Meyer & Glitzenstein
1601 Connecticut Avenue, N.W.
Suite 700
Washington, D.C. 20009-1056

Katherine A. Meyer
Eric R. Glitzenstein
Howard M. Crystal
Jonathan R. Lovvorn
Kimberly D. Ockene
Tanya M. Sanerib

Telephone (202) 588-5206
Fax (202) 588-5049
meyerglitz@meyerglitz.com

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VIA HAND DELIVERY
Secretary Spencer Abraham
Department of Energy
1000 Independence Ave., S.W.
Washington, D.C. 20585

Re: Clean-up of the Santa Susana Field Laboratory in Simi Valley, California

Dear Secretary Abraham:

We are writing on behalf of the Natural Resources Defense Council (NRDC) and Committee to Bridge the Gap (CBG), concerning the Department of Energy's (DOE) clean-up plans for a portion of the Santa Susana Field Laboratory (SSFL) – the Energy Technology Engineering Center [ETEC] – in Simi Valley, California. As explained in more detail below, in order to comply with the National Environmental Policy Act (NEPA), 42 U.S.C. § 4321, et seq., DOE must withdraw the Finding of No Significant Impact (FONSI) it issued for the clean-up, and prepare an EIS. In short, given that one of the only reactor meltdowns in the world – as well as several other serious nuclear accidents – occurred at this site; that the site has extensive radioactive and chemical contamination; and that the cleanup of the radioactive contamination at ETEC alone is budgeted at approximately a quarter of a billion dollars, it is apparent that this clean-up is a "major federal action[ ] significantly affecting the quality of the human environment," id. § 4332(C), thereby requiring an EIS.

Moreover, on December 5, 2003, the Environmental Protection Agency (EPA) provided comments on DOE's Final Environmental Assessment (Final EA) on the planned clean-up, stating, among other concerns, that "EPA does not currently believe that the clean-up at ETEC will satisfy standards for unrestricted land use," as DOE intends, but rather would be suitable only for dayhikes, with limits even on picnicking in the area. See EPA Letter of Dec. 5, 2003 (Attachment (Att.) 1). In light of these comments, as well as more recent information concerning several critical issues – including high levels of tritium contamination in groundwater at ETEC, and perchlorate contamination migrating off the property – DOE at the very least must set aside its FONSI and supplement the analysis conducted in its Final EA, as required by the binding Council on Environmental Quality (CEQ) regulations implementing NEPA. 40 C.F.R. § 1502.9(c).

In addition, it is also apparent that in undertaking this clean-up DOE is violating the procedural and substantive obligations of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9601, et seq., and the 1995 DOE-EPA Joint Policy on Decommissioning of [DOE] Facilities under CERCLA (1995 Joint Policy), in which DOE committed to undertaking these clean-ups pursuant to CERCLA. Thus, pursuant to 42 U.S.C. § 9659(d), this letter shall serve as notice of DOE's violations of CERCLA at the SSFL.

Finally, because there are several listed species – including the endangered Braunton's milkvetch – located in the area where this clean-up is taking place, DOE must comply with Section 7(a)(2) of the Endangered Species Act (ESA), 16 U.S.C. § 1536(a)(2), by consulting with the Fish and Wildlife Service (FWS) to evaluate the impacts of the clean-up on protected species, and insuring that these activities are not likely to jeopardize the continued existence of any of these species. Accordingly, as required by 16 U.S.C. § 1540(g), this letter shall also serve as written notice that, by proceeding with this clean-up, DOE is violating the ESA.

Unless DOE brings itself into compliance with these federal laws on an expeditious timetable, our clients are prepared to pursue legal action to bring DOE into compliance.

Background

For decades, DOE (and its predecessor agencies), NASA, and the Department of Defense conducted nuclear research and other projects at SSFL, which included a plutonium fuel fabrication facility; a facility for cutting up irradiated nuclear fuel shipped in from around the nation; and approximately ten nuclear reactors, one of which – the first to produce power for the commercial grid – experienced a partial meltdown, melting a third of its fuel and, it has recently been discovered, releasing more than 250 times as much contamination as the accident at Three Mile Island, and another of which had 80% of its fuel experience cracking. SSFL was also home to decades of open-air burning of radioactively and chemically contaminated reactor components in a "burn pit" overlooking Simi Valley.

The consequence of these activities is a massively contaminated site, which DOE and these other agencies are responsible for cleaning up. However, although DOE had made a commitment to participate in an EIS on the entire SSFL clean-up, instead various portions of the clean-up have been proceeding without any NEPA compliance at all.

Most recently, DOE has been undertaking a clean-up of the radiological waste on a portion of SSFL – the ETEC area – based on the assumption that "future use of the property for residential purposes is probable." EA at 4-1. Apparently recognizing that the Department has at least some obligations to comply with NEPA, in January 2002, DOE issued a Draft EA focused on radiological contamination within ETEC alone.

The EA contains two alternatives, in addition to the no-action alternative. Under Alternative 1, the preferred alternative, DOE proposed to clean up the remaining ETEC facilities to a standard of 15 millirem/year, which the agency claims translates into an additional cancer risk of 3 in 10,000. Under Alternative 2, the clean-up would be to a .05 millirem/year standard, which the agency claims translates into a cancer risk of 1 in 1 million. According to the EA, the difference between the two alternatives would be that, under Alternative 1 only 5,500 cubic meters of soil would be excavated, while Alternative 2 would require excavation of almost 405,000 cubic meters of soil. Alternative 1 would leave behind 99% of the contaminated soil, and release the site for unrestricted use. However, the EA did not consider any of the other contamination at ETEC, such as chemical contamination; did not address the relationship between this particular clean-up and the larger clean-up which must be undertaken for the entire SSFL; and did not consider the radioactive contamination from ETEC that has migrated elsewhere.

EPA provided extensive comments on the Draft EA. In those comments, EPA outlined a host of concerns, including the following:

1. ***DOE has not collected sufficient information on the degree of contamination at ETEC***
According to EPA, DOE lacks "enough measurements of radioactivity to support remedy evaluations or decisions," and the methods used thus far to take these measurements were not "sensitive enough to detect levels needed to support decisions about" the clean-up. Moreover, while EPA has repeatedly offered to undertake the survey necessary to collect this information, and DOE had previously agreed, DOE has now refused to allow this critical information to be collected.

2. ***The choice of a 15 millirem/year clean-up standard is inconsistent with CERCLA***
EPA also explained that were DOE following CERCLA guidance, as it claims it is pursuant to the 1995 Joint Policy, it would not have chosen a "presumptive clean-up level" without "site-specific" information still lacking for SSFL, and that DOE's choice of this clean-up level is inconsistent with the DOE's policy of following CERCLA requirements.

3. ***DOE's consideration of impacts and alternatives is unduly restrictive***
EPA further explained that DOE is violating NEPA by limiting its EA to the clean-up of radiological contamination at only one part of SSFL, and that DOE is ignoring obvious alternatives, including clean-up levels between the two DOE included in the EA. EPA also noted that, contrary to DOE's EA, "Alternative 2 in the DEA does not represent EPA's position on a clean-up level for ETEC."

4. ***DOE's soil removal estimates for Alternative 2 are wildly exaggerated***
EPA also questioned the accuracy of DOE's assumption that implementing Alternative 2 would require 30,000 truckloads of soil excavation, noting that sub-surface contamination is unlikely to be uniform throughout the site, and suggesting that the kind of

approximations DOE had made "typically indicate that more thoughtful and accurate calculations are needed to provide a useful analysis."

In addition, DOE received other comments, including those from CBG, explaining that DOE's estimates of the cancer risks associated with its clean-up plans massively underestimate those risks. Indeed, according to EPA's Preliminary Remediation Goals (PRGs), DOE's decision poses a cancer risk of up to one in fifty for some radionuclides, rather than the minimal risks DOE claims. Moreover, as Senator Barbara Boxer explained in her own letter to your predecessor, DOE's plans will permit 19,000 times more nickel-63 to remain than EPA permits for clean-ups under its jurisdiction, and similarly large amounts of other cancer-causing materials. See Apr. 24, 1999 Letter from Senator Boxer to Secretary Richardson (attached to CBG's comments on the Draft EA).

Six months after the comment period closed on the Draft EA, the California Department of Toxic Substances Control (DTSC) announced that it had "identified the presence of the chemical perchlorate in Simi Valley groundwater." See Att. 2. DTSC explained that testing had revealed perchlorate levels as much as five times the California Department of Health Service's advisory level, and that the "nearest known perchlorate user is the Santa Susana Field Laboratory (SSFL) located two to three miles south of the valley." Id. at 2 (emphasis added). Moreover, as detailed in a presentation to the SSFL Interagency Work Group in February, 2003, the presence of perchlorate indicates that other SSFL – and ETEC – contaminants, including radiological contaminants, may be likely to migrate off-site. See Att. 3, at 3 ("Because perchlorate migrates faster than most other contaminants, it may be the leading edge of other pollutant migration from the site")(emphasis added).

In March 2003, DOE issued a Final EA, and its Finding of No Significant Impact (FONSI). None of EPA or the other commentors' concerns was addressed in either the EA or the FONSI, nor was the perchlorate issue addressed at all. In the FONSI, DOE announced that it "has decided to implement its preferred alternative" – i.e., "clean up radiological facilities and surrounding soils to a 15 millirem exposure per year standard." According to the FONSI, "DOE has determined that implementation of this alternative will be fully protective of future users of the site." Furthermore, in the FONSI DOE decided that "[t]he clean-up of Area IV does not constitute a federal action significantly affecting the quality of the human environment within the meaning of NEPA" and thus "an environmental impact statement is not required."

In the Final EA DOE recognized that several endangered and threatened species are found in the area where this clean-up is occurring, and that implementing the clean-up may have "adverse effects on local plant and wildlife populations." EA at 4-15. However, entirely ignoring the fact that the clean-up will necessarily involve people and vehicles moving throughout the area, DOE summarily dismissed the impacts on imperiled species by asserting that they "are not present in the areas where the work would be performed." Id.

In December, 2003, EPA provided DOE with comments on the Final EA. Att. 1. In that letter EPA stressed that, contrary to the conclusion DOE had reached in the Final EA, "EPA does not currently believe that the clean-up at ETEC will satisfy standards for unrestricted land use." Indeed, EPA doubted the area could be suitable for anything more than day hiking, with limits even on picnicking in the area. EPA also disagreed with DOE's assertion in the Final EA that the clean-up will be consistent with CERCLA, noting that DOE is ignoring "a number of requirements of CERCLA." Moreover, EPA explained that DOE's effort in the Final EA to rely on certain old EPA guidance, and prior non-CERCLA decisions, as a justification for DOE's decision at SSFL is misplaced, since the guidance "has been superceded," and "it is inappropriate to draw parallels between" SSFL and EPA's "non-CERCLA risk management decisions."[1]

In recent months, Congress has also expressed serious concerns about the SSFL clean-up. In the Senate Report accompanying the 2004 Energy and Water Development Appropriation Bill, Congress explained that DOE's clean-up decision for SSFL is "an unacceptable deviation from the Department's commitment in a 1995 [DOE]-EPA Joint Policy;" from DOE's commitment "to fund an EPA radiological survey of the ETEC site;" and from DOE's commitment to "remediate the site to CERCLA standards." In sum, Congress has urged DOE "to fulfill those commitments and reassess whether the [clean-up] decision meets the joint policy and CERCLA standards." Sen Rep. No. 108-105, Section 2012.[2]

Finally, in the last month DOE announced yet another significant development that further demonstrates that DOE cannot proceed with the clean-up based on the present EA and FONSI – the discovery of high levels of tritium contamination at ETEC. As DOE disclosed at a community meeting on June 3, 2004, and in an associated Press Release, tritium – the radioactive isotope of hydrogen – has been discovered in levels as much as 4 times the maximum permitted concentrations. See Att. 5

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[1] Under the 1995 Joint Policy DOE must comply with CERCLA in undertaking clean-ups like the one at SSFL. However, despite asserting that it is in fact conducting the clean-up consistent with CERCLA and the 1995 Joint Policy, the standards and procedures DOE is employing for this clean-up clearly comply with neither. Indeed, EPA has now formally explained that the site clean-up is not consistent with EPA's CERCLA guidance, as required by the 1995 Joint Policy. See Att. 1.

[2] DOE responded to these concerns by claiming once again that the clean-up is consistent with the 1995 Join Policy. See Att. 4.

Discussion

A. DOE Is Violating NEPA

1. DOE Must Prepare An EIS

Even putting aside the new information that has come to light since DOE prepared its EA, the information available at the time DOE issued its FONSI demonstrates that an EIS is required before DOE can undertake this clean-up. Under NEPA, an EIS is required for all "major Federal actions significantly affecting the quality of the human environment." 42 U.S.C. § 4332(c). Given the history of radiological and other contamination at this site, including a partial meltdown and three other reactor accidents that resulted in the release of fission products, there simply can be no legitimate dispute that this clean-up meets the EIS standard. Indeed, the fact that DOE has repeatedly returned to Congress for tens of millions of dollars to pay for the clean-up of the site, and that the total amount has approached a quarter of a billion dollars, belies the notion that the clean-up has no significant impacts here.

Even putting these stark facts aside, while an agency is permitted to prepare an EA when it has not determined whether an EIS is required, an EIS is necessary whenever the impacts may be significant. 40 C.F.R. § 1501.4(b). The CEQ regulations implementing NEPA set forth a series of factors for determining whether an agency action is "significant," thereby requiring an EIS. Although the presence of any one of the "significance" factors is sufficient to require an EIS, in this case many of the factors are present. First, particularly in light of EPA's comments, it is apparent that "the possible effects" of DOE's proposed clean-up "are highly uncertain." 40 C.F.R. § 1508.27(b). Similarly, it is also apparent that "the effects [of the clean-up] on the quality of the human environment are likely to be highly controversial." Id. Indeed, particularly in light of the ongoing interagency dispute regarding the clean-up, as well as the intense Congressional interest, it is readily apparent that the proposed action already is "highly controversial." Id.

In addition, as EPA has also detailed, by flagrantly violating the 1995 Joint Policy of following CERCLA's requirements, DOE's SSFL clean-up certainly "threatens a violation of Federal [law] imposed for the protection of the environment," which is another factor requiring an EIS. Id. Several additional factors are also implicated here. See id. ("[t]he degree to which the proposed action affects public health or safety"); (whether the action is "related to other actions with individually insignificant but cumulatively significant impacts"). And, since the "significance" of the clean-up must be considered "on the locale" where the action will occur, it is even more apparent that an EIS is necessary. Id. § 1508.27(a).

Accordingly, it is apparent that DOE must prepare an EIS here.

2. At A Minimum, DOE Must Prepare A New EA That Complies With NEPA and Considers Whether An EIS Is Necessary In Light Of New Information.

Even assuming it were not readily apparent at this time that an EIS is necessary – which it is – at a bare minimum DOE must set aside the FONSI and prepare a new EA that both (a) complies with NEPA, and (b) considers critical information that the agency has not even begun to address.

Regarding NEPA's requirements, while the CEQ Regulations require agencies to "[r]igorously explore and objectively evaluate all reasonable alternatives" in an EIS or an EA, 40 C.F.R. §§ 1502.14(a), 1508.9(b), DOE has failed this basic requirement here, by limiting its consideration to two alternatives, and ignoring others, including those proposed by EPA. In addition, as commentors to the EA also explained, DOE is unlawfully ignoring related actions which must be considered in the same NEPA document, id. § 1502.4(a) – including other components of the clean-up of ETEC, such as the chemical contamination, and the clean-up of the entire SSFL.

As for new information, NEPA requires that even after a NEPA process is completed an agency is required to engage in further NEPA analysis whenever it is apprised of "significant new [ ] information relevant to environmental concerns and bearing on the proposed action or its impacts." Id. § 1502.9(c). There are at least three developments which warrant further NEPA review here:

a. Tritium Findings

As noted, just last month DOE announced that it has discovered high levels of tritium on the site. Att. 5. The tritium contamination was found at the former site of Building 10, which had housed two space reactors. One of those, SNAP8ER, had a serious accident in which 80% of the fuel was damaged.

DOE has not identified the source of the tritium contamination, nor has the agency established the precise nature of the tritium plume.[3] Previously, tritium at levels below the drinking water standard had been found at other portions of ETEC, and had been found to have migrated off the property to land then owned by the Brandeis Bardin Camp Institute. This latest finding of tritium at extremely high levels raises serious questions about the adequacy of DOE's site characterization, as well as the agency's refusal to allow EPA to conduct an independent site

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[3] There are numerous potential sources of tritium from the site's activities. Tritium is a ternary fission product, so it is produced when uranium fissions in reactors. It is produced also when neutrons from a reactor bombard regular hydrogen or deuterium, or when neutrons bombard lithium (used in some of the reactors at the site and in concrete shielding for the reactors and found as impurities in the sodium-potassium coolant of the reactors used at SSFL). There were numerous reactors and other facilities at SSFL that could produce tritium.

characterization. It also requires a fundamental reevaluation of DOE's decision to remove only 1% of the contaminated soil at the site, and then release the site for unrestricted use.

b. Perchlorate Findings

The discovery of perchlorate contamination also demonstrates the critical need for further NEPA review here. Perchlorate was used at the SSFL in reactors as well as in rocket fuel. See Public Health Goals For Chemicals In Drinking Water: Perchlorate, Office of Environmental Health Hazard Assessment, California Environmental Protection Agency (March 2004); Perchlorate Environmental Contamination: Toxicological Review and Risk Characterization, US EPA External Review Draft (January 16, 2002).[4] Perchlorate contamination has been found in groundwater beneath the nuclear part of the SSFL; in sediment of and stormwater from a stream leaving the site from the nuclear area; in a childrens' camp below SSFL; at Runkle Ranch, a proposed development between SSFL and Simi Valley; and in a score or so of water wells in Simi Valley itself. Indeed, seeps (high water rising into peoples' yards) in the town of Simi have been found to be contaminated. See Att. 2.

Perchlorate contamination poses serious public health risks, as this chemical impairs the thyroid's ability to take up iodide and to produce hormones critical to proper fetal and infant brain development. However, equally troublesome is the fact that the presence of perchlorate miles from the SSFL indicates that other contaminants are also likely to leak from the site into residential and other areas, because perchlorate is known to migrate faster than other contaminants. See Att. 3. Accordingly, this discovery calls into serious question DOE's plan to permit large quantities of waste to remain within ETEC once its present "clean-up" is completed.[5]

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[4] For example, perchlorate contamination has been discovered at Los Alamos National Laboratory, where there are reactors but not rockets.

[5] Tritium has also been found off the site, further demonstrating the need to consider off-site contamination risks posed by the clean-up. Moreover, since the perchlorate contamination was announced even before DOE made a final decision on its EA, DOE was required to consider this issue fully in its original EA. Yet, the EA is completely silent on this critical issue.

c. EPA's December 2003 Comments

Finally, even aside from these additional contamination issues, EPA's December 2003 comments alone demonstrate that DOE must conduct further NEPA review here. Among other concerns, EPA explained that while the Final EA is premised on the conclusion that DOE is proceeding in a manner consistent with EPA's approach to this kind of clean-up, in fact DOE's approach is flatly inconsistent with EPA's guidance and policies. See Att. 1. Thus, on the basis of DOE's December 2003 comments alone, DOE plainly must at the very least supplement its NEPA analysis here.

B. DOE Is Violating CERCLA

Although DOE claims the clean-up is being performed in a manner "consistent with CERCLA," see EA at I-1, it is apparent from EPA's comments – as well as from DOE's EA – that the clean-up is not being conducted in a manner which complies with either the procedural or substantive mandates of CERCLA or the 1995 Policy. Accordingly, this letter shall also serve as notice, pursuant to CERCLA's notice provision (42 U.S.C. § 9659(d)), of DOE's violation of CERCLA Section 120, 42 U.S.C. § 9620, and implementing regulations and guidance, because DOE is plainly not complying with CERCLA, the 1995 Policy, or other CERCLA guidance here.

C. DOE Is Violating The ESA

As noted, Section 7 of the ESA requires that "in consultation with and with the Assistance of the [Service]," each federal agency shall "insure that any action authorized, funded or carried out by such agency . . . . is not likely to jeopardize the continued existence of any" listed species. 16 U.S.C. § 1536(a)(2). Under the regulations implementing this consultation process, each federal agency is required to prepare a Biological Assessment to determine whether its activities "may affect" a listed species, and thus whether it is required to consult with the FWS concerning those effects. 50 C.F.R. § 402.14(a). Once it is determined that an action "may affect" a listed species, the action agency must engage in "formal consultation" with the Service. Id. At the conclusion of that process, the FWS issues a "Biological Opinion" (BO) detailing "how the agency action affects the species," 16 U.S.C. § 1536(b)(3)(A), and in particular, whether the action is "likely to jeopardize" the continued existence of the species. 50 C.F.R. § 402.14(g), (h). However, regardless of whether "jeopardy" will occur, if the proposed activities will result in any "take" of a listed species, the action may not go forward unless the FWS, in the BO, provides an "incidental take" statement, which authorizes the action agency to "take" a limited number of the species, if the agency complies with certain other "reasonable and prudent measures [ ] necessary or appropriate to minimize such impact." 16 U.S.C. § 1536(b)(4); 50 C.F.R. § 402.14(i). Finally, the ESA prohibits an agency from proceeding with an action which may affect listed species before the consultation process is completed, since it cannot "insure" that its actions are not likely to jeopardize the continued existence of a listed species until the FWS has rendered its expert opinion on the matter. 16 U.S.C. § 1536(d), (c)(1).

By proceeding with the SSFL clean-up without engaging in this consultation process, DOE is patently violating the ESA. In particular, the EA states that the endangered Braunton's milkvetch is found in the area where the clean-up is occurring. The milkvetch is an imperilled plant species with remaining populations in fewer than twenty areas, all of which are located in Southern California. The species is threatened by trampling among other adverse impacts. Certainly, DOE must consult with the FWS concerning the impacts of the clean-up on this species. While much of the activity may be occurring in and near various buildings, the people and vehicles that will be moving into and around the area certainly pose a threat to this species. Therefore, absent such a consultation – with an appropriate incidental take statement authorizing the "take" of the species, 16 U.S.C. § 1536(b)(4); 50 C.F.R. § 402.14(I), DOE is violating not only ESA Section 7, but also ESA Section 9, by engaging in the unlawful "take" of the species with the activities associated with the clean-up. 16 U.S.C. § 1538. As required by 16 U.S.C. § 1540(g), this letter provides written notice that, by proceeding with this clean-up, DOE is violating the ESA.

* * *

In light of the foregoing, we insist that DOE set aside the FONSI, and take the steps necessary to bring the SSFL clean-up into compliance with NEPA, CERCLA and the ESA. In regard to NEPA compliance in particular, while we believe it is apparent at this juncture that an EIS on the clean-up of all contaminants throughout the SSFL must be prepared, at a bare minimum DOE must reinitiate the NEPA process to reconsider whether an EIS should be prepared, taking into account the most recent information relevant to this issue.

Unless we hear from you in the next sixty days, we will have no choice but to assume that DOE intends to proceed with the present clean-up based on its existing FONSI, and without any effort to comply with NEPA, CERCLA or the ESA, and will proceed accordingly.

Sincerely,

Howard M Crystal
Eric R. Glitzenstein

cc (certified mail):

Lee Liberman Otis
General Counsel
Department of Energy
Room 6A-245
1000 Independence Ave., N.W.
Washington, D.C. 20585

Michael Lopez
Department of Energy
Oakland Operations Office
1301 Clay Street, Room 700N
Oakland, CA 94612

John Ashcroft
Attorney General
U.S. Department of Justice
950 Penn. Ave., N.W.
Washington, D.C. 20530-0001

Bill Lockyer
Attorney General
Attorney General's Office
California Department of Justice
P.O. Box 944255
Sacramento, CA 94244-2550

Mike Leavitt
EPA Administrator
Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Wayne Nastri
EPA Regional Administrator
U.S. EPA Region 9
75 Hawthorne Street
San Francisco, CA, 94105

Gale Norton
Secretary, U.S. Department of the Interior
1849 C Street, N.W.
Washington, D.C. 20240,

Steven Williams
Director, Fish and Wildlife Service
1849 C Street, N.W.
Washington, D.C. 20240