



# Radiological Studies at the Santa Susana Field Laboratory

# Community Involvement Plan

## Introduction

The U.S. Environmental Protection Agency (EPA) recognizes that the general public needs to be informed and involved in the government activities that affect their lives. EPA's experience has been that when the public is involved in its work, the process results in a better product and more community acceptance of EPA's conclusions.

For the Santa Susana Field Laboratory (SSFL), EPA's Community Involvement Program will help the public participate throughout the assessment process for both the Radiological Background Study and the Radiological Study of SSFL Area IV. (See map of the Area IV Study Area in Appendix J). This Community Involvement Plan (CIP) organizes EPA's public participation efforts. It is based on a series of community interviews conducted with the residents of the towns surrounding the facility, elected officials and other stakeholders, combined with EPA's CIP guidance.

A significant number of the community's comments related to the preparation for and the conduct of the site cleanup activities. It is important to note that while EPA is interested in understanding those community concerns, EPA will not be making the remedy decisions or conducting the cleanup. Decision-making authority and oversight of site cleanup belong exclusively to the State of California through its Department of Toxic Substances Control (DTSC).

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The goals of EPA's Community Involvement Program are to:

1. Provide opportunities for the public to become actively involved
2. Meet the community's information needs
3. Incorporate issues and concerns into the assessment
4. Give feedback to the public on how their issues and concerns were incorporated into EPA's work

EPA will achieve these goals through various means, including published documents, public meetings, and direct contacts. The content of the public participation activities will be based on the knowledge of the community gained through direct contact.

It should be noted that previous activities conducted at SSFL led to both chemical and radiological contamination; however, for the purpose of the EPA studies and this CIP, only radiological contaminants will be addressed.

### CIP Organization

The purpose of the CIP is not to provide technical answers to the community's questions, but to show how, when and where EPA will provide the information the public needs to understand EPA's work, and to show how stakeholders can be actively involved in the assessment process.

Chapter One of the CIP identifies the issues and concerns raised during the community interviews.

Chapter Two formally presents EPA's Action Plan for educating and involving the community about their issues and concerns through various activities. The Plan relies on the tools and techniques that EPA has developed over the years, but has the flexibility to add site-specific activities as circumstances dictate. EPA's official guidance for Community Involvement is available on the Internet at [http://www.epa.gov/superfund/community/cag/pdfs/ci\\_handbook.pdf](http://www.epa.gov/superfund/community/cag/pdfs/ci_handbook.pdf).

Chapter Three charts EPA's preliminary schedules for the investigations. Where appropriate, it lists potential community involvement activities.

The CIP concludes with a series of appendices that provide additional information: a site description and history, an overview of recent EPA involvement at SSFL, a community profile, a history of community involvement, the questionnaire used for the EPA's community interviews, community resources and contacts, media contacts, a list of potential public meeting locations, Information Repository locations, site maps, prior EPA fact sheets, a list of acronyms, and a glossary.

## CHAPTER ONE

### Community Issues and Concerns

To better understand the issues and concerns of communities affected by SSFL activities, EPA conducted a number of stakeholder interviews. EPA interviewed local residents, property owners, activists, representatives from state and federal agencies, and government officials. Each interview consisted of approximately 20 questions and covered many different topics associated with SSFL. The questionnaire used for these community interviews is presented in Appendix E.

Over the course of approximately 40 community interviews, residents and other stakeholders expressed a wide range of issues and concerns. Their responses showed a high level of knowledge about the site history, and about EPA's activities.

The interview responses were grouped into four categories: 1) Contamination and Assessment Concerns, 2) Human Health and Safety Concerns, 3) Cleanup and Oversight Activity Concerns, and 4) Communications, Education and Public Involvement Concerns.

#### *Contamination and Assessment Concerns*

Most of those interviewed expressed a desire for a thorough and well-documented radiological assessment of both background levels and SSFL Area IV, with a transparent public participation process. Most are aware of some level of radiological contamination, although some dispute that current levels pose a health threat. Many wished for EPA to expand its radiological survey to cover all of SSFL, not just Area IV.

The biggest concern regarding contaminants was their potential movement from the site due to wind dispersion (including wildfires) and surface water runoff.

Deposition of contamination on land, either within the SSFL boundary or in the surrounding residential communities, was a key issue. Bell Canyon and Runkle Canyon, plus ongoing farming at Orcutt Ranch, were cited as areas of concern. This issue included: 1) releases during the facility's operations, 2) disposal during the facility's interim cleanup actions, 3) future contamination during the final cleanup work, and 4) the migration of contaminants.

A number of people wanted EPA's radiological assessment (the sampling and evaluation) to be conducted as a fresh start. There were concerns that stories of past sampling flaws (e.g., the filtering of water samples which might reduce recorded levels, etc.) coupled with the potential conflict of interest with the owner/operator evaluating their own work, rendered prior information concerning the nature and extent of radiological contamination suspect.

People wanted a thorough explanation of the sampling process, including the media being tested, the depth in soil, the instrumentation sensitivity, who would conduct and oversee the sampling, the suite of radiological constituents being tested, and which air and groundwater model would be used.

In particular, they wanted to know if EPA would look for contamination beyond the boundary limitations of Area IV and the northern buffer zone.

The radiological background study raised some issues. These respondents were concerned that the samples might be taken too close to the SSFL facility, thus being impacted by site operations and showing a higher level of radiation than true background. The respondents were concerned that setting higher levels than true background could negatively impact a complete cleanup, thereby resulting in some of the facility's waste remaining onsite. Background sampling locations and general site boundary maps are presented in Appendix J.

A number of people asked that EPA be particularly mindful of cultural resources (e.g., Native American artifacts, American history) and endangered or sensitive species as it conducted its sampling effort.

In developing the assessment protocols/methods, many wanted EPA to be sure that the data it collected and the analysis performed would support the future cleanup to the requirements of Senate Bill 990 (SB990).

#### Human Health and Safety Concerns

Most of those interviewed were concerned about human health. This included concerns for former workers, and past and current residents who live near the site. People wanted to know if the site was safe and if their neighborhoods were safe.

More than one resident believed that their family's cancer and/or other health effects resulted from the migration of radiological contamination from the site.

Some were aware of studies concluding that there were higher rates of cancer among site workers and nearby residents, including one particular situation where an unusual childhood cancer (retinoblastoma, i.e., cancer of the eye) had been concentrated.

Some people expressed concerns about radiological contamination of drinking water from wells and of water supplied by some water purveyors. Those expressing this concern believe that some purveyors mix amounts of radiological-impacted water with waters imported from afar.

Some people thought that past health studies were incomplete. A number of respondents suggested that an epidemiological study would be appropriate.

Some expressed concerns about protecting the health of workers cleaning up the site.

Some wanted to know if the site is currently safe or if it can be made safe without endangering people or cultural/historic resources during the cleanup process.

#### Cleanup and Oversight Activity Concerns

Although EPA will not be selecting the remedy or conducting site cleanup, the community's responses during the interviews inevitably lead to issues and concerns about cleanup decisions.

The community wanted transparency in the cleanup process, with efforts made to ensure that people understood such aspects as background radiation levels, the timeline of events, the roles and responsibilities of the regulatory agencies and the federal responsible parties, and the cleanup requirements of SB990.

Many commented that they wanted the cleanup to be scientifically credible while preserving cultural, historical and biological resources, and a number wanted the cleanup to be to the standards of SB990.

A number of people expressed concern about the potential mobilization of contaminants during the cleanup process, particularly from dust. Some wanted to know if the cleanup process would be disruptive to their lives (such as any potential truck movement on neighborhood streets).

Some people are distrustful of the owners/operators at SSFL. Many wanted assurances that EPA's assessment work and DTSC's decisions about the upcoming cleanup work will be independent of the responsible parties.

A few expressed a lack of confidence in the ability of the regulatory agencies to effectively collaborate. Some were concerned about the State's liability if the site was not cleaned up properly and the State assumed ownership of the land. Others felt that the government was protecting the responsible parties more than the community.

Some were concerned about the potential impact of delays during DTSC's site investigations or EPA's radiological assessment because it might result in missing DTSC's 2017 goal for the completion of the overall site cleanup.

There has been significant political support for the cleanup of SSFL, and some of those interviewed expressed concern that the political interest might change with term limits or with potential redistricting.

#### *Communications, Education and Public Involvement Issues*

Some operations at the SSFL were shrouded in Cold War secrecy for decades. The resulting distrust generated by the later admission of accidents and releases of various contaminants, plus disputed sampling protocols and published results, concerns over missing records, the completeness of records and the release of records, have all contributed to a public desire for transparency in EPA's radiological assessment process.

Some of those interviewed asked for better coordination of information and activities. Others wanted simple/clear explanations of site activity and cleanup (definitions/acronyms, basic radiation science). They wanted data quantified in lay terminology. They wanted to know more about potential health risks from the radiological contamination.

Given that some are suspicious of information from the responsible parties, they asked for an open dialogue with EPA, with timely but balanced communication on EPA's plans and progress that is expressed in a forthright manner.

Some recommended that EPA use staff that is both technically skilled and good communicators, which would help EPA resist pressures from all perspectives on the issue.

Many believe that most of those who live in the communities around the site are not aware of its history or its level of contamination. They want EPA to do more to increase community awareness so that more people can be involved in the cleanup process.

A number of people asked for improvements in EPA's web site and information repositories. A number of interviewees reported difficulties finding documents in the libraries (where the information repositories are located), or noted a problem with the volume and complexity of the environmental documents. There was a request that all of EPA's site-related documents be put on its web site. The locations of the Information Repositories are identified in Appendix I.

Some also said that the web site needed to be better advertised. Others wanted updates through e-mail lists rather than by hard copy.

The SSFL Interagency Workgroup has been in existence for nearly 20 years and is a significant source of information for many community members. A number asked for improvements in the SSFL Interagency Workgroup, including a summary of action items and follow-up. Many in the community asked that EPA's radiological expert attend Workgroup meetings to answer technical questions.

An overall finding of the community interview process was that EPA must maintain an open dialogue with the public with timely but balanced communications on EPA's plans and progress that are expressed in a forthright manner.

## CHAPTER TWO

### Community Involvement Action Plan

This section describes the specific activities and resources that EPA will use to communicate with and educate the community as well as help them become actively involved in the two Radiological Studies.

Whenever EPA begins work on a site, it identifies at least one point of contact for community questions, issues or concerns. The principal EPA points of contact and their project responsibilities are listed below.

EPA PROJECT MANAGER NAME	CONTACT INFORMATION	PROJECT RESPONSIBILITIES
Craig Cooper	SFD-8-1 75 Hawthorne St. San Francisco, CA 94105 415-947-4148 (office) 415-947-3520 (fax) <a href="mailto:cooper.craig@epa.gov">cooper.craig@epa.gov</a>	Historical Site Assessment & Area IV Soil Testing
Nicole Moutoux	SFD8-1 75 Hawthorne St. San Francisco, CA 94105 415-972-3012 (office) 415-947- 3520(fax) <a href="mailto:moutoux.nicole@epa.gov">moutoux.nicole@epa.gov</a>	Background Study & Area IV Water Testing
Mary Aycock	SFD-8-1 75 Hawthorne St. San Francisco, CA 94105 415-972-3289 (office) 415-947-3520 (fax) <a href="mailto:aycock.mary@epa.gov">aycock.mary@epa.gov</a>	Area IV Gamma Scanning & Onsite Operations and Logistics
David Cooper	SFD-6-3 75 Hawthorne St San Francisco, CA 94105 415-972-3245 (office) 415-947-3528 (fax) <a href="mailto:cooper.david@epa.gov">cooper.david@epa.gov</a>	Community Involvement Coordination

All can also be reached through EPA's toll-free message line at 800-231-3075. EPA routes all 800-line messages to the appropriate EPA staff person, typically the Project Manager or Community Involvement Coordinator.

In addition to providing an EPA representative to answer questions, EPA employs many tools and techniques to support the community's involvement in EPA's work.

#### **1. Fact Sheets, Hand-outs and Flyers**

Fact Sheets are EPA's principal method of providing site-related information to the community. They are short (2-4 page) documents, written in non-technical language, that are mailed directly to those on the site mailing list. They often summarize larger, technical documents or announce community meetings. They include EPA contact information as well as the internet and library location of various technical documents. EPA will create fact sheets to announce upcoming EPA community meetings as events dictate or in response to community requests for specific kinds of information.

Flyers are 1-2 page notices that are sometimes posted on community bulletin boards or are sent to the mailing list. Handouts provide supplemental information, for example at community meetings. Some are posted to EPA's website.

#### **2. Community Meetings**

EPA holds public meetings at various milestones and at the request of the community. The public meetings are organized to convey site information via presentations, poster boards and discussions, and to answer questions from community members. These community meetings may also be held to discuss multiple documents or activities.

#### **3. SSFL Interagency Workgroup Meetings**

The Interagency Workgroup is a stakeholder forum consisting of representatives from various regulatory agencies, community members, community organizations, elected officials, and some of the Responsible Parties. The Workgroup meets roughly quarterly to hear information on a wide variety of topics associated with the remediation of SSFL, including those from EPA on the radiological studies.

#### **4. Web Site**

EPA has created a website specifically for this Site. The website includes electronic copies of EPA's investigation documents. EPA will update the webpage on a regular basis. Please visit the website at: <http://www.epa.gov/region09/SantaSusana>. *(Please note the web site address is case sensitive.)*

#### **5. Electronic Newsletter**

EPA will create and disseminate a quarterly electronic newsletter providing project status updates, news about upcoming work, and accomplishments. To receive this quarterly e-newsletter, please contact David Cooper to have your e-mail address added to the subscription list. Your e-mail address will not be identified when the e-newsletter is distributed and will not be shared with others.

## 6. Information Repository

EPA maintains a local public site file, which is called the Information Repository (IR). The IR contains printed copies of major site documents, fact sheets and other relevant items. The IR locations are found in Appendix I of this CIP.

## 7. Mailing List

EPA maintains a mailing list for distribution of fact sheets and meeting notices. To be added or deleted from the mailing list, contact David Cooper, Community Involvement Coordinator.

## 8. Stakeholder Technical Workgroup

On an as-needed basis, EPA establishes small Stakeholder Technical Workgroup meetings with the express purpose of providing EPA with advance input during the development of the investigation work plans and investigation data reports. For example, a Stakeholder Technical Workgroup has been meeting at DTSC offices on an ad hoc basis to discuss the radiological background study.

## 9. Public Notices

For those who are not on the site mailing list, EPA will announce community meetings in a display advertisement in the main section of local newspapers. A list of newspapers is presented in Appendix G.

## 10. Press Releases/Media Contacts

At some milestones during EPA radiological studies, EPA will provide press releases and develop media contacts with the following newspapers: *Los Angeles Daily News*, *Ventura County Star*, and *Simi Valley Acorn*.

## 11. Technical Documents

Most of the people EPA interviewed had environmental and health concerns. They wanted to know if the air, soil, surface water and/or groundwater were radiologically contaminated. The technical documents generated by both the Background and Area IV Radiological Studies will help to answer many of these questions. Chapter Three highlights the various technical documents that will be produced by EPA as a result of both Studies and the potential for community input in the finalization of these documents.

## 12. Presentations to Groups

EPA staff will be available to make presentations about EPA radiological studies at meetings for local community groups and institutions.

## 13. Technical Assistance Services for Communities (TASC)

The TASC program is used to fund the services of an environmental professional to provide independent technical assistance and/or review of EPA's documents to the community. EPA conducted a TASC Information Session in Chatsworth on May 26, 2009. EPA has decided not to utilize TASC services at this time, but may reevaluate this decision as future circumstances dictate.

#### 14. Language Translation

When a need arises, EPA provides an interpreter at its community meetings and translates its fact sheets. Currently, no populations of monolingual non-English speakers have been identified near the SSFL.

## CHAPTER THREE

### Investigation Schedule for Radiological Studies

In order to manage the multi-year radiological investigations, EPA created a schedule of activities that includes the sampling effort and the delivery of technical documents. Below is the estimated schedule of activities and technical document deliverables for the Background and Area IV Radiological Studies. Opportunities for community involvement throughout these studies will be announced through community meetings, fact sheets, public notices, and/or the website.

ACTIVITY/DOCUMENT DELIVERABLE	ANTICIPATED COMPLETION DATE	COMMUNITY INVOLVEMENT ACTIVITY
<b>BACKGROUND RADIOLOGICAL STUDY</b>		
Final Sampling Plan	Completed Summer 2009	Informal Review and Comment*
Soil Sampling	Completed Fall 2009	Observe EPA work
Draft Investigation Data Report	Spring 2010	Informal Review and Comment and Community Meeting
Final Investigation Data Report	Summer 2010	Informal Review and Comment, Fact Sheet, and Community Meeting
<b>AREA IV HISTORICAL SITE ASSESSMENT</b>		
EPA Information Request Letters	Completed Fall 2009	Informal Review and Comment
Aerial Photograph Analysis	Completed Winter 2010	Informal Review and Comment
Former Employee Interviews	Winter 2010	If former SSFL employee, volunteer to be interviewed
Technical Memos on significant findings by subarea	Spring 2010 to Fall 2010	Informal Review and Comment
Draft Historical Site Assessment Report	Summer 2010	Informal Review and Comment
Final Historical Site Assessment Report	Fall 2010	Informal Review and Comment

\*Please see Item 11 Technical Documents in Chapter Two as some documents may be made available for informal public comment. Questions or concerns may be addressed directly to the appropriate EPA Project Manager through e-mail or via the phone (see the table at the beginning of Chapter Two for principal points of contact for the specific Project Manager/areas of responsibility).

ACTIVITY/DOCUMENT DELIVERABLE	ANTICIPATED COMPLETION DATE	COMMUNITY INVOLVEMENT ACTIVITY
<b>AREA IV GAMMA SCANNING SURVEY</b>		
Draft Plan	Completed Fall 2009	Informal Review and Comment
Final Plan	Completed Winter 2010	Informal Review and Comment
Gamma Scan work	Spring 2010 to Spring 2011	Observe EPA work
Investigation Data Report	Spring 2011	Informal Review and Comment, Fact Sheet, and Community Meeting
<b>AREA IV SURFACE AND SUBSURFACE SOIL TESTING</b>		
Draft Sampling Plan	Spring 2010	Informal Review and Comment
Final Sampling Plans	Summer 2010 to Fall 2010	Informal Review and Comment
Soil Testing	Summer 2010 to Summer 2011	Observe EPA work
Investigation Data Reports	Spring 2011 to Fall 2011	Informal Review and Comment, Fact Sheet, and Community Meeting
<b>AREA IV GROUNDWATER, SURFACE WATER AND SEDIMENT TESTING</b>		
Draft Sampling Plan	Winter 2010	Informal Review and Comment
Final Sampling Plan	Spring 2010	Informal Review and Comment
Water Testing	Spring 2010 to Summer 2011	Observe EPA work
Investigation Data Reports	Fall 2010 to Fall 2011	Informal Review and Comment
<b>AREA IV QUALITY ASSURANCE PROJECT PLAN (QAPP)</b>		
Draft QAPP	Winter 2010	Informal Review and Comment
Final QAPP	Spring 2010	Informal Review and Comment
<b>AREA IV RADIOLOGICAL STUDY REPORT</b>		
Draft Report	Fall 2011	Informal Review and Comment
Final Report	Fall 2011	Informal Review and Comment, Fact Sheet, and Community Meeting

## Appendix A

### A Site Description and History

#### Site Location

The Santa Susana Field Laboratory (SSFL) site is located in the Simi Hills area of Ventura County, approximately 30 miles northwest of downtown Los Angeles. SSFL is situated on an east-west trending ridge overlooking Simi Valley to the north and northwest and the San Fernando Valley to the southeast. There are two properties to the north of the SSFL. The property located to the northwest is owned by the Brandeis-Bardin Institute. The property located to the northeast is owned by the Santa Monica Mountains Conservancy, which preserves land for parks, open space, trails, and wildlife habitat. The properties to the east of the SSFL include open space and housing developments.

Dense residential development begins in the San Fernando Valley about 2 miles east of the SSFL. Bell Canyon is located to the south of the undeveloped area at SSFL and the primary use is residential development. Runkle Canyon is located to the west of the SSFL and is designated by the Ventura County planning department as open space. This land is used for cattle grazing. Site location and site boundary maps are presented in Appendix J.

#### Site Description

The SSFL occupies 2,849 acres of rocky terrain with approximately 700 feet of topographic relief near the crest of the Simi Hills. The SSFL is divided into four administrative areas (I, II, III, IV), which are under different ownership and operation. The northern buffer zone consists of 182 acres and the southern buffer zone consists of 1,143 acres. A lawsuit settlement approximately 10 years ago stipulated that the northern buffer zone be purchased by The Boeing Company (Boeing) from the adjoining American Jewish University's Brandeis-Bardin Campus. Appendix J presents several site maps defining the four administrative areas and identifies the northern buffer zone.

Boeing own and operate Areas, I, III, and IV, and the undeveloped lands. The Federal government owns Area II which is operated by the National Aeronautics and Space Administration (NASA). In Area II, primary operations included development and testing of liquid fuel rocket motors. Ninety acres of Area IV were leased to the U.S. Department of Energy (DOE) to conduct a broad range of energy-related research and development at the Energy Technology Engineering Center (ETEC). Between 1949 and 1988, federal contractors operated 10 nuclear reactors and related facilities that resulted in chemical and radiological contamination at ETEC. All nuclear reactors and fuel elements were removed from SSFL. The ongoing cleanup of the chemical contamination is currently regulated by the State of California Department of Toxic Substances Control (DTSC). The cleanup of the remaining radiological contamination is currently being managed by DOE. However, in May 2007, the U.S. District Court of Northern California ruled (in response to a legal challenge) that DOE must prepare an Environmental Impact Statement prior to further cleanup and closure of its operations of ETEC at SSFL.

In response to a congressional mandate (HR 2764), the U.S. Environmental Protection Agency (EPA) entered into an Interagency Agreement with DOE in 2008 to conduct a joint comprehensive radiological study of Area IV and the northern buffer zone at SSFL. A map defining the radiological study areas and background study area sampling locations are presented in Appendix J.

Area IV is between 1,880 feet and 2,150 feet above sea level and is relatively flat. The northern buffer zone consists of naturally vegetated rugged terrain. The overlying soils of Area IV consist of weathered bedrock and alluvium (unconsolidated sand, silt and clay materials) that have been eroded primarily from the surrounding Chatsworth and Santa Susana Formations. Several geological faults cross this area. The climate at the vicinity of the SSFL is classified as Mediterranean subtropical, which corresponds to an average temperature of 50 degrees Fahrenheit in the winter and 70 degrees Fahrenheit in the summer. Rainfall averages approximately 18 inches per year.

The undeveloped areas within the SSFL site, both in open space and in the natural areas surrounding the developed site areas, comprise diverse habitats. Within the SSFL and open space, 16 different habitat types occur but the majority of Area IV is covered by coast live oak woodland, southern willow scrub, baccharis scrub, native grasslands, and nonnative grasslands. The SSFL is home to a wide range of wildlife. A natural resources survey conducted at the site, including Area IV, identified 69 bird species and 13 mammal species. Employees and visitors often spot mule deer, scrub jays, turkey vultures, jack rabbits, quail, and rattlesnakes.

A shallow groundwater system exists in the surface soils at small isolated locations. A regional groundwater system exists in the deeper fractured Chatsworth Formation. In some areas, groundwater from the Chatsworth Formation flows through fractures in the rock and emerges at the ground surface as seeps or springs. Groundwater underlying the SSFL site is not used as a source of drinking water.

## Site History

### Santa Susana Field Laboratory Operations

Prior to development of the site in 1948, the area was used for ranching. In 1948, North American Aviation (a predecessor company of Boeing) began development of the land in the northeast section of the site. A majority of the site property was acquired in 1954 and development began on the western section of the site. Undeveloped areas to the south were acquired in 1968 and 1976 and to the north in 1998.

The facility was home to rocket engine testing that supported the U.S. Air Force and virtually every major space program in U.S. history, from the earliest satellite launches to the Space Shuttle. Prior to 1996, the site was operated by the Rocketdyne Division (Rocketdyne) of North American Aviation and the Rockwell International Corporation. Since 1996, operations at the site have been conducted by Boeing.

Over the life of the site, thousands of tests were performed but rocket engine testing declined in the 1980s and 1990s, and ended in 2005. In addition to rocket engine testing, the SSFL was used for nuclear energy research and testing. These operations were conducted on a 90 acre section of the site known as the ETEC, which was located within Area IV. The ETEC property was leased to the DOE and operated by Atomics International (a division of North American Aviation) and Rockwell International Corporation from the 1950s to the early 1980s.

The SSFL site consists of four administrative areas used for research, development, and test operations, and buffer areas on the southern and northern boundaries of the facility. The following is a brief summary of activities conducted at each of the four SSFL administrative areas and the undeveloped buffer properties to the north:

- Area I consists of 671 acres owned by Boeing, and 42 acres owned by NASA (formerly owned by U.S. Air Force) in the northeast portion of the Site. Area I contains administrative and laboratory facilities and was formerly used for rocket engine testing. Large rocket engine tests in this area mainly used petroleum-based fuels with a liquid oxygen oxidizer as well as monomethyl hydrazine-nitrogen tetroxide. Additionally, solid propellant, such as perchlorate, was used during small rocket motor tests and research and development programs within this area.
- Area II consists of 410 acres in the north-central portion of the site and is owned by NASA and operated by Boeing. Rocket engine testing was the main operation at Area II. Testing took place at four test areas: Alfa, Bravo, Coca, and Delta. Small jet engine testing also was conducted in this area. Testing began in 1953 and used similar fuels to those in Area I.
- Area III consists of 114 acres in the northwest portion of the site and is owned and operated by Boeing. Small engine testing with a monomethyl hydrazine-nitrogen tetroxide propellant was conducted in Area III at the Systems Test Laboratory IV. The propellant ingredients were developed at the Engineering Chemistry Laboratory. Organic solvents were used to flush the small jet engine thrust chambers after each test.
- Area IV consists of 290 acres owned and operated by Boeing, including 90 acres leased by DOE. DOE and its contractors operated several nuclear reactors and associated fuel facilities and laboratories within this area. This area also includes five surface water discharge outfalls monitored under the National Pollutant Discharge Elimination System (NPDES) program. The primary use for Area IV was as a test facility for nuclear reactors and related projects. Research and development on nuclear reactor subsystems began in the 1950s. Nuclear operations at ETEC included 10 nuclear research reactors, such as the Sodium Reactor Experiment (SRE) and the Space Nuclear Auxiliary Power compound liquid-metal reactors, and seven critical facilities. Critical facilities were defined as a facility that used a mass of fissionable material of sufficient size to sustain a chain reaction capable of creating a nuclear reaction.

The main nuclear facilities within Area IV included the Radioactive Materials Disposal Facility and the Rockwell International Hot Laboratory. The Radioactive Material Disposal Facility was used for storing irradiated fuel elements, packaging radioactive wastes, and treating low-level radioactive wastes. The Rockwell International Hot Laboratory was used for decladding fuel elements. Additionally, an area known as the Former Sodium Disposal Facility, or Area IV burn pit, was used from 1966 to the late 1970s to dispose of metallic sodium, sodium-potassium mixtures, solvents, and radioactively contaminated equipment. The DOE currently is responsible for characterization and remediation of radiological contamination at the ETEC site in Area IV. On May 2, 2007, a Federal District Court Order was issued prohibiting the DOE from conducting actions at the ETEC site until the DOE completes an Environmental Impact Statement evaluating the cumulative impacts associated with the DOE's activities at the site.

### **Regulatory Oversight**

Over the years, various regulatory agencies have required the investigation and cleanup of soil, sediment, groundwater, and surface water at or near the site. These numerous investigations have been conducted throughout all four areas at the SSFL site over the past three decades and have resulted in the identification areas of concern that are potential sources of contamination. The primary chemicals from these sources are organic solvents (mainly trichloroethene), petroleum-based fuels, hydrazine-based fuels, liquid metals (mainly sodium and potassium), and radionuclides. The agencies involved with the cleanup of the site include the California DTSC, the California Regional Water Quality Control Board, and the California Department of Health Services – Radiological Health Branch.

### **California Department of Toxic Substances Control**

The California DTSC is the lead regulatory agency and responsible for the cleanup decision-making process at the SSFL.

In August 2007, the DTSC issued a Consent Order for Corrective Action to Boeing, NASA, and the DOE that included, among other things, requirements for: 1) a corrective action schedule 2) interim measures 3) the Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) process 4) remedy selection 5) the Corrective Measures Investigation process, and 6) the California Environmental Quality Act process.

### **California Regional Water Quality Control Board**

The California Regional Water Quality Control Board has issued waste discharge permits to the SSFL since 1958. Starting in 1984, the Regional Water Quality Control Board began issuing surface water discharge permits to the SSFL under the NPDES. Surface water discharges from the site are monitored at 18 NPDES locations.

### **California Department of Health Services – Radiological Health Branch**

The California Department of Health Services – Radiological Health Branch oversees Boeing's Radioactive Materials License, performs radioactive facility verification surveys, conducts environmental monitoring, and evaluates radioactive facility cleanup.

**U.S. EPA**

EPA's role in the environmental investigation of the SSFL will be limited to providing technical assistance to DTSC (the lead regulatory agency) and DOE by conducting radiological studies. In 2007, EPA issued a letter to the State of California requesting that the SSFL be placed on the National Priorities List (NPL). In 2008, a Federal Appropriations Law (HR 2764) mandated that DOE and EPA conduct a joint comprehensive radioactive site characterization of Area IV of the SSFL in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). DOE and EPA entered into an Interagency Agreement whereby DOE provided EPA with \$41.5 million including \$38.3 million in funds under the American Recovery and Reinvestment Act of 2009. Also in 2009, the State of California declined to support EPA proposing SSFL for addition to the NPL thereby leaving DTSC as lead regulatory agency of the site. In a letter dated February 2010, EPA reiterated its position that it has no intention of proceeding with NPL listing of SSFL over the objections of the State.

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## Appendix B

### Chronology of Recent EPA Involvement at Santa Susana Field Laboratory

Although the Environmental Protection Agency (EPA) had an earlier role at the Santa Susana Field Laboratory (SSFL), the following chronology covers the most recent EPA activities.

In November 2007, EPA issued a Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Preliminary Assessment/Site Investigation Report. The report found sufficient information to support beginning the process to place SSFL on the National Priorities List (commonly called the Superfund List), making it eligible for federal cleanup action with EPA as the lead regulator.

In December 2007, EPA issued a letter to the State of California requesting the State's support for adding SSFL to the National Priorities List.

In 2008, a Federal Appropriations Law (HR2764) mandated U.S. Department of Energy (DOE) and EPA to conduct a joint comprehensive radioactive site characterization of Area IV of the SSFL in accordance with CERCLA. In July 2008, an Interagency Agreement was signed whereby DOE gave EPA \$1.5 million of initial funding to (1) conduct a background radiological study for the SSFL, and (2) develop a scope of work for a comprehensive radiological study of Area IV and the northern buffer zone.

In 2009, EPA and DOE amended their Interagency Agreement to provide additional funding for the radiological study of Area IV and the northern buffer zone. An additional \$40 million was awarded to EPA for this work. The majority of the funds (\$38.3 million) came from funding allocated to DOE under the American Recovery and Reinvestment Act of 2009. The major phases of EPA's Area IV radiological studies will consist of the following:

- ***Historical Site Assessment.*** EPA will conduct an independent review of documents involving previous radiological operations and past releases of radiological materials at SSFL. The objective of this phase is to identify the full range of potential radiological contaminants and locations where radiological contaminants may have spilled or otherwise been released to the environment at SSFL (e.g., spills and disposal to the soil, migration to groundwater and surface water, etc.).
- ***Gamma Scan of Area IV Study Area.*** A complete scan of accessible areas of the Area IV Study Area will be made to identify locations of elevated gamma radiation. Any gamma radiation "hot spots" identified will be sampled by EPA for a full range of potential radiological contaminants.
- ***Testing of Soil, Groundwater, and Surface Water.*** Based on the data collected from the Historical Site Assessment and the Gamma Scanning effort, a comprehensive work plan for testing the soil, groundwater, and surface water will be developed for the Area IV Study Area. This work plan will detail specific sampling

locations, the number of samples to be collected, procedures to be followed for sample collection and analysis, equipment needed, laboratories to be used for sample analysis, laboratory detection levels, quality assurance and quality control procedures, and the process for how the data will be evaluated to determine the nature and extent of radiological contamination within the Study Area.

In January 2009, the State declined to support adding SSFL to the National Priorities List. Therefore, the California Department of Toxic Substances Control (DTSC) will remain as lead regulatory agency of the SSFL site. As lead regulator, DTSC will provide oversight and approval of risk assessment, cleanup levels, and cleanup actions at SSFL. EPA's role will be limited to conducting two radiological studies.

During Summer 2009, EPA began field work for its background radiological study which will be used to determine the extent to which operations at SSFL lead to radiological contamination at Area IV. EPA also began the process of developing the planning documents for the upcoming radiological assessment of Area IV. EPA is in the process of determining a master list of radiological contaminants via the Historical Site Assessment. These contaminants of concern, or radionuclides, include strontium (Sr-90), cesium (Cs-137), uranium (U-234, U-235, and U-238), plutonium (Pu-238, Pu-239, Pu-240, and Pu-241), americium (Am-241), cobalt (Co-60), europium (Eu-152 and Eu-154), and thorium (Th-232).

## Appendix C

### Community Profile

The Santa Susana Field Laboratory (SSFL) is approximately a 2,800-acre facility located in eastern Ventura County, California, approximately 2 miles south of the City of Simi Valley. The site borders Los Angeles County to the east and is approximately 30 miles northwest of downtown Los Angeles. The SSFL site is located in rugged terrain on a plateau near the crest of the Simi Hills at an average elevation of 1,900 feet above mean sea level. A site location map is provided in Appendix J.

The area surrounding SSFL consists mostly of parks, open space, and private property with agricultural, residential, and recreational land uses. Property north of the SSFL is owned by the Brandeis-Bardin Institute and the Santa Monica Mountain Conservancy. Property east of the SSFL is open space and housing developments. A residential community is located in Woolsey Canyon, ¼-mile east of the SSFL boundary, and a new community is under development in Dayton Canyon. Dense residential housing developments begin in the San Fernando Valley approximately 2 miles east of the site. Bell Canyon, a residential development, is located to the south. Runkle Canyon, designated as open space for cattle grazing, is located to the west.

#### Simi Valley

The City of Simi Valley occupies an area of approximately 42 square miles in Southeast Ventura County, adjacent to the northwestern perimeter of the San Fernando Valley and approximately 37 miles northwest of downtown Los Angeles. Highway 118 intersects the north-central portion of the city and connects with State Highways 23 and 101 as well as Interstates 5, 405, and 210. The City was incorporated in 1969 under the general laws of the State of California and operates under a General-Law/council-manager form of government. In 2008, the City of Simi Valley reported that the largest employers were Countrywide Home Loans, Simi Valley Unified School District, and Farmers Insurance Group.

Simi Valley has an estimated population of 126,297 (as of May 2009) and is the third largest city in Ventura County. The population increased approximately 13 percent from 2000 (City of Simi Valley, 2009). Approximately 90 percent of the population has a least a high school education, with approximately 30 percent of the population holding a Bachelor's degree or higher. According to U.S. Census Bureau statistics, the average annual household income is \$85,464 and the per capita annual income is \$33,034. Additional City of Simi Valley demographics are detailed in Table 1.

## City of Simi Valley Demographics

RACE	PERSONS	PERCENTAGE
One Race	121,349	97.6
White	93,206	75.0
Black or African American	1,661	1.3
American Indian and Alaska Native	710	0.6
Asian	9,511	7.6
Native Hawaiian and Other Pacific Islander	246	0.2
Some other race	16,015	12.9
Two or more races	2,998	2.4
Hispanic or Latino (of any race)	25,779	20.7
<b>Total Population</b>	<b>124,347</b>	<b>100</b>

SOURCE: US Census Bureau, 2005-2007 American Community Survey

In 1970, the Simi Valley Neighborhood Council Program was established to promote citizen awareness and invite participation in local government. As reported by the City of Simi Valley, the area is divided into four neighborhood councils and encourages residents 18 years and older to actively participate in neighborhood council meetings. Each neighborhood council has a maximum 13 members on its executive board, who are appointed by the City Council and serve 2-year terms. Neighborhood councils meet once a month and residents of unincorporated areas adjacent to a neighborhood council may vote on matters presented to the neighborhood council.

In addition to the four neighborhood councils, a Joint Chairs Committee meets on the first Tuesday of each month to provide updates to executive board members on the issues affecting each of the neighborhood councils and to discuss operating procedures. Flyers are distributed by the neighborhood councils to inform the community of issues being presented at upcoming meetings. Neighborhood council flyers and agendas also can be received via e-mail by subscribing to the council list serves.

### Los Angeles

The City of Los Angeles encompasses a total of 472 square miles in the southwestern portion of Los Angeles County. A large portion of the City of Los Angeles lies in the San Fernando Valley, which is bounded by the Santa Susana Mountains to the northwest. The major river in the area is the Los Angeles River, which runs from Canoga Park southeast through the city to the Pacific Ocean.

Los Angeles is the largest city in California with an estimated 4.1 million people (as of January 2009). According to U.S. Census Bureau statistics and Los Angeles County, the population increased approximately 10 percent from 2000. Additional demographic information is detailed in Table 2.

## City of Los Angeles Demographics

RACE	PERSONS	PERCENTAGE
One Race	3,666,135	97.2
White	1,836,444	48.7
Black or African American	374,848	9.9
American Indian and Alaska Native	17,836	0.5
Asian	400,507	10.6
Native Hawaiian and Other Pacific Islander	6,571	0.2
Some other race	1,029,929	27.3
Two or more races	104,455	2.8
Hispanic or Latino (of any race)	1,827,625	48.5
<b>Total Population</b>	<b>3,770,590</b>	<b>100</b>

SOURCE: US Census Bureau, 2005-2007 American Community Survey

Approximately 72.5 percent of the population has a least a high school education, with approximately 29 percent of the population holding a Bachelor's degree or higher. According to U.S. Census Bureau statistics, the average annual household income for Los Angeles is \$46,292, and the per capita annual income is \$25,798.

The City of Los Angeles web site reports that the city was incorporated in 1850 and has a Mayor-Council-Commission form of government. In May 2001, the Mayor and City Council approved a plan to establish citywide Neighborhood Councils to promote community involvement in local government and encourage government responsiveness to local needs. The Los Angeles Department of Neighborhood Empowerment reports that there are 89 certified Neighborhood Councils in Los Angeles, including the west Los Angeles neighborhoods of Chatsworth, Canoga Park, West Hills, and Woodland Hills-Warner Center.

### Sensitive Receptors

Sensitive receptors are people who are more susceptible to health problems if exposed to contamination in the soil, water, or air. Sensitive receptors include young children (ages 0-6), senior citizens, people with respiratory problems, and pregnant women.

Locations with sensitive receptors within a 3-mile radius of Area IV include:

- Talbert House Assisted Living, 1.8 miles
- Mountain View Elementary School, 2.1 miles
- Katherine Elementary School, 2.2 miles
- Vintage Simi Hills Assisted Living, 2.5 miles
- Simi Valley Rehab and Nursing Center, 2.5 miles
- Crestview Elementary School, 2.6 miles
- Knolls Elementary School, 2.6 miles
- Phoenix Ranch School, 2.65 miles
- Millennium Adult Day Health Care Center, 2.65 miles

- Tutor Time Childcare/Learning – Simi Valley, 2.75 miles
- Garden Grove Elementary School, 2.8 miles
- Pinecrest School, 2.8 miles
- St. Paul's Home Care for the Elderly, 2.8 miles
- Valley Bible Academy, 2.85 miles
- Good Shepherd Lutheran School, 2.95 miles
- Kids 'n Things Preschool, 2.96 miles
- Grace Brethren Preschool, 2.95 miles
- Leap & Bound Academy and Preschool, 2.95 miles
- Simi Elementary School, 2.95 miles
- Santa Susana Elementary School, 3.0 miles

## Appendix D

### History of Community Involvement

A long history community involvement is associated with the Santa Susana Field Laboratory (SSFL). This section provides highlights of community involvement activities undertaken by the U.S. Environmental Protection Agency (EPA) and provides links to the web sites for California Department of Toxic Substances Control (DTSC), the U.S. Department of Energy (DOE), and The Boeing Company (Boeing)/Rocketdyne, all of which conduct independent public participation programs. It is not meant to be a complete listing of all community involvement activities, but rather an overview of the major activities in the past 20 years with special attention to Area IV of the SSFL. Each section will focus on the unique activities of the specified entity and conclude with the most recent community outreach activities.

#### EPA

The EPA's involvement in the SSFL site has been primarily in a support and coordination capacity because the SSFL has never been placed on the National Priorities List, so EPA does not have independent regulatory authority over the site. The EPA has provided technical assistance to California regulatory agencies and the DOE as needed in the course of remedial actions. In response to requests from the public and elected officials, EPA has provided independent review of environmental surveys and data, provided comments to environmental documents, and hosted community outreach activities.

#### Public Meetings and Fact Sheets

In addition to the SSFL Interagency Workgroup meetings, the EPA has responded to specific community concerns over the years through the use of public meetings (See last paragraph on page 25). Additionally, informational fact sheets keep the community updated as to site activities, agency decisions, and study results. Notable community updates from the past are listed below, and a table of recent EPA activities follows:

<b>November 1992:</b>	Public Briefing Chaired by EPA on Environmental and Health Concerns from SSFL
<b>July 1995:</b>	EPA Update - EPA Announces Results of Rocketdyne's Off-Site Sampling Program for the SSFL
<b>November 1996:</b>	EPA Meeting with Rocketdyne Cleanup Coalition to Outline its Plan to Monitor Radiation Cleanup by Rocketdyne/DOE
<b>Calendar Year 1999:</b>	EPA Special Announcement to Inform You of Opportunity for Direct Community Involvement
<b>Calendar Year 2001:</b>	Fact Sheet - Significant Accomplishment 1989-2001: Fact Sheet for SSFL Workgroup
<b>April 2003:</b>	Public Meeting Called by the EPA after Complaints from Several Activists Dissatisfied with the DOE's Decontamination of the Energy Technology Engineering Center (ETEC)

### Recent Community Involvement

The EPA's current role at the site is limited to providing technical assistance for a comprehensive background study and radiological site characterization of Area IV in accordance with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The most recent EPA activities and publications related to the site are listed in the table below. Documents can be found in information repositories and on the SSFL web site <http://www.epa.gov/region09/SantaSusana> (Please note the web address is case sensitive.)

### EPA Recent Community Outreach Activities

PERIOD	ACTIVITY
July 2007	Distributed Fact Sheet: EPA Superfund Evaluation – Preliminary Assessment/Site Investigation of SSFL to be Conducted on SSFL.
August 2007	Supported SSFL Interagency Workgroup Meeting.
February 2008	Supported SSFL Interagency Workgroup Meeting.
March 2008	Distributed Fact Sheet: Superfund Eligibility Evaluation of SSFL Completed; Preliminary Assessment/Site Investigation I Completed and SSFL Eligible for National Priority List. SSFL Interagency Workgroup Meeting.
June 2008	Supported SSFL Interagency Workgroup Meeting.
September 2008	Distributed Notice: EPA Conducts Radiological Background Study.
November 2008	Distributed Fact Sheet: EPA to Hold Community Meeting on Radiological Background Study. SSFL Interagency Workgroup Meeting.
December 2008	Held Community Meeting on Radiological Background Study.
February 2009	Conducted Community Interviews in Preparation for the Community Involvement Plan (CIP).
April 2009	Conducted Community Interviews in Preparation for the CIP. DOE and EPA Sign Interagency Agreement.
May 2009	Distributed Fact Sheet: DOE and EPA Sign Funding Agreement for Radiological Study. SSFL Interagency Workgroup Meeting. EPA TASC Informational Meeting.
June 2009	Distributed Fact Sheet: EPA Meeting on SSFL Radiological Studies.
July 2009	Supported SSFL Interagency Workgroup Meeting. EPA Community Meeting. Presentation to the Santa Susana Mountain Area Committee.
October 2009	Gave Presentations to the Santa Susana Mountain Area Committee. SSFL Interagency Workgroup Meeting.
December 2009	Technical Working Group Meeting.
January 2010	Technical Working Group Meeting.
February 2010	Distribute CIP. SSFL Interagency Workgroup Meeting.

### SSFL Interagency Workgroup

In 1989, the EPA was asked to establish a working group of several health and environmental regulatory agencies to coordinate monitoring and cleanup of the SSFL. By September 1990,

community representatives had been added to the SSFL Interagency Workgroup. The SSFL Interagency Workgroup charter specified the following objectives:

- Facilitate the exchange of information among regulatory agencies and between the regulatory agencies and the community regarding the SSFL site
- Coordinate regulatory agencies' activities as necessary
- Allow the public an opportunity to receive information, ask questions, and express concerns

In December 2003, the EPA announced it would no longer chair the SSFL Interagency Workgroup; however, the Agency still funds and provides logistical support for the meetings. The SSFL Interagency Workgroup continues to meet in Simi Valley on roughly a quarterly basis to share information on environmental issues related to the site.

### **DTSC**

The DTSC has been the lead regulatory agency with regard to chemical contamination at the SSFL site for 20 years. Under the Resource Conservation and Recovery Act (RCRA), DTSC oversees the investigation and cleanup of the SSFL and has the authority to issue and enforce hazardous waste facility permits. The DTSC has been active in community involvement throughout its regulation of the site. Please visit the DTSC web site for more information regarding their community involvement activities: <http://www.dtsc-ssfl.com>.

### **DOE**

Since 1989, the DOE has performed characterization surveys, decontamination and decommissioning, final status surveys of facilities, and hosted community involvement activities pertaining to SSFL. For more information regarding their community involvement activities, please visit their website: <http://www.etec.energy.gov>.

### **Additional Public Involvement**

In addition to the entities listed above, many other groups have been active in SSFL community outreach by hosting or supporting public meetings and events, holding public comment periods on documents, issuing reports and fact sheets for the public, and publishing information on web sites. The following regulatory agencies and community groups have participated in some form of community outreach for SSFL. Please note this is only a representative list.

### **Regulatory Agencies**

Agency for Toxic Substances and Disease Registry  
California Department of Health Services  
California Regional Water Quality Control Board  
National Institute for Occupational Safety and Health  
Ventura County Air Pollution Control District

### **Community Groups**

SSFL Interagency Workgroup  
Aerospace Cancer Museum of Education (ACME)  
Chambers of Commerce

Cleanuprocketdyne.org  
The Committee to Bridge the Gap  
Greater San Fernando Valley Chamber of Commerce  
Homeowner Associations  
Neighborhood Associations  
Physicians for Social Responsibility  
Rocketdyne Cleanup Coalition  
Rocketdynewatch.org  
Rotary Clubs  
Santa Susana Mountain Area Committee of the  
    West Hills Neighborhood Association (City of LA)  
Santa Monica Mountain Conservancy  
Santa Susana Mountain Park Association  
Save Open Space – Santa Monica Mountains  
Southern California Federation of Scientists

## Appendix E

### Community Interview Questionnaire

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Name:

Date:

Phone (day): \_\_\_\_\_  
(eve): \_\_\_\_\_

E-mail address:

---

1. Do you live or work in the area? How long have you lived/worked in the area? Approximately how far away do you live/work from the SSFL site?
2. What do you know about the SSFL site? Contaminants? Former Owners/Operators? Site cleanup work to date? Are you aware of EPA's work on the Radiological Background Survey and the Area IV Radiological Survey? If so, what do you know about it? How did you hear about it? When did you hear about it?
3. [OPTIONAL] What do you feel is the overall community perception of the SSFL site?
4. Do you have any concerns about the SSFL site?
5. What are your concerns about EPA's work on the Radiological Background Survey and the Area IV Radiological Survey?
6. What is your biggest concern?
7. Have you had any experience with government agencies regarding this site? If so, which ones and what has your experience been like?
8. What is your impression (or opinion) of the facility owners and operators (NASA, Boeing, and the Department of Energy)?
9. Do you think the EPA or the State has been effective in communicating information on this site? What do you think has worked or hasn't worked?

10. How do you get information about the SSFL site?
11. Whom do you contact with questions about the site? How responsive are they to your questions?
12. How are you currently receiving information about the site?
13. Do you find the information from EPA or the State is clean and easy to understand?
14. Do you feel you have been kept adequately informed?
15. How can we best provide you with information about site cleanup? Which newspapers, web sites or other media do you normally look to for news? And what is the best frequency for communications?
  - a. –Fact Sheets
  - b. –Postings on an EPA web site about the SSFL site
  - c. –Public Meetings
  - d. –Neighborhood Meetings
  - e. –Regular technical meetings about the details concerning EPA's work
  - f. –Radio
  - g. –other
16. What days and location would be best for public meetings? What days/times should we avoid?
17. Have you participated in any public meetings and/or community group meetings for the site?
18. Are you aware that environmental program information about this site is available in the form of an information repository located at the Simi Valley Library and the Platt Branch Library?
19. Are you aware of EPA's web site?
20. Are you willing to regularly attend technical meetings about the work being conducted at the site (meetings are held M-F during normal working hours)?

21. Are you aware of groups who might need translation services? What languages?

22. What other individuals might we contact about the site?

23. Is there anything else you would like to share about this site?

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## Appendix F

### Community Resources and Contacts

This CIP reflects EPA's current understanding of community concerns. The CIP is designed to be a flexible working document, changing as community concerns change and as more information becomes available.

Please direct questions, comments, concerns, and requests to the following EPA staff based on their project responsibilities listed in the third column below. **You may also leave a message at the toll-free EPA Community Involvement Office message line at (800) 231-3075.**

EPA PROJECT MANAGER NAME	CONTACT INFORMATION	PROJECT RESPONSIBILITIES
Craig Cooper	SFD-8-1 75 Hawthorne St. San Francisco, CA 94105 415-947-4148 (office) 415-947-3520 (fax) <a href="mailto:cooper.craig@epa.gov">cooper.craig@epa.gov</a>	Historical Site Assessment & Area IV Soil Testing
Nicole Moutoux	SFD8-1 75 Hawthorne St. San Francisco, CA 94105 415-972-3012 (office) 415-947- 3520 (fax) <a href="mailto:moutoux.nicole@epa.gov">moutoux.nicole@epa.gov</a>	Background Study & Area IV Water Testing
Mary Aycock	SFD-8-1 75 Hawthorne St. San Francisco, CA 94105 415-972-3289 (office) 415-947-3520(fax) <a href="mailto:aycock.mary@epa.gov">aycock.mary@epa.gov</a>	Area IV Gamma Scanning & Onsite Operations and Logistics
David Cooper	SFD-6-3 75 Hawthorne St San Francisco, CA 94105 415-972-3245 (office) 415-947-3528 (fax) <a href="mailto:cooper.david@epa.gov">cooper.david@epa.gov</a>	Community Involvement Coordination

To ensure effective communication with interested individuals or groups, EPA will make additional services available to persons with special needs. Please contact one of the representatives listed above.

EPA Santa Susana Field Laboratory Site (SSFL) website:

<http://www.epa.gov/region09/SantaSusana> *(Please note the web site is case sensitive.)*

## Elected Officials

### Los Angeles

#### **Los Angeles City Council**

200 North Spring Street, 4th Floor  
Los Angeles, CA 90012  
Phone: (213) 978-0600

#### **Antonio Villaraigosa, Mayor**

mayor@lacity.org

#### **Greig Smith, Council Member, District 12**

Room 405  
Phone: (213) 473-7012  
councilmember.smith@lacity.org

#### **Dennis Zine, Council Member, District 3**

Room 450  
Phone: (213) 473-7003  
councilmember.zine@lacity.org

### Simi Valley

#### **Simi Valley City Council**

2929 Tapo Canyon Road  
Simi Valley, CA 93063  
Phone: (805) 583-6703

#### **Paul Miller, Mayor**

pmiller@simivalley.org

#### **Barbra Williamson, Mayor Pro Tem**

bwilliam@simivalley.org

#### **Mike Sedell, City Manager**

Phone: (805) 583-6701  
msedell@simivalley.org

**Glen Becerra, Council Member**  
gbecerra@simivalley.org

**Steven T. Sojka, Council Member**  
ssojka@simivalley.org

**Michelle S. Foster, Council Member**  
mfoster@simivalley.org

**Ventura County**

**Linda Parks, County Supervisor, District 2**  
2967 Thousand Oaks Blvd.  
Thousand Oaks, CA 91362  
Phone: (805) 373-2564  
Fax: (800) 660-5474  
linda.parks@ventura.org

**Peter Foy, County Supervisor District 4**  
980 Enchanted Way, #203  
Simi Valley, CA 93063  
Phone: (805) 955-2300  
Fax: (805) 578-1822  
supervisor.foy@ventura.org

**Los Angeles County**

**Zev Yaroslavsky, County Supervisor, District 3**  
Calabasas District Office  
26600 Agoura Road, #100  
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<http://zev.lacounty.gov/>

**Michael D. Antonovich, County Supervisor, District 5**  
San Fernando Valley Office  
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Chatsworth, CA 91311  
Phone: (818) 993-5170  
FifthDistrict@lacbos.org

**California State Senate and Assembly Representatives**

**Fran Pavley, Senator, 23rd District**  
2716 Ocean Park Boulevard, Suite 3088  
Santa Monica, CA 90405  
Phone: (310) 314-5214  
<http://dist23.casen.govoffice.com/>

**Tony Strickland, Senator 19th District**  
Simi Valley Office  
2655 First Street, Suite 230  
Simi Valley, CA 93065  
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**Julia Brownley, Assembly Member, 41st District**  
6355 Topanga Canyon Boulevard, Suite 205  
Woodland Hills, CA 91367  
Phone: (818) 596-4141  
[Assemblymember.brownley@assembly.ca.gov](mailto:Assemblymember.brownley@assembly.ca.gov)

**Cameron Smyth, Assembly Member, 38th District**  
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<http://republican.assembly.ca.gov/member/38/>

**Audra Strickland, Assembly Member, 37th District**  
Westlake Village Office  
2659 Townsgate Road, Suite 236  
Westlake Village, CA 91361  
Phone: (805) 230-9167  
<http://republican.assembly.ca.gov/member/37/>

**United States Congress**

**Senator Barbara Boxer**  
312 North Spring Street, Suite 1748  
Los Angeles, CA 90012  
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[www.boxer.senate.gov](http://www.boxer.senate.gov)

**Senator Dianne Feinstein**  
11111 Santa Monica Boulevard, Suite 915  
Los Angeles, CA 90025  
Phone: (310) 914-7300  
[www.feinstein.senate.gov](http://www.feinstein.senate.gov)

**Congressman Elton Gallegly, 24th District**

2829 Townsgate Road, Ste. 315  
Thousand Oaks, CA 91361  
Phone: (805) 497-2224  
Fax: (800) 423-0023  
[www.house.gov/gallegly](http://www.house.gov/gallegly)

**Congressman Henry Waxman, 30th District**

8436 West Third Street, Ste. 600  
Los Angeles, CA 90048  
Phone: (310) 652-3095  
Fax: (818) 878-7400  
[www.house.gov/waxman](http://www.house.gov/waxman)

**California Government Agencies**

**Cal/EPA**

Linda Adams, Secretary for Environmental Protection  
P.O. Box 2815  
1001 "I" Street  
Sacramento, CA 95812  
Phone: (916) 324-9214

**California Department of Parks and Recreation**

Ron Schafer, Superintendent, Los Angeles District  
1925 Las Virgenes Road  
Calabasas, CA 91302  
Phone: (818) 880-0360

**California Department of Public Health**

Mr. Robert Greger  
1800 E. Lambert Road, Suite 125  
Brea, CA 92821  
Phone: (714) 270-0368  
[Robert.Greger@cdph.ca.gov](mailto:Robert.Greger@cdph.ca.gov)

**California Department of Public Health – Radiologic Health Branch**

Los Angeles Branch (Region 7)  
Radiation Management  
3530 Wilshire Boulevard, 9th Floor  
Los Angeles, CA 90010  
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**California State Water Resources Control Board**

Ms. Dorothy R. Rice, Executive Director  
1001 "I" Street  
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Drice@waterboards.ca.gov

**Department of Toxic Substances Control (DTSC)**

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**Los Angeles Regional Water Quality Control Board**

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**Ventura County Air Pollution Control District**

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**Ventura County Environmental Health Division**

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**Department of Energy (DOE)**

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**National Aeronautic and Space Administration (NASA)**

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**Other Interested Parties**

**Sheila Kuehl, Former Senator 23rd District**

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## Appendix G

### Media Contacts

#### Ventura County Star

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[www.venturacountystar.com](http://www.venturacountystar.com)

#### Los Angeles Daily News

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[kjorrey@theacorn.com](mailto:kjorrey@theacorn.com)

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## Appendix H

### Potential Public Meeting Locations

FACILITY NAME	ADDRESS
Chaminade High School	7500 Chaminade Ave., West Hills, CA 91304
City of Calabasas	100 Civic Center Way, Calabasas, CA, 91302
Fairwinds Retirement Home	8138 Woodlake Avenue, West Hills, CA 91304
Grand Vista Hotel	999 Enchanted Way, Simi Valley, CA 93065
Kaiser Permanente	3900 Alamo St., Simi Valley, CA, 93063
Platt Library	23600 Victory Blvd., Reseda, CA, 91335
Posada Royale Hotel and Suites	1775 Madera Road, Simi Valley, CA 93065
Raddison Hotel	9777 Topanga Canyon, Chatsworth, CA 91311
Simi Valley City Hall	2929 Tapo Canyon Rd., Simi Valley, CA, 93065
Simi Valley Cultural Arts Center	3050 Los Angeles Ave., Simi Valley CA 93065
Simi Valley Library	2969 Tapo Canyon Rd., Simi Valley, CA, 93065
Staybridge Suites	21902 Lassen Street, Chatsworth, CA, 91311
Thousand Oaks Civic Center	2100 E. Thousand Oaks Blvd., Thousand Oaks, CA, 91362
West Valley Christian Church	22450 Sherman Way, West Hills, CA, 91307

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## Appendix I

### Information Repositories

Information Repositories contain site information, documents regarding site activities, and general information about the cleanup program. The repositories provide citizens, local officials, and the media with information essential to understanding restoration activities at SSFL. The Information Repositories for the Site are listed below.

#### **Simi Valley Library**

2969 Tapo Canyon Road

Simi Valley, CA 93063

(805) 526-1735

Monday – Thursday 10:00 a.m. – 8:00 p.m.

Friday, Sunday 1:00 p.m. – 5:00 p.m.

Saturday 10:00 a.m. – 5:00 p.m.

#### **Los Angeles Public Library – Platt Branch**

23600 Victory Boulevard

Woodland Hills, CA 91367

(818) 340-9386

Monday, Wednesday 10:00 a.m. – 8:00 p.m.

Tuesday, Thursday 12:00 p.m. – 8:00 p.m.

Friday, Saturday 10:00 a.m. – 6:00 p.m.

#### **California State University Northridge - Oviatt Library**

18111 Nordhoff Street, Room 265

Northridge, CA 91330

(818) 667-2832

Monday, Friday 8:00 a.m. – 5:00 p.m.

Tuesday – Thursday 8:00 a.m. – 7:00 p.m.

Every other Saturday 1:00 p.m. – 5:00 p.m.

#### **Department of Toxic Substances Control**

Chatsworth Office

9211 Oakdale Avenue

Chatsworth, CA 91311

Contact: Vivian Tutaan

(818) 717-6520

#### **EPA – Region 9 Superfund Records Center**

Mail Stop SFD-7C

95 Hawthorne Street, Room 403

San Francisco, CA 94105

(415) 536-2000

Monday-Friday 8:00 a.m. – 5:00 p.m.

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# Appendix J

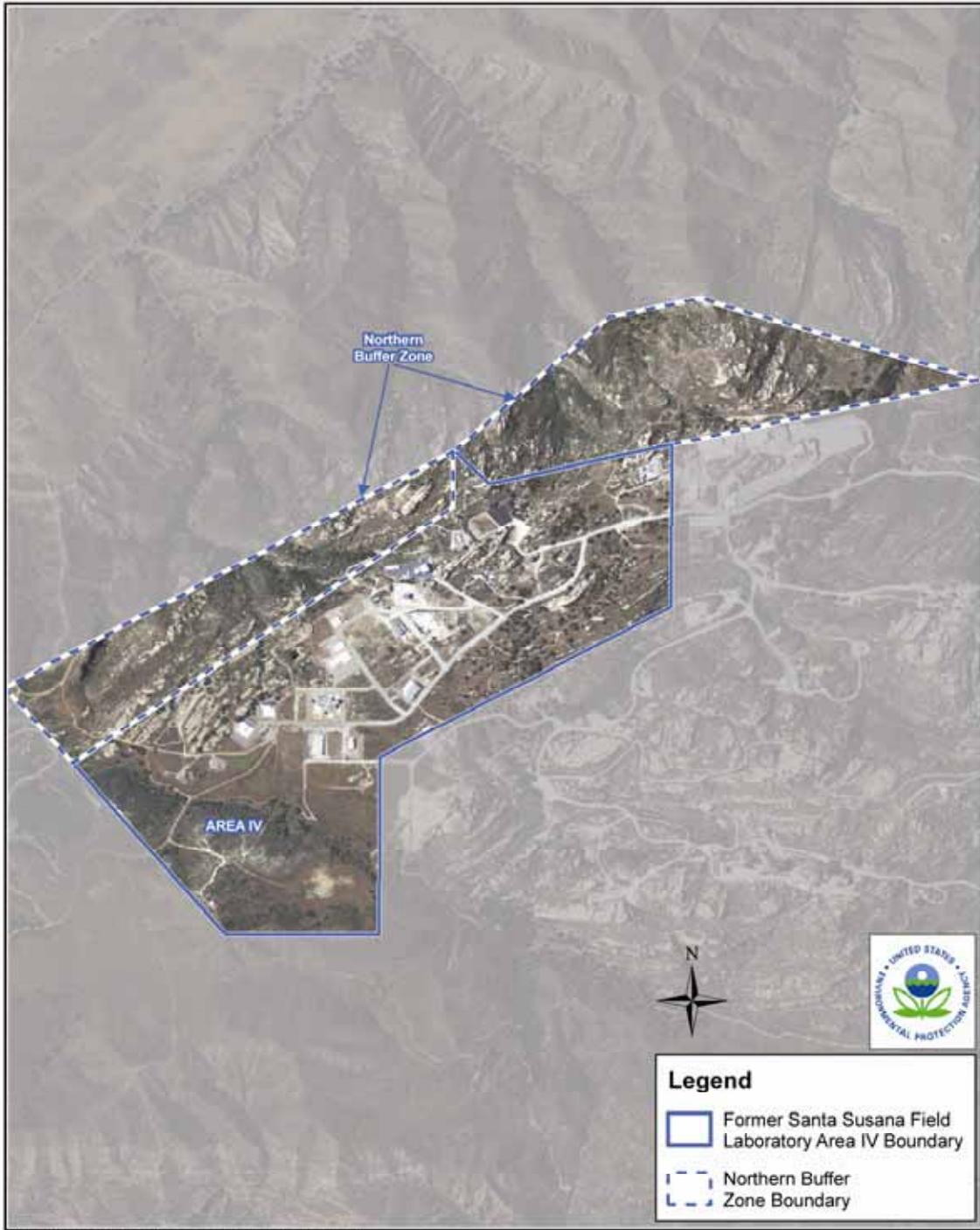
## Site Maps

### Former Santa Susana Field Laboratory Site Location Map



Y:\Santa\_Susana\EP9038 (1)\_SSFL\_Overview\_Portrait.mxd

Former Santa Susana Field Laboratory  
EPA Radiological Study Area Map



*T:\Santa Susana\EP903\PIP (02)\Study Area Map AreaIV\Portrait.mxd*

### Former Santa Susana Field Laboratory Background Study Area Sampling Locations Map



V:\Santa Susana\EP\01A\11\_SSEL\_Overview\_Portal.mxd

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## Appendix K

### EPA Fact Sheets



# SANTA SUSANA FIELD LAB SITE

U.S. Environmental Protection Agency \$ Region 9 \$ San Francisco, CA \$ November 2008

## U.S. EPA to hold Community Meeting on Radiological Background Study

The U.S. Environmental Protection Agency (EPA) invites the public to a community meeting to learn about and provide input on an upcoming study to determine the level of background radiation in areas surrounding the Santa Susana Field Laboratory (SSFL), near Simi Valley, California. The meeting will be held on **December 11, 2008** from 6:30 pm to 8:30 pm at the Grand Vista Hotel located in Simi Valley.

### EPA Community Meeting on Radiological Background Study

December 11, 2008  
6:30pm to 8:30pm

#### Grand Vista Hotel Ballroom/Conference Room

999 Enchanted Way  
Simi Valley, CA 93065  
(805) 583-4000



The SSFL site is a 2,800-acre facility located in Ventura County approximately 2 miles south of the City of Simi Valley and 30 miles northwest of Los Angeles. Owners and operators of this facility include Boeing, the Department of Energy (DOE) and NASA.

Primary past operations include the development and testing of liquid fuel rocket motors, nuclear reactors and related facilities. These operations resulted in the chemical and radiological contamination at the SSFL site.

All nuclear reactors and fuel elements have been removed from the site. The ongoing cleanup of chemical contamination is currently being conducted by Boeing and DOE under the regulatory oversight of the State of California Department of Toxic Substances Control (DTSC). The DOE is responsible for the cleanup of the radiological contamination. EPA has recently been requested to assist DOE concerning the investigation of radiological contamination in a portion of the site.

## What is the Purpose of the Radiological Background Study?

The Background Study is the first phase of an overall study of radiological contamination at the SSFL site. The purpose of the Background Study is to determine the level of “ambient or background” radioactivity found in soil surrounding the SSFL site. The Background Study results will be compared to those of an on-site radiological study when completed. The comparison of study results will indicate the level of radiological contamination associated with past operations at SSFL.

In order to determine the background levels, EPA plans to sample areas that have not been impacted by site operations at SSFL, yet are within the same soil and rock formations found at the SSFL site.



## What will be discussed at this meeting?

This will be the first of at least two community meetings on the Background Study. At this first meeting we plan to cover the following:

- Purpose of the Background Study
- Status of the Project thus far
- Goals of a “Gamma Survey”
- Criteria for Soil Testing
  - » What to test (e.g. surface soil and subsurface soil)
  - » Where to test (e.g. locations surrounding the site believed to be unaffected by site operations)
  - » What types of radiological contamination should we analyze the samples for (e.g. full scans, indicator radionuclides, etc)?
  - » How should we take the samples (e.g. types of equipment to be used)
  - » Methodology to ensure reliable results (e.g. quality assurance procedures)
- Community Input and Ideas
- The Next Community Meeting

## For More Information

If you would like more information on the overall SSFL site, please contact Nicole Moutoux. If you have questions about EPA’s community involvement process, please contact David Cooper or you may call the EPA toll-free message line at (800) 231-3075.

**Nicole Moutoux**, Project Manager  
 Superfund Division (SFD-8-1)  
 75 Hawthorne Street  
 San Francisco, CA 94105  
 (415)972-3012  
*Moutoux.Nicole@epa.gov*

**David Cooper**, Community Involvement Coordinator  
 Office of Community Involvement (SFD-6-3)  
 75 Hawthorne Street  
 San Francisco, CA 94105  
 (415)972-3245  
 Toll-free (800) 231-3075  
*Cooper.David@epa.gov*



## What is the Background Study's Timeline?

After our December 11 community meeting, EPA will assemble a draft workplan regarding the methodologies to be used for the Background Study. At a second community meeting to be held in early 2009, EPA will present the entire preliminary draft workplan including specifics on the amount of sampling, locations of the sampling sites, and other details.

After incorporating additional community input, the workplan will be finalized. It is anticipated that the testing for the Background Study will begin in Spring 2009. Under this schedule, test results and an associated report would be expected in Fall 2009.

## How Can You Be Involved?

EPA needs your help! In order to ensure thorough and successful radiological studies at the SSFL site, EPA believes that it is essential that the community be fully involved. In addition, EPA national policy establishes a strong program of public participation in the site cleanup process.

The purpose of the EPA community involvement program is to help community members become involved in the decision-making process by developing two-way communication between the affected community and EPA.

Some preliminary ways community members can assist with this effort include attending the community meetings on the Background Study and volunteering to be interviewed by EPA to help develop our Community Involvement Plan for the SSFL site.

During community interviews with local residents, elected officials and other interested parties, EPA gathers a list of issues and questions the community is concerned about so that they may be considered during the cleanup process, and particularly when a cleanup remedy is proposed. If you are willing to help EPA by being interviewed for the Community Involvement Plan, please contact David Cooper (see For More Information, Page 2).

## Technical Assistance is Available

EPA has a program to provide an independent technical advisor to interpret cleanup documents and help the community understand technical information about the site. For more information about this program, called Technical Assistance Services for Communities (TASC), please contact: Luis Garcia-Bakarich (415) 972-3237 or email: [garcia-bakarich.luis@epa.gov](mailto:garcia-bakarich.luis@epa.gov).



### Mailing List Coupon

If you are not already on the Santa Susana Field Laboratory mailing list and would like to be, please fill out the coupon below and return it to: David Cooper, Community Involvement Coordinator, U.S. EPA, 75 Hawthorne St. (SFD-6-3), San Francisco, CA 94105 or e-mail the information to: [cooper.david@epa.gov](mailto:cooper.david@epa.gov)

Name \_\_\_\_\_

Mailing Address \_\_\_\_\_

City, State \_\_\_\_\_ Zip \_\_\_\_\_

# Santa Susana Field Lab Site

## U.S. EPA to hold Community Meeting on Radiological Background Study

### SSFL Site Repositories

**Simi Valley Library**  
2969 Tapo Canyon Road  
Simi Valley, California 93063  
(805) 526-1735

**California State University, Northridge**  
Urban Archives Center  
Oviatt Library, Room 4  
18111 Nordhoff Street  
Northridge, California 91330  
Attention: Mr. Robert Marshall  
(818) 677-2271

**Los Angeles Public Library**  
Platt Branch  
23600 Victory Boulevard  
Woodland Hills, California 91367  
Attention: Janet Metzler  
(818) 340-9386



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Region 9  
75 Hawthorne Street (SFD-6-3)  
San Francisco, CA 94105  
Attn: David Cooper (SSFL 11/08)

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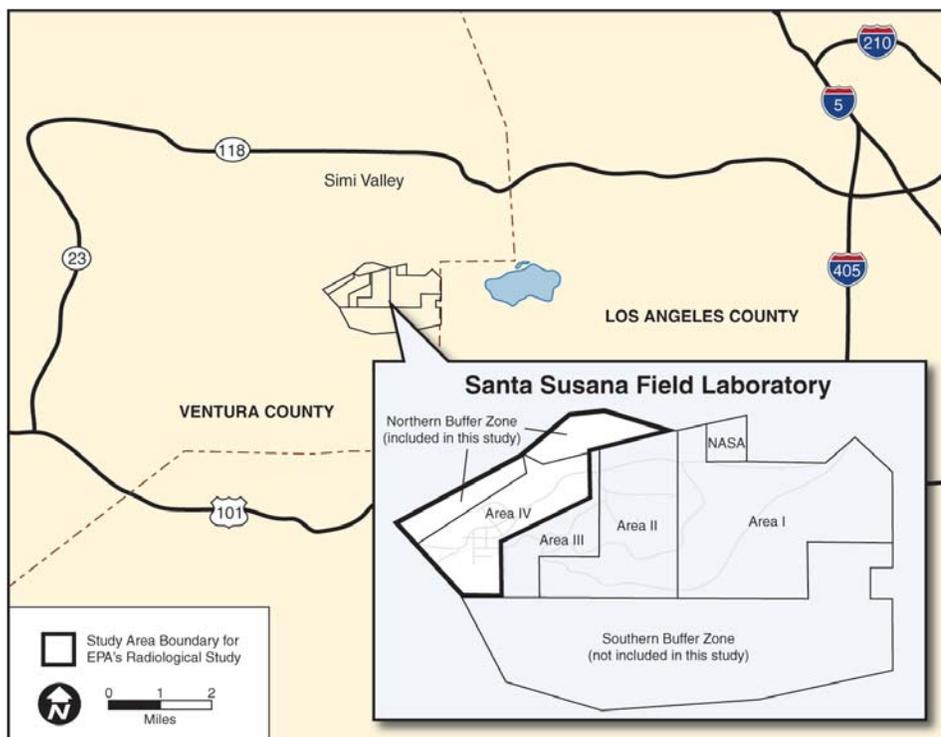
# SANTA SUSANA FIELD LAB SITE

U.S. Environmental Protection Agency \$ Region 9 \$ San Francisco, CA \$ May 2009

## DOE and EPA Sign Funding Agreement on Radiological Study

The U.S. Department of Energy (DOE) and the U.S. Environmental Protection Agency (EPA) have signed an agreement under which DOE provides funding for EPA to perform a radiological study at the Santa Susana Field Laboratory (SSFL), near Simi Valley, California. Under this agreement signed by the two agencies in late April, DOE provided \$38.3M. This funding is in addition to the \$1.7M of initial project funding that DOE provided EPA earlier this year.

This study will incorporate information gathered by a background radiation study that is already under development by EPA. Together, these two EPA studies will provide information concerning areas of elevated radiological contamination in SSFL's Area IV and adjacent buffer zones, which cover a combined total of approximately 470 acres and include the former industrial complex known at the Energy Technology Engineering Center or ETEC (see map below).



**Figure 1:** Study Area Boundary for EPA's Radiological Study, Santa Susana Field Laboratory

### Seeking Former SSFL Employees

Did you work for Atomics International, Rocketdyne, or Rockwell concerning nuclear operations, waste disposal, water/wastewater systems or other tasks that you think may be helpful to EPA? EPA may be interested in interviewing you to supplement our collection of information concerning site operations. This information will assist EPA in the planning of our investigation for potential residual radiological contamination. Please contact Craig Cooper at (415) 947-4148 or at [cooper.craig@epa.gov](mailto:cooper.craig@epa.gov) if you would like to help out. Thanks!

### Technical Assistance Services for Communities (TASC)

#### Planning Meeting

May 26, 2009  
6:30pm – 9:00pm

Radisson Hotel,  
9777 Topanga Canyon Blvd  
Chatsworth, CA

*See Page 4 for meeting details*

## SSFL Site Description

The SSFL is a 2800-acre facility located in Ventura County approximately 2 miles south of the City of Simi Valley and 30 miles northwest of Los Angeles. The SSFL is divided into four areas which are under different ownership and operation. Boeing owns and operates Areas 1, 3 and 4.

Primary operations included the development and testing of liquid fuel rocket motors. The rocket motor operations had been active since the late 1940's and have resulted in chemical contamination. Similar operations were conducted in Area 2, which is owned by NASA. Boeing also operates the 90-acre Energy Technology Engineering Center (ETEC) in Area 4 as a contractor of the Department of Energy (DOE).

Between 1949 and 1988, federal contractors operated 10 nuclear reactors and related facilities that resulted in chemical and radiological contamination at ETEC. All nuclear reactors and fuel elements were removed from SSFL. The ongoing cleanup of the chemical contamination is currently regulated by the State of California Department of Toxic Substances Control (DTSC). The ongoing cleanup of the remaining radiological contamination is managed by DOE.

## EPA's Radiological Study in Area IV will include the following major tasks:

### Information Gathering/Planning: 2009-2010

- Evaluating documents and records concerning past radiological activities and releases of radiological materials at SSFL
- Interviewing former site employees concerning past operations
- Analysis of aerial photographs which may indicate areas of disturbance and disposal activities
- Preparation of a work plan for the investigation of radiological contamination using gamma radiation scanning technology
- Preparation of a work plan for the investigation of radiological contamination by testing environmental (e.g. soil, groundwater) samples for testing at analytical laboratories

### Testing: 2010-2011

- Testing the Area IV for elevated readings of gamma radiation
- Testing of the soil, groundwater, and surface water for a broad range of potential radioactive contaminants

### Reporting: 2011

- Evaluation of the data
- Issuance of EPA's data report

EPA will lead the technical and administrative aspects of the Area IV Radiological Study. EPA anticipates completing this study by September 2011 and will provide the results to the CA Department of Toxic Substances Control (DTSC), which will manage the risk assessment and cleanup decision-making process.

## Update on Radiological Background Study

The purpose of the Background Study is to determine the level of "ambient" or "background" of radioactivity in soil. The results of the Background Study will then be compared to data collected at SSFL to determine the level of radiation in soil associated with past operations at the lab. EPA and stakeholders including DTSC, DOE, NASA, Boeing, and community members have been meeting on a regular basis in order to come to consensus on a Draft Sampling and Analysis Plan for the Background Study.

Due to concern raised by community members about the distance from SSFL of the preferred Reference Background Areas, in addition to sampling the Reference Background Areas, EPA will be sampling areas that are 10 miles or more away from the lab. The results from these further-away locations will then be used to compare to the proposed Background Reference Areas sampling locations to confirm that the Background Reference Areas are in fact representative of background, i.e., not impacted by activities at SSFL. EPA will present data to be collected at the Distance Test Locations as well as the proposed subsequent sampling efforts at the Reference Background Areas at an upcoming Community Meeting likely to be held in July 2009.

## How Can You Become Involved?

EPA's public participation process focuses on answering the community's questions about EPA's radiological studies, providing information to the community about site activities, and incorporating community issues and concerns into Agency decisions. For example, EPA

will be seeking community advice and assistance regarding the collection and analysis of historical site information. We plan to interview former employees who once worked at SSFL who may provide us with additional information regarding former site operations, spills, and releases (see box insert on front page).

EPA places copies of its documents in the Information Repositories at local libraries (see back page), conducts public meetings, provides a toll-free number to contact EPA with questions at 800-231-3075, and provides documents on EPA's SSFL web page <http://www.epa.gov/region09/santasusana>. For more information, see back page for details.

## Technical Assistance to Community Members

The EPA's Technical Assistance Services for Communities (TASC) program provides independent technical assistance and consultation for communities that are impacted by hazardous materials and wastes. TASC services have been requested for the SSFL site. A planning meeting will be held on May 26, 2009 from 6:30 to 9:00 pm at the Radisson Hotel, 9777 Topanga Canyon Blvd, Chatsworth, CA.

This meeting will introduce the TASC consultants to the community stakeholders, define consultant/community roles and responsibilities, identify community issues and concerns, and develop a work plan to organize the TASC consultant's effort regarding EPA's radiological studies, the site investigation, and other aspects of the site work.

## American Recovery And Reinvestment Act

The \$38.3M funding for EPA's radiological study is being allotted from DOE's nationwide allocation of federal funds under the American Recovery and Reinvestment Act (ARRA). Under ARRA guidelines, DOE funds should be spent by September 2011. ARRA provisions regarding expenditures and reporting of the funding will be adhered to by both DOE and EPA. Financial reports concerning this project and other ARRA funded projects will be made available to the public and reported at [www.recovery.gov](http://www.recovery.gov).

## EPA Community Update Meeting

EPA will hold community meetings about the two radiological studies that EPA is undertaking at SSFL. At our next meeting in the summer 2009, the public will learn more about the status of EPA's Radiological Background Study and the schedule for this study.

In addition, EPA will present an overview of EPA's investigation strategy for the Area IV Radiological Study. Topics will include the DOE/EPA funding agreement, project goals, the Historical Site Assessment, other potential investigation techniques and overall project schedule. EPA will be seeking the community's input and ideas to help us ensure a thorough and quality study. This meeting will be held this summer, and EPA will announce the exact date and location of this meeting via a subsequent fact sheet.



### Mailing List Coupon

If you are not already on the Santa Susana Field Laboratory mailing list and would like to be, please fill out the coupon below and return it to: David Cooper, Community Involvement Coordinator, U.S. EPA, 75 Hawthorne St. (SFD-6-3), San Francisco, CA 94105 or e-mail the information to: [cooper.david@epa.gov](mailto:cooper.david@epa.gov)

Name \_\_\_\_\_

Mailing Address \_\_\_\_\_

City, State \_\_\_\_\_ Zip \_\_\_\_\_

# Santa Susana Field Lab Site

## DOE and EPA Sign Funding Agreement on Radiological Study

### SSFL Site Repositories

#### Simi Valley Library

2969 Tapo Canyon Road  
Simi Valley, California 93063  
(805) 526-1735

#### Los Angeles Public Library

Platt Branch  
23600 Victory Boulevard  
Woodland Hills, California 91367  
Attention: Janet Metzler  
(818) 340-9386

### For More Information

#### Craig Cooper

Project Manager (SFD-8-1)  
75 Hawthorne Street  
San Francisco, CA 94105  
(415)947-4148  
*Cooper.Craig@epa.gov*

#### Nicole Moutoux

Project Manager (SFD-8-1)  
75 Hawthorne Street  
San Francisco, CA 94105  
(415)972-3012  
*Moutoux.Nicole@epa.gov*

#### David Cooper

Community Involvement  
Coordinator (SFD-6-3)  
75 Hawthorne Street  
San Francisco, CA 94105  
(415)972-3245  
Toll-free (800) 231-3075  
*Cooper.David@epa.gov*

EPA web address:

[http://www.epa.gov/  
region09/SantaSusana](http://www.epa.gov/region09/SantaSusana)



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# SANTA SUSANA FIELD LAB SITE

U.S. Environmental Protection Agency \$ Region 9 \$ San Francisco, CA \$ June 2009

## EPA Meeting on SSFL Radiological Studies

The United States Environmental Protection Agency (EPA) invites the public to attend a community meeting where updates on its two radiological studies for the Santa Susana Field Lab (SSFL) will be given. The meeting will be held at the Grand Vista Hotel in Simi Valley on July 15, 2009 from 6:30pm to 9:00pm.

### EPA's Radiological Background Study

The purpose of the Radiological Background Study is to determine the level of "ambient" or "background" radioactivity in soil. The results from the Background Study will be compared to data collected within the boundaries of SSFL and its buffer zone to determine the extent of radiological contamination.

EPA has been working on the SSFL Radiological Background Study since the summer of 2008 and held a community update meeting on December 11, 2008.

EPA, the State of California Department of Toxic Substances Control (DTSC), Department of Energy (DOE), NASA, Boeing, and community members have been meeting on a regular basis in order to come to consensus on a Draft Sampling and Analysis Plan for the Background Study.

EPA has identified three Radiological Background Reference Areas where samples for the Background Study will be collected. These areas were identified in part based on the following criteria:

- They are located in the same geologic formations found at SSFL

- They are located as far from SSFL as possible while still remaining in the appropriate formation
- They are 1-2 acre parcels of land
- They are at a similar elevation as SSFL
- There is no evidence of past human activity (i.e., excavation)

In general these Reference Areas are between 3-5 miles from SSFL. EPA will collect surface and subsurface samples at these Radiological Reference Background Areas. A total of approximately 100 surface samples and 40 subsurface samples from these areas will be collected. The surface samples will be collected within the top 6 inches of soil, and the subsurface samples will be collected between 3 and 10 feet below ground surface.

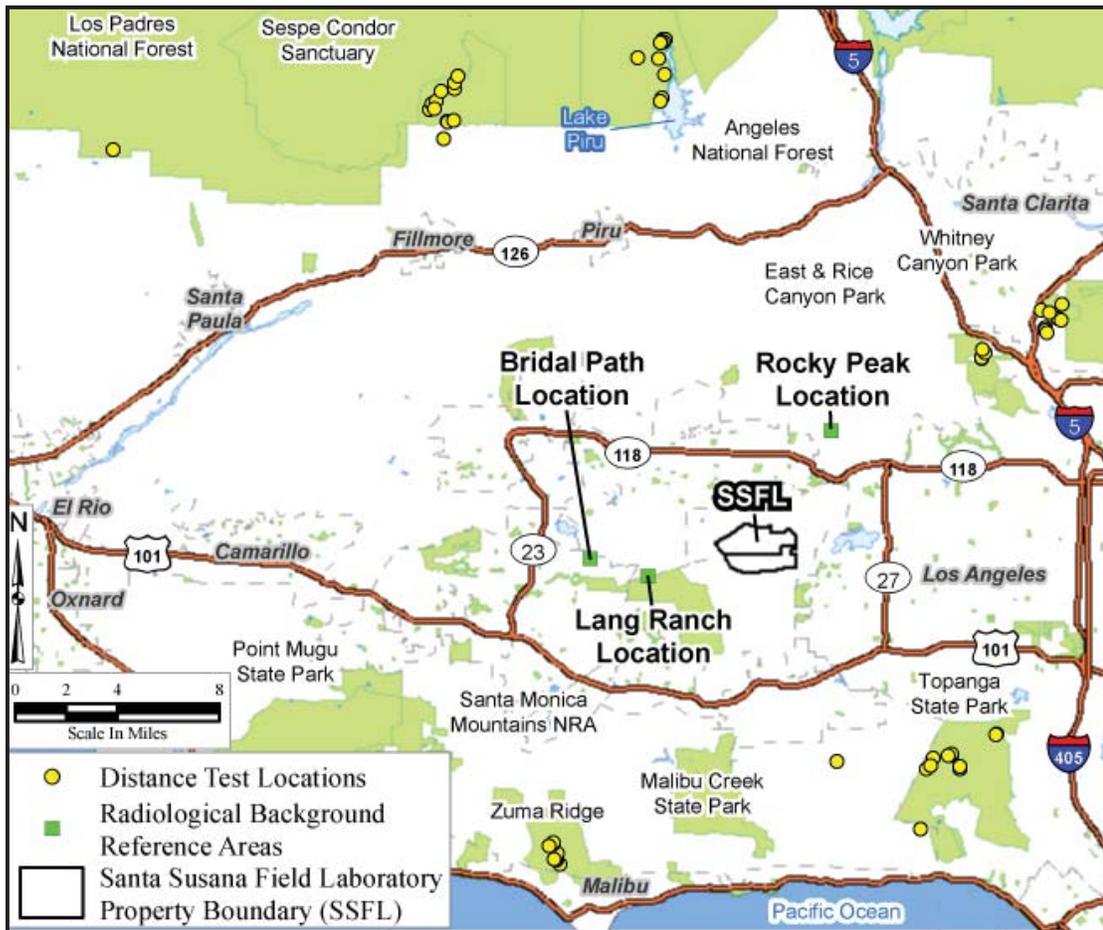
### EPA Community Meeting

Grand Vista Hotel  
999 Enchanted Way,  
Simi Valley, CA

July 15, 2009  
6:30pm – 9:00pm



Figure 1: Location of EPA Community Meeting



**Figure 2:** SSFL Reference Background Areas and Distance Test Locations

EPA also will collect surface samples at 20 locations that are more than 10 miles from the lab. These locations are referred to as “Distance Test Locations.” The purpose of these Distance Test Location samples is to compare data from the Radiological Reference Background Area to data from the Distance Test Locations to ensure that the Radiological Reference Background Areas have not been impacted by potential releases from SSFL.

At the July 15 meeting, EPA will present these locations as well as the list of radionuclides for which testing will be done. A discussion about how the data will be evaluated once it is collected also will be conducted.

EPA would like to hear from community members regarding these plans. Once the Field Sampling Plan is finalized, it will be placed in the Information Repositories and on EPA’s website for SSFL listed at the end of this fact sheet.

## EPA’s Radiological Study of SSFL Area IV

As reported in our May 2009 fact sheet, the DOE and EPA recently signed an agreement whereby DOE provided funding to EPA to conduct a radiological study of Area IV and the adjacent buffer zone to the north (see map of Area IV Study Area Boundaries on page 3).

The SSFL Area IV Study will consist of three major phases: 1) Information Gathering, 2) Planning and, 3) Testing and Reporting. At the July 15<sup>th</sup> meeting, EPA will provide the status of our Information Gathering and Planning phases of work.

### Information Gathering (Historical Site Assessment)

Many documents and reports have been prepared by various parties during the decades when radiological operations

occurred at the SSFL. These documents have been primarily developed and authored by DOE and DOE contractors such as Rocketdyne, Atomics International, Rockwell, and Boeing. It is important for EPA to review and understand these key historical records to ensure that our testing addresses all potential radiological contaminants and the locations where these contaminants may still be present in the environment. EPA will summarize its findings in its own document called a Historical Site Assessment.

### Gamma Scan Planning

As a first step in conducting a comprehensive radiological investigation,

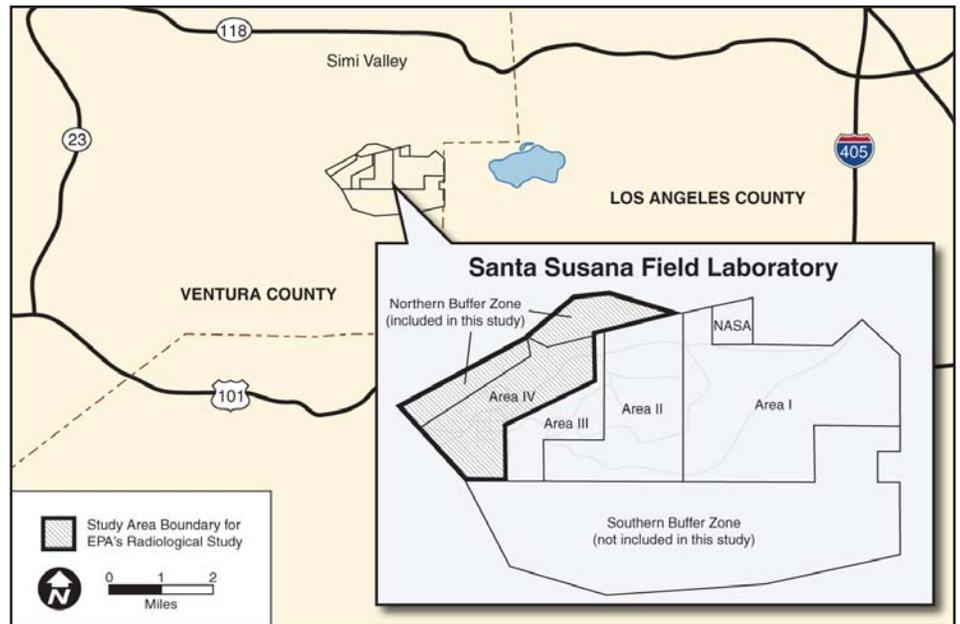
EPA typically uses gamma scanning devices to scan a site to identify potential “hot spots” of elevated gamma radiation in shallow soils (i.e., soils up to about 2 feet below the ground surface). These scanning devices provide data

## SSFL Site Description

The SSFL is a 2800-acre facility located in Ventura County approximately 2 miles south of the City of Simi Valley and 30 miles northwest of Los Angeles. The SSFL is divided into four areas which are under different ownership and operation. Boeing owns and operates Areas 1, 3 and 4 (see map on Page 3). NASA owns and operates Area 2. The ongoing investigation and cleanup of site contamination is overseen and regulated by DTSC.

instantaneously. The data is then used by EPA to better plan the next phase of investigation which involves the collection and laboratory analysis of soil, sediment and water samples. Topics to be discussed at our July 15<sup>th</sup> meeting include:

- What is gamma scanning?
- Preliminary goals for gamma scanning
- Potential technologies to be used for gamma scanning
- Challenges to gamma scanning at the SSFL site
- Schedule for gamma scan work plan development and work plan implementation



**Figure 3:** Study Area Boundary for EPA's area IV Radiological Study, Santa Susana Field Laboratory

## How Can You Learn More?

EPA places copies of its documents in the Information Repositories at local libraries (see back page), conducts public meetings, provides a toll-free number to contact EPA with questions at 800-231-3075, and provides documents on EPA's SSFL web page <http://www.epa.gov/region09/SantaSusana>. EPA is adding a new document location at the DTSC Chatsworth Office (see back page).

## Schedule

EPA will conclude its presentation by providing overall project budget and schedule information, as well as a description of the next steps EPA intends to take in order to complete its study by the end of 2011. Preliminary schedule information is as follows:

2009	2010	2011
<ul style="list-style-type: none"> <li>• Background Testing</li> <li>• Gather and analyze information on SSFL radiological operations</li> <li>• Plan for Gamma Scan work</li> </ul>	<ul style="list-style-type: none"> <li>• Issue Background Study Report</li> <li>• Conduct Gamma Scan work</li> <li>• Plan for and commence Soil and Water Testing</li> </ul>	<ul style="list-style-type: none"> <li>• Issue Gamma Scan Report</li> <li>• Complete soil and water testing</li> <li>• Issue Study Report</li> </ul>



## Mailing List Coupon

If you are not already on the Santa Susana Field Laboratory mailing list and would like to be, please fill out the coupon below and return it to: David Cooper, Community Involvement Coordinator, U.S. EPA, 75 Hawthorne St. (SFD-6-3), San Francisco, CA 94105 or e-mail the information to: [cooper.david@epa.gov](mailto:cooper.david@epa.gov)

Name \_\_\_\_\_

Mailing Address \_\_\_\_\_

City, State \_\_\_\_\_ Zip \_\_\_\_\_

# Santa Susana Field Lab Site

## EPA Meeting on SSFL Radiological Studies

### SSFL Site Repositories

**Simi Valley Library**

2969 Tapo Canyon Road  
Simi Valley, California 93063  
(805) 526-1735

**Los Angeles Public Library**

Platt Branch  
23600 Victory Boulevard  
Woodland Hills, California 91367  
Attention: Janet Metzler  
(818) 340-9386

**Department of Toxic Substances  
Control Chatsworth Office**

9211 Oakdale Avenue  
Chatsworth, California 91311  
Please contact Vivian Tutaan at  
(818) 717-6520 for an appointment

### For More Information

**Craig Cooper**

Project Manager (SFD-8-1)  
(Area IV Radiological Study)  
75 Hawthorne Street  
San Francisco, CA 94105  
(415)947-4148  
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**Nicole Moutoux**

Project Manager (SFD-8-1)  
(Radiological Background Study)  
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San Francisco, CA 94105  
(415)972-3012  
*Moutoux.Nicole@epa.gov*

**David Cooper**

Community Involvement  
Coordinator (SFD-6-3)  
75 Hawthorne Street  
San Francisco, CA 94105  
(415)972-3245  
Toll-free (800) 231-3075  
*Cooper.David@epa.gov*



EPA web address: <http://www.epa.gov/region09/SantaSusana>

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Region 9  
75 Hawthorne Street (SFD-6-3)  
San Francisco, CA 94105  
Attn: David Cooper (SSFL 6/09)

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## Appendix L

### Acronyms and Abbreviations

ACME	Aerospace Cancer Museum of Education
Boeing	The Boeing Company
CERCLA CIP	Comprehensive Environmental Response, Compensation and Liability Act Community Involvement Plan
DOE	Department of Energy
DTSC	Department of Toxic Substances Control
EPA ETEC	U.S. Environmental Protection Agency Energy Technology Engineering Center
IR	Information Repository
NASA	National Aeronautics and Space Administration
NEPA	National Environmental Policy Act
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
Rocketdyne	Rocketdyne Division of North American Aviation (owned by Boeing)
SB990	State of California Senate Bill 990
SRE	Sodium Reactor Experiment
SSFL	Santa Susana Field Laboratory
TASC	Technical Assistance Services for Communities

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## Appendix M

### Glossary

**Community Involvement Plan (CIP):**

A site-specific plan prepared by EPA that identifies community involvement objectives at a site and proposes community outreach activities to help EPA involve the public in its work.

**Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA):**

A federal law adopted in 1980 and subsequently amended (Public Law 96-510, as amended) that provides for liability, cleanup, and emergency response for hazardous substances released into the environment. This is commonly called Superfund.

**Community Involvement:**

The EPA effort to establish two-way communication with the public to create understanding of EPA programs and related actions, to ensure public input into decision-making processes related to affected communities, and to make certain that the Agency is aware of and responsive to public concerns. Specific community relations activities are required in relation to Superfund remedial actions.

**Contaminant of Concern (COC):**

Specific radionuclides that are identified for evaluation in the site assessment process.

**Contamination:**

Introduction into water, air, and soil of microorganisms, chemicals, toxic substances, wastes, radiological, or wastewater in a concentration that makes the medium unfit for its next intended use. Also applies to surfaces of objects, buildings, and various household and agricultural use products.

**Groundwater:**

The supply of fresh water found beneath the Earth's surface, usually in aquifers, which supply wells and springs. Because groundwater is a major source of drinking water, there is growing concern over contamination from leaching agricultural or industrial pollutants or leaking underground storage tanks.

<b>Endangered Species:</b>	Animals, birds, fish, plants, or other living organisms threatened with extinction by anthropogenic (man-caused) or other natural changes in their environment. Requirements for declaring a species endangered or habitat critical to the species' continued survival are contained in the Endangered Species Act.
<b>Environmental Assessment:</b>	An environmental analysis prepared pursuant to the National Environmental Policy Act to determine whether a federal action would significantly affect the environment and thus require a more detailed environmental impact statement.
<b>Environmental Impact Statements:</b>	A tool for decision making, it describes the positive and negative effects of the undertaking and cites alternative actions. The document required of federal agencies by the National Environmental Policy Act for major projects or legislative proposals significantly affecting the environment.
<b>EPA Study Area:</b>	The EPA Study Area includes Area IV and the northern buffer zone of the Santa Susana Field Laboratory (SSFL) Site.
<b>Epidemiology:</b>	Study of the distribution of disease, or other health-related states and events in human populations, as related to age, sex, occupation, ethnicity, and economic status in order to identify and alleviate health problems and promote better health.
<b>Habitat:</b>	The place where a population (e.g., human, animal, plant, microorganism) lives and its surroundings.
<b>Human Health Risk:</b>	The likelihood that a given exposure or series of exposures may have damaged or will damage the health of individuals.
<b>Mixed Waste:</b>	Waste that contains a hazardous waste component and a radioactive material component.
<b>National Pollutant Discharge Elimination System:</b>	A provision of the Clean Water Act which prohibits discharge of pollutants into waters of the United States unless a special permit is issued by EPA, a state, or, where delegated, a tribal government on an Indian reservation.
<b>National Priorities List:</b>	EPA's list of hazardous waste sites identified for possible long term cleanup by the Federal Superfund law.

<b>Preliminary Assessment:</b>	The process of collecting and reviewing available information about a known or suspected waste site or release to determine whether further study or action is appropriate.
<b>Public Notice:</b>	Newspaper notifications by EPA informing the public of Agency actions such as community meetings.
<b>Radioactive Contamination:</b>	The presence of residual radioactivity in excess of background levels. Radioactive contamination includes radioactive material, radioactive waste, and mixed waste as defined in this glossary.
<b>Radiologically Impacted Area:</b>	Any area with a reasonable possibility of containing residual radioactivity in excess of natural background or fallout levels.
<b>Radioactive Material:</b>	All materials that emit, or are suspected of emitting, radioactivity or that contain materials that emit radioactivity regardless of the level of radioactivity emitted.
<b>Radioactive Waste:</b>	Any radioactive materials that were disposed of, whether solid, liquid, or gaseous. The term applies to any such material whether it was actually disposed, released to the environment, or was stored or present on the site prior to disposal.
<b>Radioisotopes:</b>	Variants of radioactive elements with potentially serious adverse effects on the human body.
<b>Radionuclide:</b>	Radioactive particle, manmade (anthropogenic) or natural, with a distinct atomic weight number.
<b>Release:</b>	Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment of a hazardous or radioactive material.
<b>Remedial Investigation:</b>	Actions undertaken to characterize the full nature and extent of contamination at a site. EPA will identify the contamination; DTSC will evaluate human health and ecological risks.
<b>Risk Assessment:</b>	Qualitative and quantitative evaluation of the risk posed to human health and/or the environment.

<b>Santa Susana Field Laboratory (SSFL) Site:</b>	The SSFL Site comprises approximately 2,850 acres of land in eastern Ventura County, California, jointly owned by The Boeing Company and the National Aeronautics and Space Administration (NASA) and includes Areas I, II, III, IV and the Northern and Southern Buffer Zones.
<b>Site:</b>	Any installation, facility, or discrete, physically separate parcel of land, or any building or structure or portion thereof, that is being considered for survey and investigation.
<b>Superfund:</b>	The common name for the Federal program operated under the legislative authority of CERCLA.
<b>Surface Water:</b>	All water naturally open to the atmosphere (rivers, lakes, reservoirs, ponds, streams, impoundments, seas, estuaries, etc.)
<b>Topography:</b>	The physical features of a surface area including relative elevations and the position of natural and man-made (anthropogenic) features.