



Department of
Toxic Substances
Control

*Preventing
environmental
damage from
hazardous waste,
and restoring
contaminated
sites for all
Californians.*



State of California



California
Environmental
Protection Agency

Fact Sheet, December 2006 (March 2007 Revision)

DTSC Responds to Questions/ Concerns from the August 31, 2006 Public Meeting on the Santa Susana Field Laboratory

Introduction

On August 31, 2006, the Department of Toxic Substances Control (DTSC) held a public meeting in Simi Valley to discuss its work on the Area I Burn Pit and related work at the Santa Susana Field Laboratory (SSFL). During that meeting, community members raised a number of issues indicating a lack of trust in the investigation of the property, and in DTSC's decision-making and public involvement process.

Since then, DTSC staff members have met with community leaders and representatives of state legislators to discuss how to establish a more effective and productive relationship between the community and DTSC. These meetings yielded a number of ideas including changes to DTSC's oversight team, a community advisory group, open access to documents and information, enforcement concepts, communication, and an open process for making decisions related to the investigation and cleanup of the SSFL site. DTSC appreciates the time and input these community leaders provided.

Currently, DTSC is discussing these ideas internally and with community leaders in an effort to enhance access to information and build a partnership with the community in addressing this project. Many of the concepts – such as the development of a well-organized and comprehensive Website – can be completed in a relatively short period. Establishing trust in DTSC's decision-making process will take more time. However, DTSC is committed to that goal. Shortly after the New Year, DTSC plans to communicate specific changes we will put into place.

Documents and information related to this project will continue to be posted on our Website and made available to the public. Decisions related to these documents will be made in an open public process and after careful consideration of public comment.

New Documents Available on DTSC Website

DTSC has received the first in a series of 10 investigation reports on what chemicals have been found on the SSFL site. They are called Resource Conservation and Recovery Act Facility Investigation Reports (RFI) Reports. We are making them available to the public in electronic format as we receive them. As we proceed with our review, we will be seeking public input, before any final approval. To view the first report, the draft RFI Report for Group 6, Area IV, please go to www.dtsc.ca.gov/hot_topics/santa_susana_field_laboratory/project_related_documents. For questions, contact Nathan Schumacher (please see contact information on the last page).



The following is a summary of DTSC's responses to the questions and comments from the meeting on August 31, 2006, related to site investigation and cleanup activities at the site. Comments and questions reflected here are paraphrased, and are not intended to be a verbatim account of all questions and comments.

Background

In July, 2006, DTSC announced the availability of a draft Interim Measures Work Plan for public review and comment. The plan proposed to excavate and remove soil from three areas in the Area I Burn Pit where elevated levels of dioxin and chromium were measured and to collect additional soil samples to assist in determining the extent and type of contamination remaining in the Area I Burn Pit.

The plan was submitted at DTSC's direction to remove contaminated soil before the rainy season to reduce the possibility for rainwater to carry contaminants away from the Area I Burn Pit and potentially off of the SSFL property. Because the Topanga fires of 2005 had destroyed vegetation on the site, the potential for rainwater runoff was higher than normal.

DTSC announced the availability of the plan and proposed a 15-day public comment period, hoping to be able to approve the plan and direct Boeing to implement the work prior to the upcoming rainy season. In response to public concerns, DTSC agreed to extend the public comment period to 30 days and hold a public hearing to receive public comments.

During the extended comment period, a member of the public provided DTSC with historical information regarding wastes handled at the Area I Burn Pit. In that same time period, Boeing provided DTSC with additional historical disposal records that had not previously been disclosed, despite DTSC requests for this information. The newly discovered and disclosed documents indicated that wastes from **SSFL Area IV and other Southern California Rocketdyne locations** had been disposed at the Area I Burn Pit. Some of these documents were unclear as to the type of the waste disposed in Area I. Because radiological operations were conducted at Area IV and other off-site facilities and they were identified as sources for some waste, and because this information contradicted Boeing's representations that all waste treated at the Area I Burn Pit was solely from rocket testing

areas at Santa Susana Field Laboratory, DTSC halted its review of the Interim Measures Work Plan, and cancelled the planned hearing and comment period. Because the date was already scheduled, DTSC proceeded with holding a public meeting on August 31 to present information on the Area I Burn Pit and to provide the public with an opportunity to ask questions and express concerns.

Questions/Comments:

1. How could DTSC proceed with Area I work without all the historical documents that showed what was burned there?

DTSC was proceeding based in part on Boeing's representations of the site's history and information directly gathered from the site, and in part based on its desire to see high levels of contamination removed to reduce or eliminate the movement of contaminants from the area in the upcoming rainy season. Because the plan did not represent a complete or final cleanup action, DTSC did not believe that a full site characterization was necessary. DTSC expected that the remaining investigation would be performed later, after the immediate concerns had been addressed.

As indicated above, Boeing represented that all wastes treated at the Area I Burn Pit were from rocket testing areas at the Santa Susana Field Laboratory. Sampling and analytical efforts in the Area I Burn Pit were guided by this understanding. Prior to the draft work plan being developed, over 250 soil and sediment samples were taken from the Area I Burn Pit and analyzed for both a broad spectrum of chemicals as well as focused on those most likely to be present based on representations of the site's history. The samples collected indicated that there were elevated concentrations of both dioxins and chromium, and that these were predominantly found in three areas.

Based on the history and sampling results, the goal of the Interim Measures Work Plan was to excavate and remove soil from the areas with high concentrations of dioxin and chromium. A secondary goal of the plan was to gather more samples to more fully characterize the entire Area I Burn Pit and some adjacent areas to provide a better understanding of contaminants present and their extent, as a basis for planning next steps.

In a quick scan of the newly acquired historical information, DTSC learned that waste from Area 4 and from other locations outside of SSFL may have also been disposed in Area I. This new information was not consistent with some of DTSC's earlier assumptions about the contamination at the Area I Burn Pit. In particular, the new information indicated a possibility of the presence of radioactive materials. This, in turn, called into question whether all contaminants of concern had been identified. The review of the Interim Measures plan was halted until this new information could be reviewed and the history of the site better understood.

2. What is the Area I Burn Pit, and what did Rocketdyne burn or dispose of there? What chemicals are left behind there? Was radioactive waste burned there?

DTSC is still evaluating the inventory list of chemicals and related historical documents provided to DTSC in August. There are more than 700 pages of records submitted in August (available on DTSC's Internet Website at http://www.dtsc.ca.gov/SiteCleanup/Projects/Santa_Susana.cfm). DTSC also received additional historical documents from Boeing on October 25. These are also posted on the Website. So far, most of the information in these documents is consistent with what previously had been represented about the disposal activities in Area I, with the major exception that Area I received wastes from Area IV and from off-site. The primary concern that this raises is not only that other contaminants may also be present, but the possibility that radioactive wastes may also have been treated or disposed in Area I. While we have found no indication in any of the documents showing that radioactive waste was actually disposed of at Area I Burn Pit, our review is not yet complete.

Significantly, the historical documents now available make clear that the waste management history of this site was not fully documented and, therefore, it was not completely described in DTSC's original work plan for the soil removal. Complex sites such as SSFL, with a history that spans so many years and so many site activities, may never be fully documented. This is not an insurmountable hurdle, but it does mean that unknowns must be factored in when workplans are developed.

3. What will DTSC do this winter to stabilize the Area I Burn Pit so that rainwater run on and run off will not carry chemicals into the drainage?

DTSC required Boeing to take actions prior to the rainy season to control rain water run on and run off in areas that have the highest levels of contaminants. These actions include installation of low lying fabric fencing (about three feet high), sandbag barriers, heavy sheeting, and fiber rolls. Heavy sheeting anchored with sandbags will cover the dioxin-contaminated areas. In addition, DTSC has ordered Boeing to monitor and maintain these measures throughout the winter season to ensure that they are in place and performing as intended.

Boeing completed installation of these control measures on October 27, 2006 and DTSC inspected them in a site visit on November 16, 2006. We will continue to evaluate these measures to make sure that they continue to provide adequate erosion control and the necessary stabilization for the contaminated soil.

4. How did DTSC establish the cleanup levels for dioxin and chromium for the Area I Burn Pit for the Interim Measures Work Plan?

The goals included in the Interim Measures Work Plan were intended as performance measures that, in addition to winterization methods, DTSC believes would have greatly reduced or eliminated the migration of contaminants from the site. After the new Area I Burn Pit RCRA Facility Investigation (RFI) (under the RFI for Group 1B) that further characterizes the Area I Burn Pit is approved, the final cleanup levels for chemicals will be established.

DTSC proposed an interim cleanup goal for dioxin (13.1 parts per trillion) at the Area I Burn Pit based on United States Environmental Protection Agency guidelines that are protective of human health and the environment.

DTSC proposed an interim cleanup goal for chromium (185 parts per million) which is more stringent than the United States Environmental Protection Agency preliminary remediation goals (site screening guidelines) at the Area I Burn Pit. This interim goal is not a final cleanup standard for chromium. We will do a risk assessment to determine a final cleanup standard.

5. Why did DTSC originally propose a California Environmental Quality Act Notice of Exemption for the Interim Measures Work Plan at the Area I Burn Pit?

We believed that the use of an exemption was appropriate based on Boeing's representations of the site history, the initial field work, and the scope and goals of the Interim Measures Work Plan. The original proposal was to remove soil contaminated with dioxin and chromium for off-site disposal as hazardous waste. We also believed the work to be time-sensitive. The goal was to complete the work before the rainy season in order to limit run off of contamination in the surface water. Similar scale removal actions have not resulted in significant environmental effects if done with all the controls in place. Thus, a Notice of Exemption (NOE) was proposed.

Given the new information DTSC received from Boeing and the public (please see the Area I Burn Pit Background section), we decided to postpone going forward with the proposed Interim Measures Work Plan including the NOE. Based on the new information, the prior project description is no longer accurate and we agree that the proposed NOE is not adequate for an area that may have unknown contaminants present.

6. Has DTSC done an investigation of the groundwater underneath the Area 1 Burn Pit?

Groundwater beneath the Area 1 Burn Pit is being investigated as part of the ongoing site-wide groundwater investigation effort as well as the Area 1 RFI. There are 11 wells in this area that are routinely monitored and sampled for releases from Area I Burn Pit and other areas of concern. Contaminants have been identified in those wells that may be related to the Area I Burn Pit. We will continue to gather additional information and the contamination in groundwater beneath Area I Burn Pit will be addressed as part of the final RFI Report on the investigation results and the overall groundwater remedy.

7. Why did Boeing submit documents so late in the process? What legal means does DTSC have to require documents from Boeing? Will DTSC take legal action against Boeing for failing to provide documents on what was burned there or failing to provide all historical documents requested?

DTSC is unsure why Boeing did not provide the historical documents earlier. We requested the information through verbal communications with Boeing months prior. After the initial set of historical information was provided in late August, DTSC issued a letter to Boeing on August 30, 2006 requiring, among other things, the submittal of all historical documents for the Area I Burn Pit. In addition, in a letter dated September 29, 2006, DTSC directed Boeing to submit historical records and documents specified for each of the areas under investigation, facility wide. With their submittal, Boeing must certify under penalty of law that the information provided meets DTSC requirements. Both letters from DTSC are posted on the DTSC Website. We are in the process of reviewing the latest documents produced by Boeing and we will evaluate our legal enforcement options for any outstanding documents.

8. Why did DTSC not require a RCRA (Resource Conservation and Recovery Act) Cap (synthetic) for the Area IV where the Former Sodium Burn Pit was located? The clay soil cover is not preventing rain from infiltrating and spreading contaminants already known to be in the bedrock below.

In 1999, DTSC directed Boeing to remove soils contaminated with dioxin, PCBs, solvents and other waste at the Former Sodium Disposal Facility (FSDF) also known as the Former Sodium Burn Pit. The contamination in the soil was a source for potential migration to surrounding areas and to groundwater below. In 2000, more than 14,000 cubic yards of contaminated soils were removed down to the bedrock below. Although removal of the soil eliminated new contaminants from migrating into the bedrock and groundwater, contaminants already in the bedrock and groundwater would remain there, at least until a final remedy can be developed. The concern at the time was that rainfall would infiltrate and drive contaminants in the bedrock and groundwater deeper. To address this

concern about rainwater infiltration and contaminant migration, DTSC directed Boeing to cap the area. The options considered at the time were both a synthetic RCRA cap (i.e., one that met the design and performance standards for a permanent cap), and a cap of compacted clay. The primary factor being considered was how well either cap would perform. Cost was also considered, as was the permanence of the cap in light of the rest of the remedy.

DTSC ultimately approved the installation of a compacted clay cap as a temporary measure. The clay was compacted to increase its density and decrease its permeability. To measure the clay cap's performance, instrumentation to measure water infiltration was installed in the cap (pan lysimeters and other instruments). DTSC has been monitoring the amount of infiltration as measured in the pan lysimeters over the past 5 years and considers the small amount of infiltration indicative that the cap is performing well. Because the source of contamination has been removed, DTSC does not believe the amount of water infiltrating the cap significantly propels the contaminants in bedrock and groundwater.

As stated above, the compacted clay cap was intended as an interim measure only, not a final remedy. The required effectiveness of a cap on this area will be evaluated in combination with the final groundwater remedy in determining a final overall remedy for this area. DTSC welcomes public input as we continue to investigate this area and the groundwater beneath the site, and as we consider options for a final remedy.

In the interim, DTSC will continue to monitor the compacted clay cap's effectiveness and will share any results from the monitoring as they are available.

DTSC is aware that a portion of the Report of the SSFL Advisory Panel includes an analysis of the clay cap's performance by William C. Bianchi, Ph.D. Dr. Bianchi has raised a number of issues regarding the cap, its performance, and potential impacts. We appreciate Dr. Bianchi's analysis and review, and plan to contact him to discuss his observations and concerns more fully.

9. We understand that Boeing filters all groundwater samples. Does DTSC require Boeing to analyze the filtered material from groundwater samples?

DTSC should not filter groundwater samples at all, but if they do, the filters should be analyzed.

Most of the groundwater samples collected at SSFL are unfiltered. However, groundwater samples collected for metals and radiological constituents are filtered during the collection process. (Note: sample preparation and preservation techniques for radiological constituents are exclusively under control of the Department of Energy because DTSC does not have the authority to regulate radiological waste.)

DTSC has approved the filtering of groundwater when sampling for metals for site characterization purposes when the groundwater naturally contains a high concentration of dissolved and suspended solids (it will appear cloudy). This cloudiness in the water can have a profound effect on reported metal concentrations. This, in turn, makes it more difficult to distinguish between what occurs naturally in groundwater and what results from contamination at the site.

The groundwater characterization activities at portions of the site are nearing completion and work is beginning to assess the current and future risk associated with the site conditions. The data quality objectives during the risk assessment are different than the objectives for characterization. To meet the data quality objectives for assessing exposure risks, DTSC will require Boeing to begin collecting *both filtered and unfiltered groundwater metal data*.

10. A resident reported riding her bicycle onto Area IV of the Lab's property. Is the Santa Susana Field Laboratory secure?

In response to the resident's statement of concern regarding access to the site, DTSC staff went to SSFL to investigate on September 14, 2006. Although there are many publicly accessible roads around SSFL, barriers have been installed to prevent unauthorized entry into SSFL. DTSC and other regulatory agencies require Boeing, NASA and DOE to provide adequate security to prevent entry, and minimize the possibility for the unauthorized entry of persons onto the active portions of the facility, including SSFL Areas I, II, III and IV. To satisfy this requirement, Boeing has installed locked gates and fencing at each of the dirt roads leading into SSFL, and has a manned security station at the Main Gate. Fencing is present around active areas of the facility as well.

During the September 14, 2006 visit, DTSC staff specifically inspected and verified the security at each entry point into SSFL. DTSC found all of these points provided adequate barriers and they were all in good working order. However, DTSC realizes that these roads outside of the SSFL facility are publicly accessible and it is possible for a person to walk or bike up to many of the security gates without gaining access to the property.

11. What are the health risks from Simi Valley drinking water? Is there any chemical or radiological contamination in our drinking water?

In Simi Valley, the majority of the drinking water (about 85%) supplied to residents comes from Northern California. Two water supply wells located in Simi Valley (accounting for about 15% of the residential water use) are tested regularly. Golden State Water Company, the owners of these wells, in their most recent tests have found no radiation present or chemicals above state levels of concern. In Simi Valley, all drinking water is tested regularly. Since the community is drinking unpolluted water, there are no health effects to Simi Valley residents from their drinking water.

If you have questions about your drinking water, please contact the appropriate water agency person

listed below:

For Eastern Simi Valley, please call John Brady, Golden State Water Company, (800) 999-4033, or go to www.aswater.com and click on their company links, click on the GSWC regional offices, click on the region one headquarters, and then click on the water quality link to review their water quality reports for Simi Valley.

For Central and Western Simi Valley, please call Bobby Wheeler, Simi Valley Public Works (805) 583-6408.

For unincorporated areas (outside of the city of Los Angeles) of West Hills, Chatsworth, Agoura, Agoura Hills, Calabasas, Hidden Hills, Westlake Village, please call Ken Reed, Las Virgenes Metropolitan Water District, (818) 251-2218.

For incorporated areas (in the city of Los Angeles), please call the Water Quality Section, Los Angeles Department of Water and Power, (213) 367-3182.

For Bell Canyon, please call Al Sexton, Ventura County Water and Sanitation, (805) 378-1168.

For Oak Park, please call Lorie, Oak Park Water Service at (800) 613-0901.

12. My child has been diagnosed with retinoblastoma and at least nine other children have the same condition. Is this rare condition connected to SSFL contamination? DTSC needs to take action to prevent exposures to any chemicals from SSFL that may cause risk to our communities.

DTSC staff members who attended the August 31 public meeting were deeply touched by the statements from the parents who informed us of their and other children's diagnosis of retinoblastoma. We understand their concern with any possible links to exposure from SSFL releases. Epidemiology is not an area in which we have specific expertise.

In regard to preventing exposure to SSFL chemicals, DTSC agrees that any possible off-site exposure from SSFL should be addressed. Our approach is to focus our efforts on on-site sources where we have established elevated levels of chemicals do exist, to ensure

they do not migrate off-site. DTSC agrees that migration of any identified chemicals from SSFL should be investigated and cleaned up.

13. There is a high rate of cancer all around SSFL. Independent studies show this. When will DTSC take action to protect communities from exposure to cancer causing chemicals?

DTSC is aware of the UCLA studies. The first one to be released entitled “The Potential for Offsite Exposures Associated with Santa Susana Field Laboratory, Ventura County, California” by Dr. Yoram Cohen is a study of exposure pathways from SSFL. It does not address cancer incidence. We are in the process of reviewing it since its release in September, 2006. We are also awaiting a related UCLA study on cancer incidence by Dr. Hal Morgenstern which has yet to be released. We have reviewed other studies which indicate no excessive cancer risk. We are also reviewing the Report of the Santa Susana Field Laboratory Advisory Panel. The thrust of that report is on potential radiological exposures from the facility, which is not within DTSC jurisdiction, although it does raise concern with chemical contamination as well. There are additional studies that have been conducted that we have also received and reviewed.

DTSC appreciates the work of Drs. Cohen and Morgenstern, as well as those who contributed to the report of the Advisory Panel and others who have studied the health of residents in the area surrounding SSFL. We welcome additional scientific information such as this and will work diligently to study chemical contamination at the site and determine if it has migrated from the site.

14. Is DTSC going to investigate off-site contamination in the Runkle Canyon area of Simi Valley? Will DTSC investigate other communities which may have been exposed to chemicals from SSFL?

DTSC understands that people living near SSFL are concerned about the potential for exposure. The City of Simi Valley has requested that the U.S. Environmental Protection Agency, Department of Health Services, and DTSC provide technical assistance on the KB Homes Runkle Canyon development project. The agencies are coordinating with the city to determine how to best provide assistance.

In September, 2006, DTSC staff met with two Mountain View Mobile Home residents to survey the Mobile Home Park in response to concerns they have about their proximity to the Santa Susana Field Laboratory. DTSC staff is in the process of writing a sampling work plan. The sampling goal will be to determine if there is any potential contamination from Santa Susana Field Lab in any of the groundwater, surface water or soil at Mountain View Mobile Home Park. DTSC’s charge is to find residual contamination that can pose ongoing exposure and risk to residents or workers. Historical airborne releases may or may not have left behind residual contamination.

Contacts for Information

DTSC invites continuing dialogue with community members. If you have questions that have not been addressed in this fact sheet or need further clarification, please contact:

Nathan Schumacher, Public Participation Specialist at toll free at 866-495-5651 or e-mail: nschumac@dtsc.ca.gov;

Larry Woodson, Public Participation Supervisor at 916-255-3648 or e-mail: lwoodson@dtsc.ca.gov.

Media inquiries should be directed to Jeanne Garcia, Public Information Officer at 818-551-2176 or e-mail: jgarcia1@dtsc.ca.gov.

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ARE YOU ON DTSC's MAILING LIST?

If you would like to be on the Santa Susana Field Laboratory mailing list,
please fill out the information below and mail back to:
Nathan Schumacher, DTSC, 8800 Cal Center Drive, Sacramento CA 95826:

Please print name and address clearly

Name: _____

Address: _____

City/State/Zip: _____

Phone: _____ Fax: _____ E-mail: _____

Please take me off the mailing list.

Note: While the mailing list is solely for DTSC use, the list is considered a public record.

Notice to Hearing Impaired

You can obtain additional information by using the California State Relay Service at:
1-888-877-5378 (TDD).

Please ask them to contact Nathan Schumacher, DTSC, at (916) 255-3650 regarding Santa Susana Field
Laboratory.