



# SANTA SUSANA FIELD LAB SITE

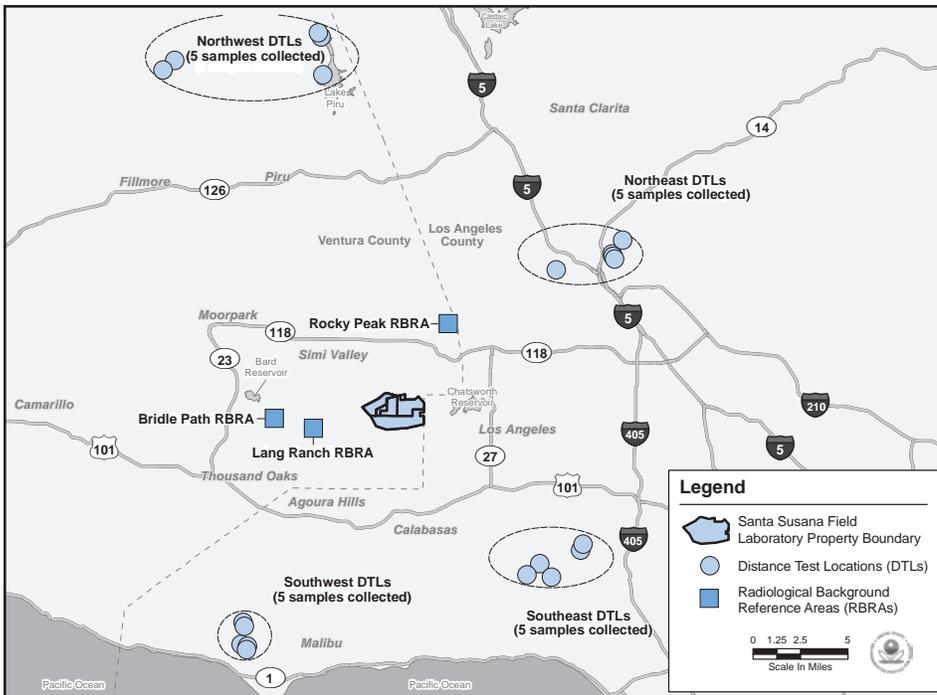
U.S. Environmental Protection Agency • Region 9 • San Francisco, CA • November 2010

## SSFL Area IV Radiological Study Begins

The U. S. Environmental Protection Agency (EPA) started its Radiological Study of Santa Susana Field Lab (SSFL) Area IV and Northern Buffer Zone in July 2010. Opportunities for the public to observe EPA's scanning and sampling activities are discussed in the sidebar.

In addition, EPA's laboratory is currently analyzing soil samples taken between four and twenty miles from SSFL to determine the level of radioactivity that is *not* associated with historic industrial activities at the Lab, i.e., "background." These samples are part of a radiological background study which will be discussed during an upcoming EPA meeting that is tentatively planned for January 2011.

When EPA's radiological background study is complete, it will be used by the State of California to compare against EPA's soil sampling results of SSFL Area IV. The State of California, through its Department of Toxic Substances Control, will set soil cleanup standards and oversee appropriate cleanup activities.



### Our Work Has Begun – Come Visit Us

EPA has begun its investigation of residual radiological contamination within SSFL Area IV and the Northern Buffer Zone. The public is invited to observe EPA's gamma scanning equipment, and soil and water testing field crews the 2<sup>nd</sup> and 4<sup>th</sup> Wednesday of every month from 10:30am to Noon.

Because EPA's work is conducted within a privately-owned gated facility, procedures were developed to allow the visitors to watch our work while staying safe. A reservation is required at least 48-hours before coming on-site. To make a reservation, send an email to EPA contractor Stacy Harp at [visitsflepa@hgl](mailto:visitsflepa@hgl) or call Stacy at (818) 466-8058.

**Figure 1:** EPA Radiological Background Study Areas

## EPA's SSFL Fact Sheets Change From Paper To Electronic

In an effort to reduce the amount of paper we use, EPA will send out future information about its work at SSFL electronically. The new E-Newsletter will allow EPA to provide extensive photos, video and Internet links to additional resources.

To subscribe to the E-Newsletter, please send an email to David Cooper at [cooper.david@epa.gov](mailto:cooper.david@epa.gov). If you would prefer to continue receiving paper information, please contact David Cooper toll-free at 800-231-3075 or 415-972-3245.

# EPA's Radiological Background Study

EPA is in the process of analyzing 140 samples taken from three areas (Radiological Background Reference Areas) located approximately 4-5 miles away from SSFL that are considered to be representative of background radiation levels. These areas were chosen after careful evaluation of over 10 other areas because EPA believes they are similar to SSFL with respect to geology, terrain, and climate.

## 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 below). 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 DTSC.

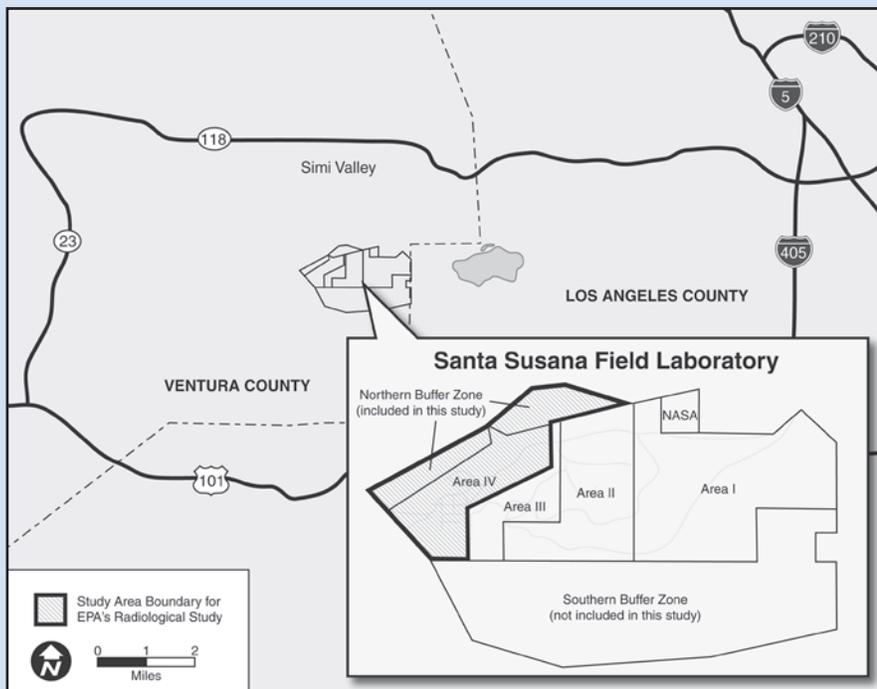


Figure 2: Santa Susana Field Laboratory Site

Due to concerns raised by community members that the three areas may be too close to SSFL and possibly impacted by on-site operations, EPA also collected 20 soil samples in locations (Distance Test Locations) at least 10 miles away from SSFL. These samples will be compared to the samples from the three closer areas to ensure that levels at the three Radiological Background Reference Areas are not significantly higher than the samples from the Distance Test Locations (see map on Page 1).

Currently, EPA plans to issue a Technical Memorandum summarizing the preliminary results of the sampling in December 2010, followed by a full report in early 2011. EPA will hold public meetings to explain the preliminary data and the full report.

## EPA's Radiological Testing Program at SSFL

### Gamma Radiation Scanning

Scanning surface soil for gamma radiation started in July and over 90 acres have been surveyed. EPA will scan all accessible areas of Area IV and the Northern Buffer Zone. EPA gamma radiation detectors are mounted to an off-road forklift, a mule, a rolling cart, or a hand-held scanner depending on the terrain.



Off-Road Forklift Gamma Scanner

## Water and Soil Testing

The first round of groundwater collection in Area IV wells occurred from August 18 to September 10. EPA collected groundwater from 66 wells in area IV and is testing the wells for relevant radionuclides.

In mid-October EPA began soil sampling in Area IV where the former nuclear energy reactors once operated. EPA's samples will generally be taken from ground surface down to 10 feet in depth. Most of the soil samples will be taken from locations where EPA believes residual radiological contamination may be present (e.g. near former reactor buildings, disposal areas, pipelines and tanks). These sample locations are based on EPA's independent assessment of past information in site records, aerial photos, interviews with former lab workers, gamma radiation scanning, and geophysical tests for potential buried materials.

Some soil samples will be taken from locations selected randomly. EPA anticipates collecting and testing thousands of soil samples over the next 12 months. EPA will also be collecting soil from within drainages leading from Area IV. This will occur in November 2010.

## Project Schedule Update

Calendar Year 2010	
<b>Summer</b>	<ul style="list-style-type: none"><li>• Start 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>• Issue Radiological Background Study Report</li><li>• Start sediment and surface water sampling</li><li>• Start Soil Testing (one year duration)</li><li>• Begin issuing periodic data updates regarding the results of EPA's testing efforts (one year duration)</li></ul>
Calendar Year 2011	
<b>Spring – Summer</b>	<ul style="list-style-type: none"><li>• Finish Gamma Radiation Scanning</li><li>• Finish Water Testing</li><li>• Finish Sediment and Surface Water Testing</li></ul>
<b>Fall – Winter</b>	<ul style="list-style-type: none"><li>• Finish Soil Testing</li><li>• Final Report</li></ul>

## How Can You Learn More about EPA's Work at SSFL?

### Public Meetings

About every six months, EPA provides meetings for the general public to receive periodic updates concerning the status of our radiological study and our progress and findings. The next EPA public meeting is tentatively planned for January 2011. EPA will issue a notice with the exact day, time, and location of the public meeting.

### EPA documents

EPA places copies of its documents in the Information Repositories at local libraries (see back page), conducts public meetings, issues fact sheets, and provides a toll-free message number to contact EPA with questions at (800) 231-3075. Recently, a binder with a number of current documents has been added to each repository.

### EPA Website

In addition, EPA has a website dedicated to our radiological study at SSFL. On the website, you will find information and documents that EPA has prepared concerning site research, environmental compliance, and data collection and reports. This website can be found at: <http://www.epa.gov/region09/SantaSusana> (please note that this web address is case-sensitive).

# Santa Susana Field Lab Site

## SSFL Area IV Radiological Study Begins

### For More Information

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### 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



EPA's toll-free message line **(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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Attn: David Cooper (SSFL 11/10)

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