



# SANTA SUSANA FIELD LAB SITE

U.S. Environmental Protection Agency • Region 9 • San Francisco, CA • April 2010

## EPA Meeting on SSFL Radiological Studies

The U. S. Environmental Protection Agency (EPA) invites the public to attend a community meeting where updates on its radiological studies for the Santa Susana Field Lab (SSFL) will be provided. EPA has been funded by the Department of Energy (DOE) to conduct a radiological investigation of SSFL Area IV and the Northern Buffer Zone.

EPA will present and discuss the status of its investigative efforts and answer questions from the general public. The meeting will be held on May 12 from 6:30pm to 9:00pm at Canoga Park High School, 6850 Topanga Canyon Blvd, Canoga Park, CA (See Figure 1).

### EPA's Radiological Background Study

The purpose of the Radiological Background Study is to determine the level of ambient or naturally-occurring radiation in areas that have not been impacted by activities at SSFL. These results will then be compared to data collected from SSFL to determine the level of residual radiation in soil from operations at SSFL.

In late 2009, EPA collected 140 samples from three areas located approximately 4-5 miles away from SSFL that are considered to be representative of background radiation levels (see Figure 2 for a map of EPA background soil sample locations). EPA also collected samples from several locations 10 to 20 miles away from SSFL to make certain that its three primary background reference areas are not impacted by past operations at the lab. All the data is currently being analyzed and the results will be available this summer. In June 2010, EPA will issue a Technical Memorandum summarizing the preliminary results of the sampling followed by a full report in the Fall of 2010.

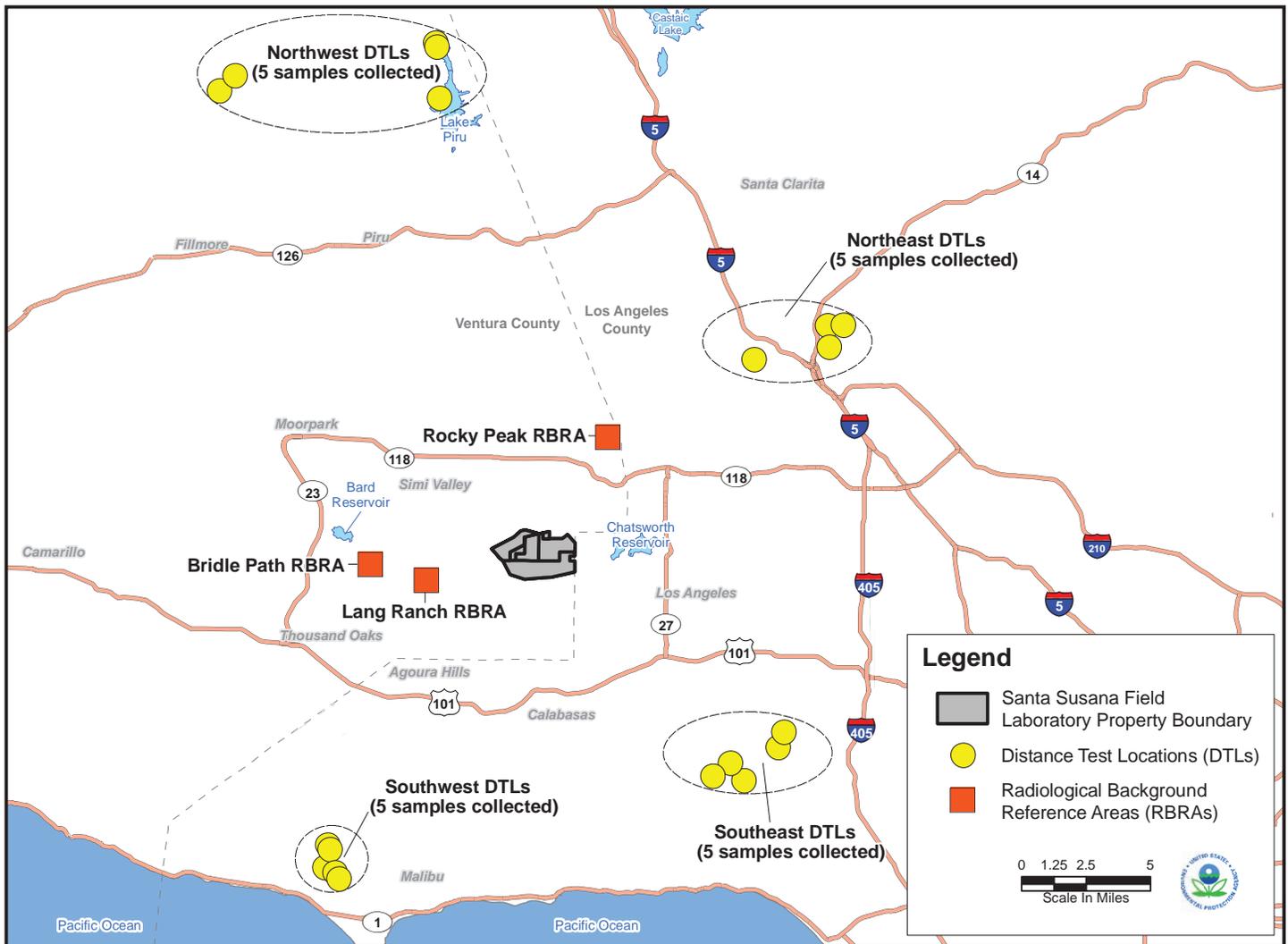
### EPA Community Meeting

**May 12, 2010**  
**6:30pm – 9:00pm**

Canoga Park High School  
6850 Topanga Canyon Blvd  
Canoga Park, CA



Figure 1: Location of EPA Community Meeting



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**Figure 2: EPA Radiological Background Study Areas**

## EPA’s Radiological Testing Program at SSFL

EPA’s investigation in search of residual radiological contamination at property within SSFL Area IV and the Northern Buffer Zone is about to begin. EPA’s on-site radiological study is focused on releases of radioactive materials used during past nuclear energy research and testing associated with the DOE’s Energy Technology Engineering Center or ETEC. Figure 3 presents portions of SSFL that EPA has been funded to investigate. EPA’s work consists of three major phases: (1) Information Gathering, (2) Planning or Pre-Investigation Activities, and, (3) Testing and Reporting. At the May 12th meeting, EPA will provide an update on the status of all three phases of its work.

## Information Gathering (Historical Site Assessment)

Thousands of documents and reports about the radiological operations conducted at the site were prepared by various parties during the decades when the SSFL was in full operation. These documents have been primarily developed and authored by DOE, and DOE contractors such as Rocketdyne, Atomics International, Rockwell, and Boeing. Using its authorities under Federal law, EPA requested copies of these documents from both Boeing and DOE so that EPA can conduct an independent review of critical historical records.

In addition, EPA has recently finished an analysis of aerial photographs from 1939 (pre-development of SSFL and ETEC) to 2005 (post closure of ETEC). Careful analyses of these photographs identified locations where contamination may have been disposed of on the ground in pits, ditches,

and landfills. As a way to further collect independent information, EPA is interviewing former ETEC employees to gain their insight and advice concerning potential contaminated locations that may not have been well documented in past records and reports.

EPA will summarize all of its findings in a document called a Historical Site Assessment (HSA). The purpose of the HSA is to ensure that EPA's upcoming soil and water testing addresses a full range of potential radiological contaminants and locations where these contaminants may still be present in the environment. Because of the large volume of information to be covered, EPA will present its findings in a series of technical memorandums. EPA's first technical memorandum will be issued in late April and will be posted on EPA website: <http://www.epa.gov/region09/SantaSusana>. Please note that this web address is case sensitive.

### Pre-investigation Activities

Because EPA's work at SSFL will involve the mobilization of up to 30 individuals to the site along with a great deal of equipment and supplies, EPA has established a field office at SSFL Building 204, a former NASA building being managed by the U.S. General Services Agency (GSA) on behalf of NASA. EPA and GSA signed an agreement called a memorandum of understanding (MOU) which temporarily transfers custody of Building 204 to EPA.

In addition, EPA and SSFL property owner and operator, The Boeing Company, signed an Administrative Order on Consent. This Consent Order requires Boeing to participate and cooperate with EPA by allowing us entry and access to the site and giving us the ability to do our work within the boundaries of SSFL. Both the MOU and AOC are available for public review and can be found on EPA's website.

In addition to preparing investigation work plans, EPA also must document how it will comply with a wide variety of environmental laws that protect natural and cultural resources at SSFL. For example, due to the presence of threatened and endangered animal and plant species at SSFL, EPA issued a report explaining how it will take action while operating its equipment and vehicles to avoid or minimize impacts to these species protected under Federal law. Copies of EPA's Biological Assessment and U.S. Fish and Wildlife's Biological Opinion also can be found on EPA's website.

## 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 Page 3). The U.S. Government owns a small portion of Area 1 and all of Area 2.

Primary operations at SSFL included the development and testing of liquid fuel rocket motors. The rocket motor operations have been active since the late 1940's and have resulted in chemical contamination. DOE contractors operated the ETEC in SSFL Area IV. Between 1949 and 1988, 10 nuclear reactors and related facilities caused chemical and radiological contamination in soil and groundwater. All nuclear reactors and fuel elements were removed from SSFL. The ongoing investigation and cleanup of site contamination is overseen and regulated by California Department of Toxic Substances Control (DTSC).

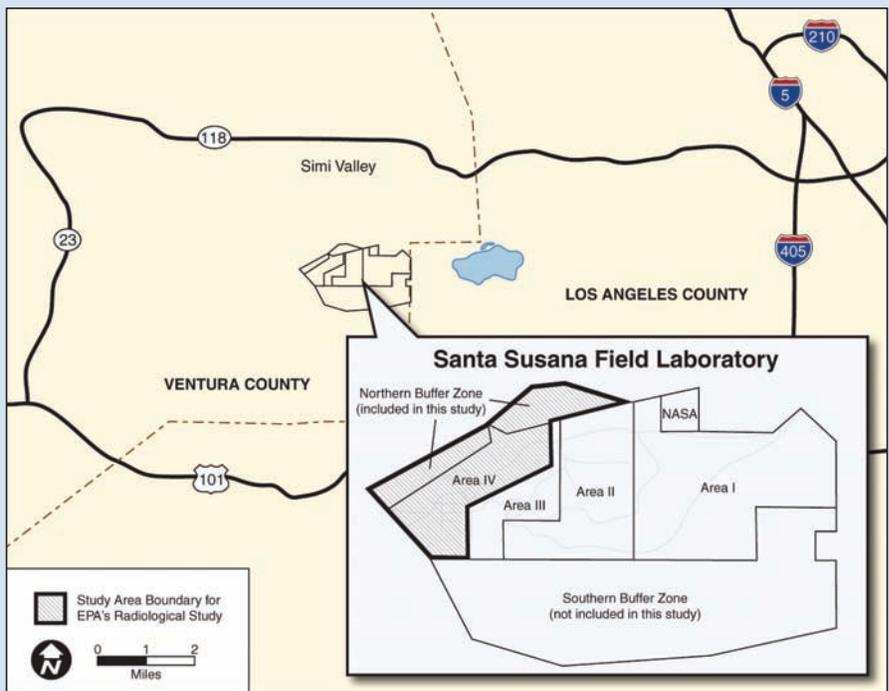


Figure 3: Santa Susana Field Laboratory Site

## Testing and Reporting

### *Scanning for Gamma Radiation to Commence in the Spring 2010*

A next step in EPA's comprehensive radiological investigation is to conduct a thorough survey using sensitive radiation detection instruments that are specially designed to detect gamma radiation coming from the ground. By moving the instruments slowly over the ground, or "scanning," EPA will be able to locate potential "hot spots" of elevated gamma radiation in soils.

The advantage of using the gamma scanning equipment is that more ground can be covered compared to collecting traditional soil samples alone. However, the gamma scanning instruments are not able to detect all types of radioactive materials. Therefore, traditional soil samples will be collected for laboratory analysis to ensure that we can detect all radioactive materials that may possibly exist in Area IV and the Northern Buffer Zone.

Starting May 2010 and for approximately one year thereafter, EPA plans to scan all accessible areas of Area IV and the Northern Buffer Zone. Depending on the terrain, which ranges from flat to rough, EPA will mount gamma scanning equipment onto an off-road forklift, a mule, or a cart, or use a hand-held scanner. As the gamma radiation data is collected and analyzed, EPA will provide periodic updates concerning its progress and findings.

### *Water and Soil Testing to Commence in Summer 2010*

EPA's water and soil testing programs are still in the planning stages. As information from the HSA and gamma scanning work become available, EPA will develop work plans to target locations that will maximize the likelihood of finding elevated radiological contamination. As EPA's water and soil testing work plans are developed, they will be posted on EPA's website.

EPA water testing (e.g. testing of groundwater and naturally occurring surface springs/seeps) will begin later this spring. A Sampling and Analysis Plan will be available on EPA's website prior to field work beginning. Soil testing is slated to begin this fall, also preceded by a Sampling and Analysis Plan. EPA understands the importance of selecting laboratories of the highest technical capability and integrity so that the data results will be credible and useful to all users of EPA's data. EPA is working to secure one or more analytical laboratories to analyze soil and water samples that meet these high standards.

## Schedule

EPA will conclude its presentation on May 12<sup>th</sup> 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:

Calendar Year 2010	
<b>Spring – Summer</b>	<ul style="list-style-type: none"><li>• Issue Radiological Background Study Report</li><li>• Begin Gamma Radiation Scanning (one year duration)</li><li>• Start Water Testing (one year duration)</li></ul>
<b>Fall – Winter</b>	<ul style="list-style-type: none"><li>• Start Soil Testing (one year duration)</li><li>• Begin issuing periodic data updates on gamma radiation scanning</li></ul>
Calendar Year 2011	
<b>Spring – Summer</b>	<ul style="list-style-type: none"><li>• Issue complete Historical Site Assessment Report (based on technical memos)</li><li>• Finish Water Testing</li></ul>
<b>Fall – Winter</b>	<ul style="list-style-type: none"><li>• Finish Soil Testing</li><li>• Issue comprehensive Area IV Radiological Study Report</li><li>• Depart from field office</li></ul>

## How Can You Learn More?

EPA places copies of its documents in the Information Repositories at local libraries (see Page 5), conducts public meetings, issues fact sheets, and provides a toll-free number to contact EPA with questions at 800-231-3075.

In addition, EPA has a website dedicated to our work at the SSFL site. On this website, you will find EPA's work-related documents concerning our information gathering, planning, testing and reporting at SSFL. This website can be found at the following web address: <http://www.epa.gov/region09/SantaSusana>. Please note that this web address is case sensitive.

### EPA's SSFL Outreach Going Green

EPA will add the paperless power of the Internet to its public outreach activities. A new electronic publication, the E-News, will provide content unavailable through EPA's paper fact sheets (that would make the paper mailing too large), such as links to video content and full-color maps, and to additional web resources. The E-News will be published about every two months. To receive a copy of EPA's E-News, please send an e-mail to [cooper.david@epa.gov](mailto:cooper.david@epa.gov) with the following subject line: subscribe E-News. Your e-mail address will not be released by EPA.

## SSFL Site Repositories

### Simi Valley Library

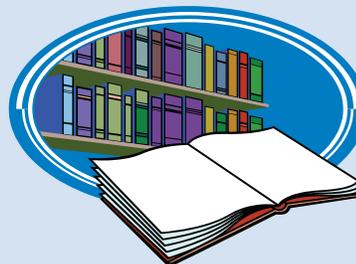
2969 Tapo Canyon Road  
Simi Valley, California 93063  
(805) 526-1735

### 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



## 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 \_\_\_\_\_

E-mail Address \_\_\_\_\_

# Santa Susana Field Lab Site

## EPA Meeting on SSFL Radiological Studies

### For More Information

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You may also call these individuals at EPA's toll-free message line at (800) 231-3075. Please leave a message and your call will be returned.



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

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San Francisco, CA 94105  
Attn: David Cooper (SSFL 4/10)

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