurin	SAME TEXT- CONFIRMED

* See Appendix 4A for responses by category

Comment Number	Name (Affiliation)	Comment Response Category= Support for the AOC & Leaving Contamination
228	Monica Santander	SAME TEXT- CONFIRMED
229	Terrence Thompson	SAME TEXT- CONFIRMED
230	Dorina Timbol	SAME TEXT- CONFIRMED
231	Danielle Mana	SAME TEXT- CONFIRMED
232	Thea Berns	SAME TEXT- CONFIRMED
233	Michelle Rofeh	SAME TEXT- CONFIRMED
234	Rosemary Alatorre	SAME TEXT- CONFIRMED
235	Rita Skuratovsky	SAME TEXT- CONFIRMED
236	Ningyalai Amiri	SAME TEXT- CONFIRMED
237	Katie Sweeney	SAME TEXT- CONFIRMED
238	Devyn Major	SAME TEXT- CONFIRMED
239	Alison Oei	SAME TEXT- CONFIRMED
240	Alexandra Sanchez	SAME TEXT- CONFIRMED
241	Vanessa Montiel	SAME TEXT- CONFIRMED
242	Greg Beery	SAME TEXT- CONFIRMED
243	Clint Matkovich	SAME TEXT- CONFIRMED
244	Rona Frimmer	SAME TEXT- CONFIRMED
245	Sharon Ashley	SAME TEXT- CONFIRMED
246	Jessica Dubois	SAME TEXT- CONFIRMED
247	Katherine Wright	SAME TEXT- CONFIRMED
248	Kathryn Beddow	SAME TEXT- CONFIRMED
249	Diane Hakim	SAME TEXT- CONFIRMED
250	Natasha Rumney	SAME TEXT- CONFIRMED
251	Rose Abraham	SAME TEXT- CONFIRMED
252	Rachel Rabizadeh	SAME TEXT- CONFIRMED
253	Nichelle O'Brien	SAME TEXT- CONFIRMED
254	Denise Holter	SAME TEXT- CONFIRMED
255	Steve Gutierrez	SAME TEXT- CONFIRMED
256	Jamie Aboulafia	SAME TEXT- CONFIRMED
257	Wendy Maguire	SAME TEXT- CONFIRMED
258	Shelby Radfar	SAME TEXT- CONFIRMED
259	Pam Lazos	SAME TEXT- CONFIRMED
260	Abigail Thurlow	SAME TEXT- CONFIRMED
261	laura Tolmachoff	SAME TEXT- CONFIRMED
262	Ryann Moresi	SAME TEXT- CONFIRMED
263	Angela Gardner	SAME TEXT- CONFIRMED
264	Heather Lindstrom	SAME TEXT- CONFIRMED
265	Sara Burton	SAME TEXT- CONFIRMED
266	Amzie Mattson	SAME TEXT- CONFIRMED
267	Anita Yosef	SAME TEXT- CONFIRMED

* See Appendix 4A for responses by category

Comment Number	Name (Affiliation)	Comment Response Category= Support for the AOC & Leaving Contamination
268	Nahal Sadighim	SAME TEXT- CONFIRMED
269	Susie Ellis	SAME TEXT- CONFIRMED
270	Julia McLellan	SAME TEXT- CONFIRMED
271	Linda Skinner	SAME TEXT- CONFIRMED
272	Jasmin Baluran	SAME TEXT- CONFIRMED
273	Ameenah Kwara Richards	SAME TEXT- CONFIRMED
274	Renata Ilitsky	SAME TEXT- CONFIRMED
275	Leran Yosef	SAME TEXT- CONFIRMED
276	Tracey Jenkins	SAME TEXT- CONFIRMED
277	Beth Masciave	SAME TEXT- CONFIRMED
278	Lisa Mayer	SAME TEXT- CONFIRMED
279	Andria Letsos	SAME TEXT- CONFIRMED
280	Jamie Lifsey	SAME TEXT- CONFIRMED
281	Rachael Denny	SAME TEXT- CONFIRMED
282	Lisa Alexander	SAME TEXT- CONFIRMED
283	Maggie Koch	SAME TEXT- CONFIRMED
284	Katie Jenkins	SAME TEXT- CONFIRMED
285	Jeff Rios	SAME TEXT- CONFIRMED
286	Sarah Seeger	SAME TEXT- CONFIRMED
287	Kim Etter	SAME TEXT- CONFIRMED
288	Inyang Bassey	SAME TEXT- CONFIRMED
289	Rebecca Tillman	SAME TEXT- CONFIRMED
290	Vincent Czapla	SAME TEXT- CONFIRMED
291	Kristyn Wenzel	SAME TEXT- CONFIRMED
292	Stephanie Kert	SAME TEXT- CONFIRMED
293	Louis McDoniel	SAME TEXT- CONFIRMED
294	Jill Elsemore	SAME TEXT- CONFIRMED
295	Kathleen Mirabelli	SAME TEXT- CONFIRMED
296	Bridget Dougherty	SAME TEXT- CONFIRMED
297	Suzanne Hoffman	SAME TEXT- CONFIRMED
298	Lori Rangel	SAME TEXT- CONFIRMED
299	Kelsey McConville	SAME TEXT- CONFIRMED
300	Christina Kantor	SAME TEXT- CONFIRMED
301	Julian Yerena Jr	SAME TEXT- CONFIRMED
302	Scott Arend	SAME TEXT- CONFIRMED
303	Nadine Bond	SAME TEXT- CONFIRMED
304	Laurie Dell	SAME TEXT- CONFIRMED
305	Sam Bryan jr	SAME TEXT- CONFIRMED
306	Jananne Hayes	SAME TEXT- CONFIRMED
307	Acacia Saric	SAME TEXT- CONFIRMED

* See Appendix 4A for responses by category

Comment Number	Name (Affiliation)	Comment Response Category= Support for the AOC & Leaving Contamination
308	Adelheid Koepfer	SAME TEXT- CONFIRMED
309	Jaki Amos	SAME TEXT- CONFIRMED
310	Ashley Cibelli	SAME TEXT- CONFIRMED
311	Lynn Skibinski	SAME TEXT- CONFIRMED
312	Andy Rodriguez	SAME TEXT- CONFIRMED
313	selma Ademovic	SAME TEXT- CONFIRMED
314	Jennifer Martinez	SAME TEXT- CONFIRMED
315	Alison Sutton	SAME TEXT- CONFIRMED
316	Lisa Weinstock	SAME TEXT- CONFIRMED
317	Yvette Anguiano	SAME TEXT- CONFIRMED
318	Lindsey Prince	SAME TEXT- CONFIRMED
319	Donna Dyer	SAME TEXT- CONFIRMED
320	Isabella Micone	SAME TEXT- CONFIRMED
321	Kathleen Haffly	SAME TEXT- CONFIRMED
322	Rachel Johnson	SAME TEXT- CONFIRMED
323	Stephanie Zukauskas	SAME TEXT- CONFIRMED
324	Ashlie Passen	SAME TEXT- CONFIRMED
325	Diane Buxo	SAME TEXT- CONFIRMED
326	Lois Kalbfeld	SAME TEXT- CONFIRMED
327	Olivia Dirro	SAME TEXT- CONFIRMED
328	Megan Kelsey	SAME TEXT- CONFIRMED
329	Michele Dempsey	SAME TEXT- CONFIRMED
330	Amy Gibson	SAME TEXT- CONFIRMED
331	Leah Oviedo	SAME TEXT- CONFIRMED
332	Kayla Neveu	SAME TEXT- CONFIRMED
333	Michelle Bellamy	SAME TEXT- CONFIRMED
334	Amy Lopez	SAME TEXT- CONFIRMED
335	Cindy Rea	SAME TEXT- CONFIRMED
336	Michele Cole	SAME TEXT- CONFIRMED
337	Jaime Semsch	SAME TEXT- CONFIRMED
338	Natalie Cherot	SAME TEXT- CONFIRMED
339	Mario Zdybel	SAME TEXT- CONFIRMED
340	Nicole Clardy	SAME TEXT- CONFIRMED
341	Heather Davidson	SAME TEXT- CONFIRMED
342	Teri Olson	SAME TEXT- CONFIRMED
343	Allan Boggess	SAME TEXT- CONFIRMED
344	Dani Rugama	SAME TEXT- CONFIRMED
345	Janet Nunan	SAME TEXT- CONFIRMED
346	Erin Barnett	SAME TEXT- CONFIRMED
347	Diane Miller	SAME TEXT- CONFIRMED

* See Appendix 4A for responses by category

Comment Number	Name (Affiliation)	Comment Response Category= Support for the AOC & Leaving Contamination
348	Pamela Tilikete	SAME TEXT- CONFIRMED
349	Christine Kerrigan	SAME TEXT- CONFIRMED
350	Jill Bristow	SAME TEXT- CONFIRMED
351	Jay Rodriguez	SAME TEXT- CONFIRMED
352	Cindy Leeds	SAME TEXT- CONFIRMED
353	Erin Atkins	SAME TEXT- CONFIRMED
354	Cristina Ruiz	SAME TEXT- CONFIRMED
355	Brandy Horne	SAME TEXT- CONFIRMED
356	Sandra Wisler	SAME TEXT- CONFIRMED
357	Danielle Henderson	SAME TEXT- CONFIRMED
358	Elizabeth Portillo	SAME TEXT- CONFIRMED
359	Andrea Moskowitz	SAME TEXT- CONFIRMED
360	Wendy Jones	SAME TEXT- CONFIRMED
361	Ruthye Kaplan	SAME TEXT- CONFIRMED
362	Kim Avalos	SAME TEXT- CONFIRMED
363	Lynn Cralle	SAME TEXT- CONFIRMED
364	Gina Zacher	SAME TEXT- CONFIRMED
365	Brad J Abraham	SAME TEXT- CONFIRMED
366	Michael Wilson	SAME TEXT- CONFIRMED
367	DAVID BICKEL	SAME TEXT- CONFIRMED
368	Karen Beuerlein	SAME TEXT- CONFIRMED
369	Lisa Boros	SAME TEXT- CONFIRMED
370	Alexis Daniels	SAME TEXT- CONFIRMED
371	Debra Trevino	SAME TEXT- CONFIRMED
372	Elaine Benjamin	SAME TEXT- CONFIRMED
373	Pamela Ulich	SAME TEXT- CONFIRMED
374	Gail Baltaxe	SAME TEXT- CONFIRMED
375	Susan Kaplan	SAME TEXT- CONFIRMED
376	David Pietraz	SAME TEXT- CONFIRMED
377	Melanie Rosenberg	SAME TEXT- CONFIRMED
378	Michael Kincaid	SAME TEXT- CONFIRMED
379	Debbie Fogel	SAME TEXT- CONFIRMED
380	Christina Kirkpatrick	SAME TEXT- CONFIRMED
381	Shelley Boros	SAME TEXT- CONFIRMED
382	Thinisha Armstead	SAME TEXT- CONFIRMED
383	Celina Goodman	SAME TEXT- CONFIRMED
384	Christina Mesropyan	SAME TEXT- CONFIRMED
385	Colette Thiel	SAME TEXT- CONFIRMED
386	Agnes Pollay	SAME TEXT- CONFIRMED
387	Kristine Kasumyan	SAME TEXT- CONFIRMED

* See Appendix 4A for responses by category

Comment Number	Name (Affiliation)	Comment Response Category= Support for the AOC & Leaving Contamination
388	Chantal Palmer	SAME TEXT- CONFIRMED
389	April Mcguire	SAME TEXT- CONFIRMED
390	Amber Saniatan	SAME TEXT- CONFIRMED
391	Sheryl Duke	SAME TEXT- CONFIRMED
392	Caro Garcia	SAME TEXT- CONFIRMED
393	Tracy Raitt	SAME TEXT- CONFIRMED
394	Rena Rubio	SAME TEXT- CONFIRMED
395	Joy Krone	SAME TEXT- CONFIRMED
396	Helene Burns	SAME TEXT- CONFIRMED
397	Julia Bradley	SAME TEXT- CONFIRMED
398	Cathryn Polimeni	SAME TEXT- CONFIRMED
399	Andrea Massi	SAME TEXT- CONFIRMED
400	Nicole Gates	SAME TEXT- CONFIRMED
401	Donna Cabrera	SAME TEXT- CONFIRMED
402	Karla Gallegos-Ross	SAME TEXT- CONFIRMED
403	Frank Salinas	SAME TEXT- CONFIRMED
404	Jasen Frisby	SAME TEXT- CONFIRMED
405	Jennifer Malman	SAME TEXT- CONFIRMED
406	Salvador Tamayo	SAME TEXT- CONFIRMED
407	Samantha Christmas	SAME TEXT- CONFIRMED
408	Daniel Alvarado	SAME TEXT- CONFIRMED
409	Carrie Scott	SAME TEXT- CONFIRMED
410	Noor Heintzelman	SAME TEXT- CONFIRMED
411	Alexis Taylor	SAME TEXT- CONFIRMED
412	Linda Marchman	SAME TEXT- CONFIRMED
413	Annika Squires	SAME TEXT- CONFIRMED
414	Ashley Marsh	SAME TEXT- CONFIRMED
415	Debra Block	SAME TEXT- CONFIRMED
416	susan oneil	SAME TEXT- CONFIRMED
417	Jasmine Wiese	SAME TEXT- CONFIRMED
418	alyssa dierkes	SAME TEXT- CONFIRMED
419	Alexis Deavenport-Saman	SAME TEXT- CONFIRMED
420	Wendy Hellmann	SAME TEXT- CONFIRMED
421	Rhona Maple	SAME TEXT- CONFIRMED
422	Melissa Knowles	SAME TEXT- CONFIRMED
423	Candace Barbiera	SAME TEXT- CONFIRMED
424	Sarah Her	SAME TEXT- CONFIRMED
425	Christine Johnston	SAME TEXT- CONFIRMED
426	Dollene Spencer	SAME TEXT- CONFIRMED
427	Keith Rhinehart	SAME TEXT- CONFIRMED

* See Appendix 4A for responses by category

Comment Number	Name (Affiliation)	Comment Response Category= Support for the AOC & Leaving Contamination
428	Betty Azarkman	SAME TEXT- CONFIRMED
429	Sherin Sonny	SAME TEXT- CONFIRMED
430	Lindsay Samaniego	SAME TEXT- CONFIRMED
431	heather lee	SAME TEXT- CONFIRMED
432	Lanan Kendall	SAME TEXT- CONFIRMED
433	Shayla Harper	SAME TEXT- CONFIRMED
434	Susan Vitale	SAME TEXT- CONFIRMED
435	Kelly Kerr	SAME TEXT- CONFIRMED
436	Samantha Bail	SAME TEXT- CONFIRMED
437	Franki Mignosi	SAME TEXT- CONFIRMED
438	Christina Ornelas	SAME TEXT- CONFIRMED
439	Anton Borisov	SAME TEXT- CONFIRMED
440	David Marote	SAME TEXT- CONFIRMED
441	Pamela Kelly	SAME TEXT- CONFIRMED
442	Samantha Calderon	SAME TEXT- CONFIRMED
443	Mary Rogan	SAME TEXT- CONFIRMED
444	Alexis Schlosser	SAME TEXT- CONFIRMED
445	Jason Barenblatt	SAME TEXT- CONFIRMED
446	Stephanie McPherson	SAME TEXT- CONFIRMED
447	Lindsey Dalton	SAME TEXT- CONFIRMED
448	Kama Craig	SAME TEXT- CONFIRMED
449	Melissa Hinds	SAME TEXT- CONFIRMED
450	Robert Barenblatt	SAME TEXT- CONFIRMED
451	Shelley Wiseman	SAME TEXT- CONFIRMED
452	Charmaine Gobo	SAME TEXT- CONFIRMED
453	Jody Anderson	SAME TEXT- CONFIRMED
454	Janelle Sawelenko	SAME TEXT- CONFIRMED
455	Danielle St Germain	SAME TEXT- CONFIRMED
456	Cara Shapiro	SAME TEXT- CONFIRMED
457	Nick Diener	SAME TEXT- CONFIRMED
458	Lisa Geer	SAME TEXT- CONFIRMED
459	Lihini Lamalie	SAME TEXT- CONFIRMED
460	Susie Mahler	SAME TEXT- CONFIRMED
461	Chris Ramirez	SAME TEXT- CONFIRMED
462	Annell Schmutzler	SAME TEXT- CONFIRMED
463	Andrew Silver	SAME TEXT- CONFIRMED
464	Dawneeta Schmautz	SAME TEXT- CONFIRMED
465	emily boyd	SAME TEXT- CONFIRMED
466	Sandra Andrade	SAME TEXT- CONFIRMED
467	Michelle Schaubert	SAME TEXT- CONFIRMED

* See Appendix 4A for responses by category

Comment Number	Name (Affiliation)	Comment Response Category= Support for the AOC & Leaving Contamination
468	Gena Rios	SAME TEXT- CONFIRMED
469	Mycole Carbone	SAME TEXT- CONFIRMED
470	Rosa Oreilly	SAME TEXT- CONFIRMED
471	Sara MacFarlane	SAME TEXT- CONFIRMED
472	Mercedes Schlegel	SAME TEXT- CONFIRMED
473	Sharon Siman-tov	SAME TEXT- CONFIRMED
474	Santiago Sanchez	SAME TEXT- CONFIRMED
475	Deborah Goldsby	SAME TEXT- CONFIRMED
476	Crystal Shaw	SAME TEXT- CONFIRMED
477	Tammy Rach	SAME TEXT- CONFIRMED
478	Donald Emery	SAME TEXT- CONFIRMED
479	Patricia Becerra	SAME TEXT- CONFIRMED
480	Vanessa Dellamalva	SAME TEXT- CONFIRMED
481	Nichole Barlow	SAME TEXT- CONFIRMED
482	Emma Lynch	SAME TEXT- CONFIRMED
483	Yazmin Pace	SAME TEXT- CONFIRMED
484	Linda Hawkins	SAME TEXT- CONFIRMED
485	Nicole Gonzalez	SAME TEXT- CONFIRMED
486	Jessica Fisher	SAME TEXT- CONFIRMED
487	Sian Jones	SAME TEXT- CONFIRMED
488	Corinne Torres	SAME TEXT- CONFIRMED
489	Krysti Houle	SAME TEXT- CONFIRMED
490	Kristin Danan	SAME TEXT- CONFIRMED
491	Yuna Megre	SAME TEXT- CONFIRMED
492	Emilia Madalina Calma	SAME TEXT- CONFIRMED
493	Sara Woolf	SAME TEXT- CONFIRMED
494	Lori Harvey	SAME TEXT- CONFIRMED
495	Sheryl Chow	SAME TEXT- CONFIRMED
496	Hanriette Resnik	SAME TEXT- CONFIRMED
497	Leslie Del Rio	SAME TEXT- CONFIRMED
498	Amy Colli	SAME TEXT- CONFIRMED
499	Julie Himelstein	SAME TEXT- CONFIRMED
500	Pat Andrade	SAME TEXT- CONFIRMED
501	April Dalton	SAME TEXT- CONFIRMED
502	Pat Rosati	SAME TEXT- CONFIRMED
503	Cynthia Gardner	SAME TEXT- CONFIRMED
504	Abbie Roberts	SAME TEXT- CONFIRMED
505	Kristine Cooper	SAME TEXT- CONFIRMED
506	Suzu Ciccolini	SAME TEXT- CONFIRMED
507	Katie Nicholson	SAME TEXT- CONFIRMED

* See Appendix 4A for responses by category

Comment Number	Name (Affiliation)	Comment Response Category= Support for the AOC & Leaving Contamination
508	Colleen Conklin	SAME TEXT- CONFIRMED
509	Angela Aston	SAME TEXT- CONFIRMED
510	Joy Godfrey	SAME TEXT- CONFIRMED
511	Alisha Adams	SAME TEXT- CONFIRMED
512	Elizabeth Holman	SAME TEXT- CONFIRMED
513	Allegra Siman-Tov	SAME TEXT- CONFIRMED
514	Adrienne Murillo	SAME TEXT- CONFIRMED
515	Ashwin Trivedi	SAME TEXT- CONFIRMED
516	Kimberly Dealba	SAME TEXT- CONFIRMED
517	Sierra Nething	SAME TEXT- CONFIRMED
518	Joanna Hammond	SAME TEXT- CONFIRMED
519	Tina Hendizadeh	SAME TEXT- CONFIRMED
520	Teri Stephenson	SAME TEXT- CONFIRMED
521	Sophia Santitoro	SAME TEXT- CONFIRMED
522	Sarah Robison	SAME TEXT- CONFIRMED
523	Maricela Chamagua	SAME TEXT- CONFIRMED
524	Olivia Bird	SAME TEXT- CONFIRMED
525	Barvie Koplow	SAME TEXT- CONFIRMED
526	Samantha Holman	SAME TEXT- CONFIRMED
527	Yoriawnna Fluhrer	SAME TEXT- CONFIRMED
528	Bill Essling	SAME TEXT- CONFIRMED
529	Brian Reed	SAME TEXT- CONFIRMED
530	Ben White	SAME TEXT- CONFIRMED
531	joanne katzen	SAME TEXT- CONFIRMED
532	Carey Templeton	SAME TEXT- CONFIRMED
533	Meg Mattes	SAME TEXT- CONFIRMED
534	Stephanie Vincent	SAME TEXT- CONFIRMED
535	Marie Garside	SAME TEXT- CONFIRMED
536	Brooke Lough	SAME TEXT- CONFIRMED
537	Kelly Adelman	SAME TEXT- CONFIRMED
538	Brittney Reeves	SAME TEXT- CONFIRMED
539	Susana Rider	SAME TEXT- CONFIRMED
540	Joanne Doherty	SAME TEXT- CONFIRMED
541	Katherine LoGiudice	SAME TEXT- CONFIRMED
542	Bret Temple	SAME TEXT- CONFIRMED
543	Loren Mikael	SAME TEXT- CONFIRMED
544	Inna Finkelshteyn	SAME TEXT- CONFIRMED
545	Michelle Maghalyan	SAME TEXT- CONFIRMED
546	Nathan Andresen	SAME TEXT- CONFIRMED
547	Cynthia Gargiulo	SAME TEXT- CONFIRMED

* See Appendix 4A for responses by category

Comment Number	Name (Affiliation)	Comment Response Category= Support for the AOC & Leaving Contamination
548	Sonia Gilliam	SAME TEXT- CONFIRMED
549	Virginia Dooley	SAME TEXT- CONFIRMED
550	N Chiarolla	SAME TEXT- CONFIRMED
551	Kelly Faulkner	SAME TEXT- CONFIRMED
552	Jessalyn Pina	SAME TEXT- CONFIRMED
553	Tonya Mulligan	SAME TEXT- CONFIRMED
554	Vanesa Lopez	SAME TEXT- CONFIRMED
555	Debbie Fagan	SAME TEXT- CONFIRMED
556	Megan Fletcher	SAME TEXT- CONFIRMED
557	Cindy Troutwine	SAME TEXT- CONFIRMED
558	Jean Dannelly	SAME TEXT- CONFIRMED
559	Nicole Cottrell	SAME TEXT- CONFIRMED
560	Jaime Siraton	SAME TEXT- CONFIRMED
561	Sarah Santitoro	SAME TEXT- CONFIRMED
562	Candace Jones	SAME TEXT- CONFIRMED
563	Lauren Spykerman	SAME TEXT- CONFIRMED
564	Kathie Fierro	SAME TEXT- CONFIRMED
565	Dori Mittner	SAME TEXT- CONFIRMED
566	Colette Erke	SAME TEXT- CONFIRMED
567	Deborah Stouffer	SAME TEXT- CONFIRMED
568	Anna Engelhardt	SAME TEXT- CONFIRMED
569	Jennifer Wallace	SAME TEXT- CONFIRMED
570	Ellie Winnerkrans	SAME TEXT- CONFIRMED
571	montana robar	SAME TEXT- CONFIRMED
572	Jennifer Lindsey	SAME TEXT- CONFIRMED
573	Kim Charnofsky	SAME TEXT- CONFIRMED
574	Melissa Effler	SAME TEXT- CONFIRMED
575	Tiffany Easton	SAME TEXT- CONFIRMED
576	Grace Shanahan	SAME TEXT- CONFIRMED
577	Tessa Boury	SAME TEXT- CONFIRMED
578	Christina Perdigao	SAME TEXT- CONFIRMED
579	Cynthia Reinecker	SAME TEXT- CONFIRMED
580	Kelly Meza	SAME TEXT- CONFIRMED
581	DeLynn Morgan	SAME TEXT- CONFIRMED
582	Nyah Nelms	SAME TEXT- CONFIRMED
583	Lisa Kienholz	SAME TEXT- CONFIRMED
584	Melanie Kitlinger	SAME TEXT- CONFIRMED
585	Linda Fletcher	SAME TEXT- CONFIRMED
586	Susan Gustafson	SAME TEXT- CONFIRMED
587	Joseph Capolupo	SAME TEXT- CONFIRMED

* See Appendix 4A for responses by category

Comment Number	Name (Affiliation)	Comment Response Category= Support for the AOC & Leaving Contamination
588	Camille Reinecker	SAME TEXT- CONFIRMED
589	Deirdre Bolona	SAME TEXT- CONFIRMED
590	Deirdre Shoemaker	SAME TEXT- CONFIRMED
591	Kellie Kropfl	SAME TEXT- CONFIRMED
592	Jessica Seifert	SAME TEXT- CONFIRMED
593	Lauren Pedroli	SAME TEXT- CONFIRMED
594	Sarah Moore	SAME TEXT- CONFIRMED
595	Lauren Wicks	SAME TEXT- CONFIRMED
596	Ashley Prater	SAME TEXT- CONFIRMED
597	Bridget Crocker	SAME TEXT- CONFIRMED
598	Ian Minns	SAME TEXT- CONFIRMED
599	Amanda Andre	SAME TEXT- CONFIRMED
600	Alixandre Wilkins	SAME TEXT- CONFIRMED
601	Rose Delfino	SAME TEXT- CONFIRMED
602	Brenda Scott	SAME TEXT- CONFIRMED
603	Janay Hodges	SAME TEXT- CONFIRMED
604	Amelia Graham	SAME TEXT- CONFIRMED
605	Ryan Lee	SAME TEXT- CONFIRMED
606	Jane MIller	SAME TEXT- CONFIRMED
607	Maria Abanilla	SAME TEXT- CONFIRMED
608	Jennifer Vazquez	SAME TEXT- CONFIRMED
609	Rebecca Hopkins	SAME TEXT- CONFIRMED
610	Angela DAurizio	SAME TEXT- CONFIRMED
611	Paul Leibowitz	SAME TEXT- CONFIRMED
612	Tamar Lion	SAME TEXT- CONFIRMED
613	Janet Swingle	SAME TEXT- CONFIRMED
614	Kirsten Douglass	SAME TEXT- CONFIRMED
615	Karin Grennan	SAME TEXT- CONFIRMED
616	Amelia Mars	SAME TEXT- CONFIRMED
617	Josie Kinnear	SAME TEXT- CONFIRMED
618	joeie wolkensdorfer	SAME TEXT- CONFIRMED
619	Jo Ann Pierce	SAME TEXT- CONFIRMED
620	Jake Orlan	SAME TEXT- CONFIRMED
621	Sarah Johnson	SAME TEXT- CONFIRMED
622	Juliana Braga	SAME TEXT- CONFIRMED
623	Alexis Jones	SAME TEXT- CONFIRMED
624	Ashley Julian	SAME TEXT- CONFIRMED
625	Stephanie Dupont	SAME TEXT- CONFIRMED
626	Olivia Pentelow	SAME TEXT- CONFIRMED
627	Coco Salazar	SAME TEXT- CONFIRMED

* See Appendix 4A for responses by category

Comment Number	Name (Affiliation)	Comment Response Category= Support for the AOC & Leaving Contamination
628	Jesicah Grossman	SAME TEXT- CONFIRMED
629	Karen Voohries	SAME TEXT- CONFIRMED
630	Pamela Holley-Wilcox	SAME TEXT- CONFIRMED
631	Jake Hull	SAME TEXT- CONFIRMED
632	Marcie Seens	SAME TEXT- CONFIRMED
633	Brian Jolly	SAME TEXT- CONFIRMED
634	Georgia Forgo	SAME TEXT- CONFIRMED
635	Annelies Heylen	SAME TEXT- CONFIRMED
636	Gail Caswell	SAME TEXT- CONFIRMED
637	Stefanie Ceo	SAME TEXT- CONFIRMED
638	Cherie Fernandez	SAME TEXT- CONFIRMED
639	Martha Lockie	SAME TEXT- CONFIRMED
640	Todd Milazzo	SAME TEXT- CONFIRMED
641	Sophie Van der heiden	SAME TEXT- CONFIRMED
642	Yvette Lara	SAME TEXT- CONFIRMED
643	Tiffany Hansen	SAME TEXT- CONFIRMED
644	Valantis Matsakas	SAME TEXT- CONFIRMED
645	Kelsey Ciarlillo	SAME TEXT- CONFIRMED
646	Linda Kolin	SAME TEXT- CONFIRMED
647	Paul Keffaber	SAME TEXT- CONFIRMED
648	Rob Hundscheidt	SAME TEXT- CONFIRMED
649	James Provenzano	SAME TEXT- CONFIRMED
650	K R	SAME TEXT- CONFIRMED
651	Patricia Lauer	SAME TEXT- CONFIRMED
652	David Katz	SAME TEXT- CONFIRMED
653	Jim Loveland	SAME TEXT- CONFIRMED
654	Kristofer Young	SAME TEXT- CONFIRMED
655	Dr, Mha Atma S Khalsa	SAME TEXT- CONFIRMED
656	Kelly Mills	SAME TEXT- CONFIRMED
657	Richard Davis	SAME TEXT- CONFIRMED
658	Diane Smith	SAME TEXT- CONFIRMED
659	chris jacobson	SAME TEXT- CONFIRMED
660	Charles Flynn	SAME TEXT- CONFIRMED
661	Victor Lobl	SAME TEXT- CONFIRMED
662	Marie Mason	SAME TEXT- CONFIRMED
663	Hannah Cockerton	SAME TEXT- CONFIRMED
664	Amber Lopez	SAME TEXT- CONFIRMED
665	Nicole Morgan	SAME TEXT- CONFIRMED
666	Sandra Kaye	SAME TEXT- CONFIRMED
667	BRENNA GUTELL	SAME TEXT- CONFIRMED

* See Appendix 4A for responses by category

Comment Number	Name (Affiliation)	Comment Response Category= Support for the AOC & Leaving Contamination
668	deborah dugger	SAME TEXT- CONFIRMED
669	Lori Hawkins	SAME TEXT- CONFIRMED
670	Kelly Murth	SAME TEXT- CONFIRMED
671	Cheri Anderson	SAME TEXT- CONFIRMED
672	Karen Ramirez	SAME TEXT- CONFIRMED
673	Jessica Ciulla	SAME TEXT- CONFIRMED
674	Amanda Vicker	SAME TEXT- CONFIRMED
675	Rachel Woeller	SAME TEXT- CONFIRMED
676	Peggy Paola	SAME TEXT- CONFIRMED
677	Anne Call	SAME TEXT- CONFIRMED
678	Rebecca Tillman	SAME TEXT- CONFIRMED
679	Jean Morawski	SAME TEXT- CONFIRMED
680	Candice Garnand	SAME TEXT- CONFIRMED
681	Tracey Hoffman	SAME TEXT- CONFIRMED
682	Sandra Harber	SAME TEXT- CONFIRMED
683	Mark Reback	SAME TEXT- CONFIRMED
684	Michael Adler	SAME TEXT- CONFIRMED
685	Tony Whiting	SAME TEXT- CONFIRMED
686	Jamie Solow, PhD	SAME TEXT- CONFIRMED
687	Jay Kapitz	SAME TEXT- CONFIRMED
688	John Burke	SAME TEXT- CONFIRMED
689	Lori Hodges	SAME TEXT- CONFIRMED
690	Dr. Farideh Kioumehr	SAME TEXT- CONFIRMED
691	Rohan Sabnis	SAME TEXT- CONFIRMED
692	Colin Swanson	SAME TEXT- CONFIRMED
693	Leslie Foumberg	SAME TEXT- CONFIRMED
694	Tim Nelson	SAME TEXT- CONFIRMED
695	Sylvia Tillman	SAME TEXT- CONFIRMED
696	Judith Gambino	SAME TEXT- CONFIRMED
697	Teresa McGilvray	SAME TEXT- CONFIRMED
698	Joe Ayala	SAME TEXT- CONFIRMED
699	Mary Ann Seltzer	SAME TEXT- CONFIRMED
700	Sabrina Jensen	SAME TEXT- CONFIRMED
701	Sandra Joos	SAME TEXT- CONFIRMED
702	Sherry Morez	SAME TEXT- CONFIRMED
703	Richard Davis	SAME TEXT- CONFIRMED
704	John Cybulski	SAME TEXT- CONFIRMED
705	David Ferguson	SAME TEXT- CONFIRMED
706	Barbara Mueller	SAME TEXT- CONFIRMED
707	Dee Del Nero	SAME TEXT- CONFIRMED

* See Appendix 4A for responses by category

Comment Number	Name (Affiliation)	Comment Response Category= Support for the AOC & Leaving Contamination
708	David Levy	SAME TEXT- CONFIRMED
709	Rick Shaw	SAME TEXT- CONFIRMED
710	Deborah Fischer	SAME TEXT- CONFIRMED
711	John Kovak	SAME TEXT- CONFIRMED
712	Sheri Montrose	SAME TEXT- CONFIRMED
713	Vivien Dowlatshahi	SAME TEXT- CONFIRMED
714	Mike Murth	SAME TEXT- CONFIRMED
715	Stephanie Erb	SAME TEXT- CONFIRMED
716	De Anna Goldberg	SAME TEXT- CONFIRMED
717	David Dassey MD MPH	SAME TEXT- CONFIRMED
718	David Drum	SAME TEXT- CONFIRMED
719	Tracy O	SAME TEXT- CONFIRMED
720	Stephanie Beaver	SAME TEXT- CONFIRMED
721	Bonnie Ramey	SAME TEXT- CONFIRMED
722	Erika Bratschie	SAME TEXT- CONFIRMED
723	Tami Onori	SAME TEXT- CONFIRMED
724	Tom McLain	SAME TEXT- CONFIRMED
725	Jane Elller	SAME TEXT- CONFIRMED
726	Junichiro Endo	SAME TEXT- CONFIRMED
727	K R	SAME TEXT- CONFIRMED
728	phyllis babila	SAME TEXT- CONFIRMED
729	David Katz	SAME TEXT- CONFIRMED
730	William Preston Bowling	SAME TEXT- CONFIRMED
731	Nadia Ellison	SAME TEXT- CONFIRMED
732	Cecilia Ball	SAME TEXT- CONFIRMED
733	Tammy Ashmore	SAME TEXT- CONFIRMED
734	leo baldino	SAME TEXT- CONFIRMED
735	Kathy Tessalone	SAME TEXT- CONFIRMED
736	Nannette Perez	SAME TEXT- CONFIRMED
737	Melinda Kubiak	SAME TEXT- CONFIRMED
738	David Lutness	SAME TEXT- CONFIRMED
739	Makela Stankey	SAME TEXT- CONFIRMED
740	Martha Waite	SAME TEXT- CONFIRMED
741	Rosa Chamberlain	SAME TEXT- CONFIRMED
742	Barbara Leighton	SAME TEXT- CONFIRMED
743	Lauri Moore	SAME TEXT- CONFIRMED
744	Danielle Jacobs	SAME TEXT- CONFIRMED
745	Sherri Keeler	SAME TEXT- CONFIRMED
746	Michelle Schaubert	SAME TEXT- CONFIRMED
747	dawn rosenquist	SAME TEXT- CONFIRMED

* See Appendix 4A for responses by category

Comment Number	Name (Affiliation)	Comment Response Category= Support for the AOC & Leaving Contamination
748	Jane Wallace	SAME TEXT- CONFIRMED
749	Carol Esqueda	SAME TEXT- CONFIRMED
750	Lyanne Wong	SAME TEXT- CONFIRMED
751	donald dickerson	SAME TEXT- CONFIRMED
752	Kathleen Norton	SAME TEXT- CONFIRMED
753	Tom Mueller	SAME TEXT- CONFIRMED
754	Patricia Lauer	SAME TEXT- CONFIRMED
755	Melissa Oestman	SAME TEXT- CONFIRMED
756	Windy Wagner	SAME TEXT- CONFIRMED
757	Kathy St. Germain	SAME TEXT- CONFIRMED
758	LEAH HERZBERG	SAME TEXT- CONFIRMED
759	Harriette Jensen	SAME TEXT- CONFIRMED
760	Paul Waller	SAME TEXT- CONFIRMED
761	Kim Depenbrok	SAME TEXT- CONFIRMED
762	Jim Loveland	SAME TEXT- CONFIRMED
763	Heather Gibson	SAME TEXT- CONFIRMED
764	Sharon Torrisi	SAME TEXT- CONFIRMED
765	Paula And Charles Goldsmid	SAME TEXT- CONFIRMED
766	Wendy Say	SAME TEXT- CONFIRMED
767	STEVE HAUSMAN	SAME TEXT- CONFIRMED
768	Tasha Moon	SAME TEXT- CONFIRMED
769	Janice Nardella	SAME TEXT- CONFIRMED
770	Martha Martinez	SAME TEXT- CONFIRMED
771	Rachael Holmes	SAME TEXT- CONFIRMED
772	Paul Aagaard	SAME TEXT- CONFIRMED
773	Tiffany Townsend	SAME TEXT- CONFIRMED
774	Brian Seligman	SAME TEXT- CONFIRMED
775	Andrea Moeller	SAME TEXT- CONFIRMED
776	Robert Lujan	SAME TEXT- CONFIRMED
777	Laura Gideon	SAME TEXT- CONFIRMED
778	Maraleen Gradle	SAME TEXT- CONFIRMED
779	Cyndi Colonna	SAME TEXT- CONFIRMED
780	Vicky Todd	SAME TEXT- CONFIRMED
781	Vikki Salmela	SAME TEXT- CONFIRMED
782	Hilary Milner	SAME TEXT- CONFIRMED
783	DeAdriane Johnson	SAME TEXT- CONFIRMED
784	Andy Adle	SAME TEXT- CONFIRMED
785	Sylvia Wilkerson	SAME TEXT- CONFIRMED
786	Barbra Davalos	SAME TEXT- CONFIRMED
787	Leah Alicata	SAME TEXT- CONFIRMED

* See Appendix 4A for responses by category

Comment Number	Name (Affiliation)	Comment Response Category= Support for the AOC & Leaving Contamination
788	Anna Marie Russo	SAME TEXT- CONFIRMED
789	Susan Burden	SAME TEXT- CONFIRMED
790	Jessie Clark-Schermer	SAME TEXT- CONFIRMED
791	Ondrea Faillace	SAME TEXT- CONFIRMED
792	Terrill Kelly'Barrows	SAME TEXT- CONFIRMED
793	Valerie Allen	SAME TEXT- CONFIRMED
794	Angela Pina	SAME TEXT- CONFIRMED
795	Ruth Luevanos	SAME TEXT- CONFIRMED
796	Donna Shaw	SAME TEXT- CONFIRMED
797	Danna Zubia	SAME TEXT- CONFIRMED
798	John McMillan	SAME TEXT- CONFIRMED
799	Chris Cano	SAME TEXT- CONFIRMED
800	Barbara Bau	SAME TEXT- CONFIRMED
801	Courtney James Berina	SAME TEXT- CONFIRMED
802	Y	SAME TEXT- CONFIRMED
803	Meyer Ben David	SAME TEXT- CONFIRMED
804	David Claper	SAME TEXT- CONFIRMED
805	Grace Amato	SAME TEXT- CONFIRMED
806	Gina Lyons	SAME TEXT- CONFIRMED
807	Marcy Rothenberg	SAME TEXT- CONFIRMED
808	Peter Rothenberg	SAME TEXT- CONFIRMED
809	Ray Bishop	SAME TEXT- CONFIRMED
810	William Coonfield	SAME TEXT- CONFIRMED
811	M.S. Coonfield	SAME TEXT- CONFIRMED
812	Leslie Arsenman	SAME TEXT- CONFIRMED
813	Kim Scott	SAME TEXT- CONFIRMED
814	Ray Svedin	SAME TEXT- CONFIRMED
815	Lynne Svedin	SAME TEXT- CONFIRMED
816	Richard Mayhew (North Valley Democratic Club)	SAME TEXT- CONFIRMED
817	David Fiskers (SCOPE)	SAME TEXT- CONFIRMED
818	Doris Dent	SAME TEXT- CONFIRMED
819	Stella Rothschild	SAME TEXT- CONFIRMED
820	Lennie Pinsky	SAME TEXT- CONFIRMED
821	Jeanne Londe	SAME TEXT- CONFIRMED
822	Jeanne Londe	SAME TEXT- CONFIRMED
823	Julie Korenstein	SAME TEXT- CONFIRMED
824	Edward R	SAME TEXT- CONFIRMED
825	Ben Raskin	SAME TEXT- CONFIRMED
826	Beatrice Raskin	SAME TEXT- CONFIRMED
827	Illegible 1	SAME TEXT- CONFIRMED

* See Appendix 4A for responses by category

Comment Number	Name (Affiliation)	Comment Response Category= Support for the AOC & Leaving Contamination
828	Illegible 2	SAME TEXT- CONFIRMED
829	David Raskin	SAME TEXT- CONFIRMED
830	Eleanor R	SAME TEXT- CONFIRMED
831	Illegible 3	SAME TEXT- CONFIRMED
832	Illegible 4	SAME TEXT- CONFIRMED
833	Illegible 5	SAME TEXT- CONFIRMED
834	Robert W M	SAME TEXT- CONFIRMED
835	Illegible 6	SAME TEXT- CONFIRMED
836	Illegible 7	SAME TEXT- CONFIRMED
837	Illegible 8	SAME TEXT- CONFIRMED
838	Illegible 9	SAME TEXT- CONFIRMED
839	Lloyd Dent	SAME TEXT- CONFIRMED
840	Susan Janovic	SAME TEXT- CONFIRMED
841	Carole Lutness	SAME TEXT- CONFIRMED
842	Jeff Doar	SAME TEXT- CONFIRMED
843	Illegible 10	SAME TEXT- CONFIRMED
844	Illegible 11	SAME TEXT- CONFIRMED
845	Illegible 12	SAME TEXT- CONFIRMED
846	Nicole Mohr	SAME TEXT- CONFIRMED
847	Illegible 13	SAME TEXT- CONFIRMED
848	Pauline Posner	SAME TEXT- CONFIRMED
849	Barbara Miyamoto	SAME TEXT- CONFIRMED
850	Teresa Priem	SAME TEXT- CONFIRMED
851	Illegible 14	SAME TEXT- CONFIRMED
852	Illegible 15	SAME TEXT- CONFIRMED
853	Illegible 16	SAME TEXT- CONFIRMED
854	Illegible 17	SAME TEXT- CONFIRMED
855	Illegible 18	SAME TEXT- CONFIRMED
856	Illegible 19	SAME TEXT- CONFIRMED
857	Illegible 20	SAME TEXT- CONFIRMED
858	Illegible 21	SAME TEXT- CONFIRMED
859	Illegible 22	SAME TEXT- CONFIRMED
860	Illegible 23	SAME TEXT- CONFIRMED
861	Illegible 24	SAME TEXT- CONFIRMED
862	Jonathan Zhao	SAME TEXT- CONFIRMED
863	Iris Edinger	SAME TEXT- CONFIRMED

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