

Abraham Weitzberg, PhD
5711 Como Circle
Woodland Hills, CA 91367

November 2, 2010

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Office of Inspector General
1000 Independence Avenue, SW
Washington, DC 20585
Via email ighotline@hq.doe.gov

Investigations
Bureau of State Audits
555 Capitol Mall, Suite 300
Sacramento, California 95814
Via FAX 916-322-2603 Attn: Investigation

NASA Office of Inspector General
P.O. Box 23089
L'Enfant Plaza Station
Washington, D.C. 20026
Via email
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U.S. Environmental Protection Agency
Office of Inspector General Hotline (2431M)
1200 Pennsylvania Avenue, NW
Washington, DC 20460
Via email OIG_Hotline@epa.gov

Subject: Fraud, Waste, and Abuse relating to the cleanup of the Santa Susanna Field Laboratory at Chatsworth, California

Inspectors General and Auditors:

I am writing to report ongoing and potentially worsening problems with the cleanup of the Santa Susanna Field Laboratory at Chatsworth, California. The key issue of immediate concern is that an unwarranted, unduly severe and damaging cleanup is being imposed by California elected officials working through Linda Adams, Secretary for Environmental Protection, CAL/EPA. As is well documented and well known in the named agencies, the Responsible Parties for the site are DOE, NASA, and the Boeing Company. The California Department of Toxic Substances Control (DTSC) has assumed oversight and regulatory responsibility, and EPA is providing technical expertise in the area of sampling for radioactive materials in the soil. There have been decades of ongoing cleanup activities and there are continuing negotiations over new consent agreements to move forward with the site cleanup after many years of delay. The events that triggered my complaint were the release of Agreements in Principle (AIPs) announced on September 3, 2010 between DTSC and DOE, and DTSC and NASA, followed by the release of the Draft DOE Administrative Order on Consent (AOC) on October 27, 2010.

Although lauded as a major breakthrough in the press release from Assemblymember Julia Brownley (Attachment 1), in actuality the AIPs were the result of inappropriate political influence by elected State and Federal Officials on the State and Federal agencies. The AIPs were released without appropriate technical inputs from DTSC, DOE and NASA staff. As a result, the AIPs were severely flawed, and would violate NEPA, CERCLA, and CEQA. They would place the surrounding populace at risk, cause severe damage to the SSFL environment, and waste considerable amounts of tax dollars to achieve cleanup levels that are neither necessary nor appropriate. The original AIP announcement from DTSC requested comments by October 1, 2010 and there were verbal assurances that comments

would be discussed in public meetings and taken into consideration during the revision process. However, there were no substantive discussions of the comments, and the AIPs were unchanged, and the severely flawed Draft DOE AOC was released on October 27, 2010 with a planned signature date of December 6, 2010. Of immediate concern is the likelihood that the same political pressures will cause DOE to sign the AOC without due regard to the fiscal and environmental consequences. A similar concern exists for the NASA AOC when it is released. Immediate action must be taken by the respective OIG and State Auditors to avert this calamity, and allow a suitable period for a more reasoned evaluation of the AIPs and AOCs. As now constituted the Agreements will surely lead to unnecessary remediation without any commensurate risk reduction benefits and at considerable wasteful expense to the Government.

Inappropriate Political Influence

The inappropriate activities are well documented by the words of the perpetrators themselves both in Attachment 1 and the Attachment 2 news article and in subsequent public meetings. It is commonly acknowledged that as stated in Attachment 1 Senator Barbara Boxer through the White House pressured Energy Secretary Chu and NASA Administrator Bolden to agree to the AIPs, despite the misgivings of their technical staffs. The DTSC technical staff also said that they had not seen the AIPs before they were released by Linda Adams. The timing of the DTSC announcement just before the Labor Day holiday came as a surprise to the DOE and NASA staff who had problems with the AIPs and who believed they were still in negotiation. These statements were made at the public SSFL Workgroup meeting on September 16, 2010.

While DOE and NASA were surprised, California elected officials and anti-nuclear activist Dan Hirsch obviously was not. Hirsch was able to have a letter written and signed and presented to Boeing at a photo-op at SSFL on September 8, 2010 (Attachment 2). Hirsch's website provides several pictures of the event -- <http://www.committeetobridgethegap.org/electeds.html>, and his website exhorts his followers to support the AIPs, as written -- <http://www.committeetobridgethegap.org/>. It is reasonable to question why Hirsch so strongly supports the defective AIPs, while the agencies that have to implement them have such severe and valid reservations.

The role of activist Hirsch is key to the political influence at both the California and National levels. The Attachment 1 press release talks about a 1959 accident at the Sodium Reactor Experiment at SSFL. Hirsch, President of Committee to Bridge the Gap, as part of his anti-nuclear activities, was instrumental in publicizing this event starting in about 1989, and convincing several California legislators and members of the public of widespread radiation release and massive cover-ups by the AEC. While there was never any health risks to the public from the accident, as was discussed and documented at a DOE Workshop on August 31, 2009, Hirsch nevertheless was able to get California to pass SB990 (which he authored) and continue to influence the California legislators. The cleanup requirements of SB990 are unnecessary to protect the public, are unattainable at any cost, and would result in severe damage to the SSFL environment. As will be discussed later, the AIPs and the DOE AOC go even further than SB990 in the wrong direction.

Hirsch has dominated the SSFL Workgroup activities since its inception over 20 years ago. He dominates the meetings, where he browbeats and threatens the agency employees by stating he will go to the various legislative committees. Public input from other than Hirsch's allies on the Workgroup is severely restricted, and so there is the appearance that he represents the views of the community.

While Hirsch and the elected officials certainly have the right to express themselves, they cross the line when behind-the-scene manipulations are used to avoid open discussion of essential issues and to dictate the terms of an excessive cleanup to unrealistic requirements for no valid reason. A recent example of such interference was the furor created by Hirsch and his activist supporters over the planned removal of some soil from the NASA area, under an Interim Source Removal Action (ISRA). The soil has unacceptable levels of lead and dioxin, and also has low levels of Cs-137. The Cs-137 was slightly above background and was deemed safe by the California Department of Public Health (DPH), Radiologic Health Branch to be removed and deposited in a Class 1 or Class 2 hazardous waste landfill (Attachment 3). The activists objected, and there was no shipment to Kettleman City. In April 2010, NASA attempted to send soil to an out-of state facility. Hirsch objected on April 14, 2010:

http://ssfl.msfc.nasa.gov/documents/comm/Hirsch_to_Egoscue.pdf .

By April 15, only one day later, 2010 NASA's plans were put on hold.

http://ssfl.msfc.nasa.gov/documents/comm/Owens_to_Boeing_NASA.pdf

http://ssfl.msfc.nasa.gov/documents/comm/Elliott_to_Owens.pdf

http://ssfl.msfc.nasa.gov/documents/comm/Costa_to_Owens.pdf .

Stated succinctly, Hirsch complains to a State agency which immediately rolls over. The soil is not radioactive waste by any customary definition and never was. The ISRA is again delayed and the risk of groundwater contamination continues over a specious issue.

It is legitimate to ask how Activist Hirsch gets the power to define Low Level Radioactive Waste and get the State and Federal agencies to bend to his will, even when he is wrong. The Cs-137 concentration is more than an order of magnitude lower than the screening guidelines of the EPA, the Nuclear Regulatory Commission, or the DTSC itself at other locations in California. Recently, based on the SB990/AIP requirements, DTSC has overruled the original DPH position, using background data that is biased on the low side and site sample data that is biased to the high side. This effectively shows what will be the consequences of rigorously applying the political SB990/AIP requirements to any future SSFL cleanup. Of ongoing concern will be the real possibility that political interference will also force background determinations by EPA and DTSC to unreasonably low levels, as in the Cs-137 example, and thus cause the excessive cleanup to become a reality.

Deficiencies with the AIPs and AOC

From comments made by agency staff at public meetings and from some informal conversations it is apparent that deficiencies in the AIPs are well known to the agencies. The recent draft DOE AOC can be found at: [http://www.dtsc-](http://www.dtsc-ssfl.com/files/lib_pub_comment_docs/docs_for_review/64767_SSFL_DOE_Draft_AOC.pdf)

[ssfl.com/files/lib_pub_comment_docs/docs_for_review/64767_SSFL_DOE_Draft_AOC.pdf](http://www.dtsc-ssfl.com/files/lib_pub_comment_docs/docs_for_review/64767_SSFL_DOE_Draft_AOC.pdf)

My comments on that document and the review and comment process are included as Attachment 4, bellow. All of the comments on the DOE and NASA Agreements in Principle, together with the respective DTSC responses are to be found at; [http://www.dtsc-](http://www.dtsc-ssfl.com/files/lib_correspond/agreements/64765_AIP_Response_to_Comments_Volume_I.pdf)

[ssfl.com/files/lib_correspond/agreements/64765_AIP_Response_to_Comments_Volume_I.pdf](http://www.dtsc-ssfl.com/files/lib_correspond/agreements/64765_AIP_Response_to_Comments_Volume_I.pdf), and [http://www.dtsc-](http://www.dtsc-ssfl.com/files/lib_correspond/agreements/64766_AIP_Response_to_Comments_Volume_II.pdf)

[ssfl.com/files/lib_correspond/agreements/64766_AIP_Response_to_Comments_Volume_II.pdf](http://www.dtsc-ssfl.com/files/lib_correspond/agreements/64766_AIP_Response_to_Comments_Volume_II.pdf),. I

direct you to my comments which can be found at Page 196 of Volume II and those of John Luker, Vice President of the Santa Susana Mountain Park Association, which can be found at Page 75 of Volume II. Similar comments made by Boeing can be found at:

[http://www.acmela.org/images/Boeing to DTSC AIP Tech Comments October 1 of 2010.pdf](http://www.acmela.org/images/Boeing%20to%20DTSC%20AIP%20Tech%20Comments%20October%201%20of%202010.pdf) and [http://www.acmela.org/images/Boeing to DTSC AIP Comments September 30 of 2010.pdf](http://www.acmela.org/images/Boeing%20to%20DTSC%20AIP%20Comments%20September%2030%20of%202010.pdf). It should be readily apparent to an independent investigator that these issues are substantive and should not have been overlooked or ignored in the drafting of the AIPs or the DOE AOC. The only reason that can reasonably be given for the haste in which the AIPs were released together with claims of major progress towards a cleanup, is that political influence overrode practical technical considerations for implementation as well as legal requirements of and guidance for existing Federal and State laws such as NEPA, CERCLA, and CEQA.

Two of the major unresolved technical issues are briefly summarized below:

1. The 'cleanup to background' approach as described in the AOC ensures that remediation limits for all possible contaminants of concern will be close to background or detection limits if there is no natural background. The EPA's procedures for establishing these limits are not defined and the consequences of any limits will not be known until after the site characterization is completed. The DTSC decision to use a fixed lookup table rather than the customary risk assessment to make remediation decisions, plus the fact that there will be a large number of analytes close to background or slightly above detection limits that pose no risk will almost ensure that something in most samples will require remediation, regardless of real risk to the populace.
2. The issue of establishing Cs-137 cleanup levels will be a major issue of contention throughout the cleanup, because Cs-137 exists throughout the SSFL site as a result of worldwide fallout from weapons testing. Questions have been raised about EPA performing background sampling in drainage areas where Cs-137 is known to accumulate, but it appears that this critical activity may not be performed. It is known that a factor of three increase in background is possible, which would change the cleanup decisions as was seen in the case of the NASA ELV ISRA for Outfall 9, which also included a drainage area. In this case there is concern that political interference would force unjustifiable remediation, and Cs-137 from weapons testing would be mischaracterized as contamination.

These and other technical issues need to be addressed before the AOC is signed, not after DOE has committed to an excessive cleanup. The connection between the political interference and the technical issues is clear. In all meetings where issues are raised, it is Activist Hirsch who rises to defend the DTSC approach, not the DTSC technical staff or the DOE or NASA staff. It is clear that as far as SSFL is concerned, Hirsch is the prime force in the California power structure. He is answerable to no one but himself and it is the taxpayers who will have to pay for an excessive cleanup.

It is important to note that the Boeing estimate of about 100,000 trucks needed to remove the soil to achieve a cleanup to background may be on the low side. Such a cleanup would have severe environmental consequences and would have health impacts that would likely far outweigh any risk reduction benefits of the cleanup. The costs of such a cleanup would be exorbitant and would be very wasteful of taxpayer dollars. Also, the cost effectiveness of the expenditure of Stimulus Funds for the EPA radiological studies comes into question if they are misused as a result of political interference. While it is very important to address the remaining issues during the public comment period before the AOC is signed, it is the flawed process by which the AIPs and AOC were developed that continues to be the major problem.

Summary and Conclusions

The agency technical staffs are highly qualified and conscientious and are capable of doing an excellent job of cleaning up SSFL to an acceptable level, if left to do so without political interference. Agency management must be held accountable for the actions of their agencies, when these actions are contrary to the public interests, violate Federal and State laws and waste taxpayer money. The names of the individuals responsible for the questionable negotiation decisions and drafting the AIPs and AOC are unknown to me, but they and the responsible technical managers whose inputs were either not requested or not heeded should be listed in the appropriate agency records. I am hoping that my complaint will result in sufficient independent investigation to lead to corrective actions that will put the SSFL cleanup back on the right track. In the interim, I am requesting that any signing of the AOC be put on hold until there can be full and open discussion of all the issues that have been raised, and the AOC revised accordingly.

The grave deficiencies in the AIPs have led to the similarly defective DOE AOC and there have been no substantive discussions with the community, followed by resolution of the AOC flaws. Further decisions driven by a political agenda irrespective of the consequences should not be allowed. Thus far, the agencies have been hamstrung by political intervention, responding to the special agenda of a single individual activist. Boeing was forced to sue California because of the onerous and probably illegal terms of SB990. All parties except the activists are committed to a reasoned risk-based cleanup, so that more harm is not caused by the remediation than the benefits it is supposed to bring.

I have only provided a small portion of the large amount information that is available. There is additional information on Federal and State agency websites and activist websites relating to SSFL and the Santa Susanna cleanup. Google works very well. Many public meetings have been recorded by Adam Salkin (AdamSalkin@gmail.com) and these can be used to substantiate verbal statements that show the excessive political influence. I will be happy to provide additional information to investigators as necessary. I have been quite open about the views I have expressed in this letter and do not require anonymity.

Thank you,



Abraham Weitzberg
818-347-5068



[LEGISLATION](#) | [BIOGRAPHY](#) | [VISIT MY WEBSITE](#) | [PHOTO GALLERY](#)

Assemblymember Brownley Lauds Historic SSFL Cleanup Deal

SAN FERNANDO VALLEY -- Just over 50 years ago, an uncontained partial nuclear meltdown occurred at the Santa Susana Field Laboratory in the Chatsworth Hills, with radioactive releases that the Department of Energy, NASA and Rocketdyne, the site operators, kept secret from the public and regulators for decades. A third of the core melted, power had risen uncontrollably, and fuel temperatures shot up to the level that the fuel rods lost their integrity and released massive amounts of radioactivity into the air. Later revelations uncovered more accidents in at least four of the ten nuclear reactors and a long list of reckless activities and disposal practices that have left the site both radioactively and chemically contaminated to this day. The accident has been compared to the Three Mile Island catastrophe, and may actually have been worse.

In 2007, then-State Senator Sheila Kuehl and Assemblymember Julia Brownley as joint authors succeeded in getting legislation passed - SB990 - setting a very high standard for cleanup of the site. The Boeing Company, current owner of the site, has fought to overturn SB990 from the day it passed, and filed suit against California last year.

However, today the Department of Energy and NASA reached a historic agreement with the California Department of Toxic Substances Control (DTSC) to clean up the site to background levels and in full compliance with SB990. The Environmental Protection Agency will do monitoring of the radiation cleanup. This will be one of the highest levels of cleanup of any contaminated site in the country.

"Today's unprecedented agreement caps 30 years of struggle by the community to get this site cleaned up," Assemblymember Brownley said. "Finally we have a deal with these two Federal entities. Too many people have gotten sick. Reports of radiation-associated cancers over the decades cannot be ignored. The importance of this deal cannot be overstated, and the community that has been so severely impacted by the presence of the SSFL virtually in their back yards will have the important opportunity to comment on the deal before the final signatures are put on paper."

"It's also imperative that key people who have been working exhaustively over the years to reach this point get the recognition they deserve. State Senator Kuehl kept carrying legislation to get this cleanup done, never giving up after the special interests killed bill after bill until SB990, which I was proud to jointly author, was signed into law. CalEPA Secretary Linda Adams has been nothing short of heroic, and was hands-on every step of the way to insure that the public health and safety is fully protected to the highest level possible, and I am grateful to Governor Schwarzenegger for this newest expression of his commitment to environmental protection.

"None of this would have happened but for Senator Barbara Boxer's personal intercession with the White House. She sealed this deal with DOE Secretary Steven Chu and NASA Administrator Charles Bolden. The DOE made a promise to the Senator's Committee two years ago and she was going to hold them to it.

"Mostly, I need to thank the community members, who never lost hope, and never stopped fighting year after year after year. All of these people are truly amazing, and my admiration for them is unbounded."

DAILYNEWS.COM

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LAB

FROM PAGE A1

Rocketydyne lab.

Congressman Brad Sherman, D-Sherman Oaks, Assemblywoman Julia Brownley, D-Santa Monica, Ventura County Supervisor Linda Parks and Los Angeles City Councilman Greig Smith all signed a letter addressed to Boeing Chairman and CEO W. James McNerney, State Sen. Fran Pavley, D-Agoura Hills, who was not there, also pledged support.

The letter called on McNer-

ney to end litigation against the state and accept responsibility for cleanup, just as NASA and the DOE have done.

"It's now time for the Boeing Company to do the same," Brownley said. "... to join the DOE and NASA and comply with California law by dismissing its lawsuit against the citizens of California and close the circle by entering into the same cleanup agreement as its federal counterparts."

Dispute over standards

Community activists called last week's announcement historic, but said they will remain dissatisfied until Boeing com-

mits to standards set by Senate Bill 990, signed into law in 2007.

Championed by now-retired state Sen. Sheila Kuehl, D-Los Angeles, and co-written by Brownley, SB 990 requires the lab property to be cleaned to state environmental standards higher than those set by the federal government.

A Boeing lawsuit to overturn the law is pending and won't be heard until June 2011.

The suit contends that only the federal government, not the state of California, has the authority to oversee cleanup at nuclear sites.

Boeing officials said Wednes-

day, the company continues to review the agreement signed by NASA, the DOE and the state's Department of Toxic Substances Control.

"We are still reviewing the conceptual framework carefully and remain committed to continued dialogue with the state," said Boeing spokeswoman Kamara Sams. "We are hopeful that the framework moves the cleanup efforts forward while preserving the biological, historical and cultural resources at Santa Susana."

Mystery has long shrouded the Santa Susana Field Lab. Founded in the mid-1940s at what was then a remote loca-

tion, the lab developed and tested nearly a dozen nuclear reactors for the U.S. Atomic Energy Commission, which later became the Department of Energy.

Contamination long hidden

But kept secret from the public was what was later called a partial meltdown of one reactor in 1959, releasing radiation into the air. Five decades later, the full scope of the release and its impact on workers and residents remains unknown.

But in May 1989, Department of Energy surveys revealed that radioactive and toxic contamination from

decades of nuclear experiments and rocket tests had leaked into soil, groundwater and bedrock at the hilltop site.

NASA's portion of the land includes the area where the meltdown occurred, the nuclear site known as Area 4. Boeing acquired the land in 1996.

Dan Hirsch, president of the activists group Committee to Bridge the Gap, said the agreement by the two federal agencies to clean up their portion of the site to state standards could weaken Boeing's lawsuit.

"We have a lot of work to do," Hirsch said. Boeing needs "to get with the program. It's not rocket science."

Smith, meanwhile, had a simple message for Boeing:

"If Boeing doesn't clean up this mess, we will make it very tough for them," he said. "Fix the problem and get it cleaned up."

State officials said a 30-day public comment period on the DOE and NASA agreement is under way until Oct. 1 and comments can be sent to ssf@ca.gov.

Officials pressure Boeing to clean up Santa Susana Lab

By Susan Abram Staff Writer

CHATSWORTH — Clean it up to the highest standards or face renewed pressure.

That was the message to The Boeing Co. on Wednesday by federal, state and local elected officials who called on the aerospace corporation to purge every inch of the land they own at the Santa Susana Field Laboratory of radioactive and chemical contamination.

Bolstered by an announcement last week that both the Department of Energy and NASA have committed to state cleanup standards for their portion of the 2,849-acre site, elected officials stood outside the entry gate of the property between Chatsworth and Simi Valley and pledged to pressure Boeing to clean up the former

LAB A7



MARK B HORTON, MD, MSPH
Director

State of California—Health and Human Services Agency
California Department of Public Health



ARNOLD SCHWARZENEGGER
Governor

September 24, 2009

Mr. Phil Rutherford, Manager
Health, Safety & Radiation Service
The Boeing Company
Santa Susana Field Laboratory
5800 Woolsey Canyon Road,
Canoga Park, CA 91304-1148

Dear Mr. Rutherford,

In response to your letter dated September 11, 2009, regarding SHEA-109081, disposal of IRSA outfall 009 soil to a Class 1 or 2 hazardous waste landfill. California Department of Public Health, Radiologic Health Branch (RHB) has reviewed the analysis provided in the attachment and finds the proposal does not represent a public health threat and meets the criteria of the Executive Order D-62-02.

Therefore; RHB concurs with your finding to send the material to either a Class 1 or Class 2 landfill.

If you have any questions, please contact me at (916) 440-7942.

Sincerely,

Gary W. Butner, Chief
Radiologic Health Branch

cc: James M. Passas, DTSC
Samuel Unger, RWQCB
Cassandra Owens RWQCB
William Chi, CDPH-OLS
Peter Sapunor, CDPH-OLS

Attachment 4 – A. Weitzberg Comments on DOE AOC

Abraham Weitzberg, PhD
5711 Como Circle
Woodland Hills, CA 91367

November 1, 2010

To: DTSC

Comments on DRAFT DOE AOC

The Draft DOE AOC, as presented, contains almost all of the flaws of the AIP, which remained unchanged. Most substantive negative comments about the AIPs were dismissed without any discussion of their merits or with the suggestion to wait until later to address them. Failure to address these flaws resulted in the Draft AOC which should not be agreed to by DOE. Any DOE official who signs the document would be knowingly committing the Department to wasting Federal funds, possibly in amounts in the hundreds of millions of dollars, with no actual reduction in risk to the affected populations and, in fact, with excessive environmental damage and increased health risks from the unnecessary remediation activities.

DTSC's obsession with eliminating risk assessment from the remediation decisionmaking only serves to avoid showing the negative effects of implementing the terms of SB990 and the subsequent AIP and AOC. Claims of expediting the cleanup by avoiding risk assessments are false, because they are not on the critical path. Cleanup cannot begin until well after the completion of the site characterization and the necessary planning, evaluation and review tasks. Much of the needed risk assessment information is already done as part of the DOE EIS preparation. There is ample time for DTSC to reconsider the Draft AOC so as to avoid the issues that have been identified. There is no need to rush to force a political cleanup. Eventually, when the severe consequences become known, substantial changes in the AOC will be needed. Otherwise, the dispute resolution process will end up in court or there will be insufficient funds to perform the massive demolition of the SSFL site. A far better approach would be to identify a cleanup strategy that eliminates significant sources of risk, preserves the SSFL environment, poses minimal risk to the surrounding populace, is affordable, and can be completed in a reasonable timeframe. The present AOC does none of that.

Since none of my AIP comments were addressed in a substantive response from DTSC, I am including them by reference in this set of comments. Additionally, my addendum 1 and 3 comments were not included at all in the DTSC Response to Comments (RTC) documents and I am resubmitting them by reference in this set of comments. Because the RTC provides some insights into the DTSC rationale, they form the basis of some of my new comments.

Comments on the AOC

The key problem is the specification of cleanup levels for radionuclides and chemicals as defined by SB990 and propagated through the AIP and AOC. Specifying that having a single constituent over a pre-specified table lookup value would require remediation, independent of its risk or the total risk of the soil relative to the replacement soil, almost guarantees that most, if not all, of the soil that is sampled will have to be replaced. By requiring that the most restrictive limits be placed on each constituent

from either a suburban residential or rural residential (agricultural) land use scenario, the DTSC approach assures that very restrictive requirements are applied to individual constituents. This approach also ignores the fact that these only refer to risks to people potentially living on the land (SSFL) and that the specified soil concentrations pose absolutely no risk to anyone living off of the SSFL site.

However, both SB990 and Superfund process, as summarized below in the DTSC RTC, require the summation of the risks from all of the contaminants.

“Summed Risk

The Superfund process requires that the risk values that are calculated for all contaminants of concern at the site (both radioactive and chemical contaminants) must be added together, not viewed independently. Excess cancer risk from both radioactive and chemical contaminants are to be summed to provide an estimate of the combined risk presented by all carcinogenic contaminants as specified in OSWER directive 9200.4-18 (U.S. EPA 1997a) and “Radiation Risk Assessment at CERCLA Sites: Q & A”, OSWER Directive 9200.4-31(P), U.S. EPA, Dec. 1999, p. 11.”

Also from the continuing RTC discussion:

*“These factors are evaluated through the Feasibility Study, and the cleanup levels adjusted as necessary. It is important to note, however, **that under Superfund, the maximum amount that the cleanup levels may be adjusted for any reason is 100 fold.** So for a cleanup level that has been calculated to achieve less than one in one million increased cancer rate (1×10^{-6}), the maximum the calculated cleanup levels may be adjusted through the exercise of the balancing criteria is to achieve less than one in ten thousand increased cancer rate (1×10^{-4}). As such, a “risk range” of 10^{-6} to 10^{-4} is the standard risk range for carcinogens, and 10^{-6} is the risk range “point of departure” (the starting point in the exercise of the balancing criteria). Both of these standards are found in the National Contingency Plan (See 40 CFR 300.430(i)(A)(2)).”*

There is a fundamental inconsistency and flaw in the logic expressed by DTSC. That is, why should the factor of 100 be applied to the individual constituents when the risks are specifically required to be summed? The effect of this can be seen in the following RTC text:

“The following are a few specific examples of these contaminants and the relationship between their calculated values and background levels or detection limits³:

- Cesium-137 – The U.S.EPA calculated Preliminary Remedial Goal for a 1×10^{-6} risk value for rural residential land use for Cesium-137 is 0.0012 pCi/g. The 1×10^{-4} risk value is 0.12 pCi/g, which would be the highest allowable concentration for Cesium-137 under the Superfund process. The upper statistical limit for local background values for Cesium-137 has been measured as 0.21 pCi/g. In this case, for Cesium-137, which as recognized above the Superfund process does not require a site to be cleaned up to levels less than background levels, the background level would become the de facto cleanup level for the Santa Susana Field Laboratory.*
- Strontium-90 - The U.S.EPA calculated Preliminary Remedial Goal for a 1×10^{-6} risk value for rural residential land use for Strontium-90 is 0.00139 pCi/g. The 1×10^{-4} risk value is 0.139 pCi/g, which would be the highest allowable concentration for Strontium-90 under the Superfund process. The upper statistical limit for local background values for Strontium-90 has been measured as 0.11 pCi/g. In this case, for Strontium-90, which as recognized above the Superfund process does not*

require a site to be cleaned up to levels less than background levels, again the background level would essentially become the cleanup level for the Santa Susana Field Laboratory.

- *Arsenic - The calculated Risk Based Screening Level for a 1×10^{-6} risk value for rural residential land use for Arsenic is 0.0016 mg/kg. The 1×10^{-4} risk value is 0.16 mg/kg, which would be the highest allowable concentration for Arsenic under the Superfund process. The upper statistical limit for background values for Arsenic for the site has been measured as 15 mg/kg. In this case, for Arsenic, which as recognized above the Superfund process does not require a site to be cleaned up to levels less than background levels, again the background level would become the cleanup level for the Santa Susana Field Laboratory.*
- *2,3,7,8 TCDD (Dioxin) - The calculated Risk Based Screening Level for a 1×10^{-6} risk value for rural residential land use for Dioxin is 4.7×10^{-9} mg/kg. The 1×10^{-4} risk value is 4.7×10^{-7} mg/kg, which would be the highest allowable concentration for Dioxin under the Superfund process. The upper statistical limit for background values for Dioxin for the site has been measured as 5×10^{-7} mg/kg. In this case, for Dioxin, which as recognized above the Superfund process does not require a site to be cleaned up to levels less than background levels, again the background level would become the cleanup level for the Santa Susana Field Laboratory.*

It is important to remember that the Superfund process requires that the risk values for all contaminants of concern at the site (both radioactive and chemical contaminants) must be added together, not viewed independently.” These are DTSC words.

While DTSC uses the information to justify “cleanup to background” it ignores the other significant piece of information regarding summing the risks. Among these four constituents, the dominant risk comes from the arsenic. In fact, it poses about 100 times greater risk than the others. It is well known that the arsenic occurs at these levels throughout the site, as well as the cesium and strontium from atmospheric weapons testing and naturally occurring dioxin resulting from fires. The flawed DTSC logic would force remediation of 10^{-4} to 10^{-6} levels of risk while leaving in place 10^{-2} levels of risk for arsenic. As I had noted in my earlier comments the DTSC logic would force lower concentration arsenic soils that had slightly above background concentrations of cesium values to be removed and replaced with other soil that could have substantially higher arsenic concentrations but still be below background cleanup limits. This practice would be even more onerous when one of the constituents requiring remediation was one with no background concentration and was limited to its detection limit without any consideration of risk. Such situations are highly likely under the draft AOC, and the AOC needs substantial revision in this regard.

In reviewing EPA Superfund Guidance documents one encounters numerous relevant passages: such as:

“It is important to note that PRGs are not intended to act as site-specific cleanup levels; rather they are intended to serve as initial guidelines for use in scoping characterization and remediation alternatives at Superfund, Federal Facilities, and RCRA sites. Final cleanup levels for a site typically would be developed by modifying the PRGs based on consideration of site specific factors (e.g., exposure frequency or acceptable cancer risk level).”

Additionally, the entire Superfund process is geared towards Risk Assessment. It is inconsistent for DTSC to selectively choose small pieces of the Superfund process to attempt to justify its position, while precluding the use of risk assessment in its regulation of the SSFL cleanup.

There are other related flaws in the AOC and they all should be corrected before there is a rush to sign. For example, the Confirmation Sampling Protocol states:

“Uranium, radium, and thorium may occur naturally at SSFL and may accumulate in drainages. In the absence of an upgradient source, methods to determine whether levels of these constituents in drainages exceed background shall be addressed in site-specific plans.”

This statement misstates the fact that these elements definitely occur naturally throughout the site as well as numerous other radiological and chemical constituents, such as cesium, strontium, arsenic and dioxin, as noted above. All of these may exhibit naturally differing background concentrations in drainage areas, and all relevant information should be given due consideration in any evaluations.

Another issue of continuing concern is “Disposal of contaminated soils” as stated in AIP, page 3.

“Soils contaminated with radioactive contaminants above local background to licensed low-level radioactive waste (LLRW) disposal site or an authorized LLRW disposal facility at a DOE site.”

Very recent evidence of the practical consequences of DTSC’s misunderstanding of criteria for accepting waste at licensed disposal facilities can be seen from the furor over the disposition of NASA’s ISRA soil containing Cs-137. Waste acceptance criteria at the receiving site do not depend on the source of the waste, but rather on the properties of the waste. How can the same soil be categorized differently as LLRW or not depending on a background level in a lookup table that is primarily determined by an arbitrary statistical criterion. If you pick a 95% confidence level it might be above background, but if you pick a 99% confidence level it might be below background. It makes no sense. Does DTSC intend to regulate all soil disposals in the state to the same criteria and force them to go to LLRW disposal sites, or does this just apply to SSFL soil. If so, why? There may be real farms in California with soil that has more Cs-137 than SSFL. Almost all soil above some local background level from any source would be radioactive waste because most soils contain some uranium.

I see several problems in the following DTSC RTC. (Volume I, page 30)

“Impacts on Habitat and Ecosystems

Several commenters expressed concern that if the cleanup of the Santa Susana Field Laboratory were to be done according to the Agreements in Principle, and to SB 990 required levels, habitat and ecosystems would be destroyed.

*Response: DTSC understands that to carry out the cleanup specified in the Agreements in Principle could result in significant removal of contaminated soils. **It is regrettable that the actions of Boeing, DOE and NASA have resulted in contamination of the site to the extent that the volumes of soil requiring cleanup may be significant. It is also regrettable that the impacts of accomplishing the necessary cleanup may also be significant. DOE and NASA will need to identify, assess and mitigate any environmental impacts that result in the course of carrying out their cleanup responsibilities.***

*DTSC also recognizes that any cleanup action to be taken must be in accordance with all federal, state and local requirements. The final Administrative Orders on Consent will establish that requirement, and all federal, state and local government agencies with jurisdiction will be consulted throughout the site characterization and cleanup process. **In addition, all plans and***

reports that will be developed in the implementation of final Administrative Orders on Consent will be made available for public review and comment.”

I have highlighted two parts of the DTSC response which are cause for great concern. The first acknowledges the possibility that **their** proposed cleanup approach based on SB990 could result in significant amounts of soil removal with significant (i.e., negative) consequences, but they take no responsibility for their part in making that happen. They call it regrettable and place all of the responsibility on Boeing, DOE and NASA. The statement that DOE and NASA need to mitigate the effects of this is ludicrous, because the only way to accomplish that would be to perform less of the non-beneficial remediation forced by DTSC. The second would have us believe that by submitting plans and reports for public review and comment they would actually be responsive to valid substantive comments. Their actions regarding the AIP comments demonstrate exactly the opposite. They are unresponsive to anything other than political influence.

Comments on the Review Process

It is discouraging to have submitted detailed substantive comments and to have them all ignored or deferred. It is more disconcerting to read statements as seen in the Ventura County Star on October 28, 2010:

“It doesn’t make sense to me, after such tremendous public support, why would there be another delay,” said Cindi Gortner of Oak Park. “It doesn’t seem justified. I am, and my family is, certainly thrilled it’s so close and we are excited about getting it signed on Dec. 6.”

In statement released Thursday, state Sen. Fran Pavely, D-Agoura Hills, said she was pleased to learn there is final legal language for an enforceable cleanup agreement, “although I am deeply disappointed that the DOE is demanding that it be circulated for yet another round of public comments on the legal details.”

It would appear as if large numbers of identical non-substantive comments from areas that have not been directly impacted by past SSFL activities and which will not be impacted by future SSFL cleanup activities can be taken as tremendous public support, while substantive detailed comments are ignored and left unresolved. It is also very strange when an elected official wants to truncate public comments on a very important issue, particularly when the details have not been worked out. The credibility of DTSC as an objective regulator is already in doubt and continuing political interference will only diminish it further.

My final concern invokes the concept of Environmental Justice. While none of the communities involved in the SSFL cleanup can be considered disadvantaged or minority, as they are all predominantly middle or upper middle-class, Environmental Justice seems to apply here. The environmental consequences of any SSFL remediation and soil transportation activities would fall almost entirely on the Woolsey Canyon-West Hills areas and these are the areas from which most of the negative comments about the AOC arise. Conversely, most of the “tremendous public support” comes from communities far removed from any environmental impacts from either the prior operation or possible future SSFL remediation. They and California elected officials, led by a non-community activist from Santa Cruz, appear to be disproportionally influencing DTSC decisions, to the detriment of the communities that will be impacted. Justice demands that impacted communities be heard and protected.

A delay of several months beyond the “rush to sign” date of December 6, 2010 is certainly in order, to resolve these and other substantive comments. The close of the comment period is November 22, 2010 and the allotted time is clearly insufficient for any substantive discussions and changes. The DTSC comment process is sham, and there is no intent to change anything.

Thank you,

A handwritten signature in cursive script, appearing to read 'A. Weitzberg'.

Abraham Weitzberg

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