



The Boeing Company  
Santa Susana Field Laboratory  
5800 Woolsey Canyon Road  
Canoga Park, CA 91304-1148

Hand-Delivered

May 21, 2013

In reply, refer to SHEA-113547

Mr. John Jones  
Federal Project Director  
U.S. Department of Energy  
4100 Guardian St. STE 160  
Simi Valley, CA 93063

Dear Mr. Jones:

Subject: NESHAPs Report for 2012

The U.S. Environment Protection Agency (EPA) regulates airborne releases of radioactivity from the Department of Energy's (DOE) facilities under 40 CFR 61, Subpart H. This regulation requires that the National Emission Standards for Hazardous Air Pollutants (NESHAPs) Report for the DOE's operations at Santa Susana Field Laboratory (SSFL) be submitted to EPA on an annual basis.

The only potential emission source at the DOE facility at SSFL is the exhaust stack at the Radioactive Materials Handling Facility (RMHF). In May 2007, DOE suspended all Decontamination and Decommissioning (D&D) operations at SSFL, pending completion of the SSFL Area IV Environmental Impact Statement (EIS). As a result, the entire facility was placed into a safe shutdown mode, and no effluents were released to the atmosphere through the stack in 2012.

The EPA limit for a DOE site is 10 mrem/yr, as specified in 40 CFR 61, Subpart H. The regulation also specifies that radiation exposure dose to the Maximally Exposed Individual (MEI) be calculated using the EPA's CAP88PC computer model. Due to the fact that no effluents were released to the atmosphere from the DOE facility at SSFL in 2012, the potential radiation exposure dose to the MEI was zero.

This report includes the Certification Statement to be signed by P. Rutherford for The Boeing Company, Santa Susana Field Laboratory and by you for the DOE Project Office. The Certification Statements are required for the final report.

If you have any questions or comments on this report, please contact Ning Liu at (818) 466-8762.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Phil Rutherford', with a stylized flourish at the end.

Phil Rutherford, Manager  
Health, Safety & Radiation Services

PR:NL:jc

Enclosure: Radionuclide Air Emissions Annual Report

DOEAIR12

**U. S. Department of Energy  
Radionuclide Air Emissions Annual Report  
(under Subpart H of 40 CFR Part 61)  
Calendar Year 2012**

Site Name: Santa Susana Field Laboratory  
(Prepared on May 15, 2013)

Operations Office Information

Office: Department of Energy  
Address: Energy Technology Engineering Center  
4100 Guardian St. STE 160  
Simi Valley, CA 93063

Contact: John Jones  
Phone: (805) 416-0990

Site Information

Operator: The Boeing Company  
Santa Susana Field Laboratory  
Address: 5800 Woolsey Canyon Road  
Canoga Park, CA 91304-1148

Contact: Ning Liu  
Phone: (818) 466-8762

## **Section I. Facility Information**

### Site Description

The Santa Susana Field Laboratory (SSFL) is located at the boundary of Ventura and Los Angeles Counties in southern California, as shown in Figure 1. The site consists of four administrative areas and undeveloped land, with a total area of approximately 2,850 acres. A broad range of energy related research and development (R&D) projects, including nuclear technologies, were conducted in Area IV of the site. All the nuclear R&D operations in Area IV ceased in 1988, and the subsequent efforts have been directed toward decontamination and decommissioning (D&D) of the former nuclear facilities. In May 2007, DOE suspended all D&D operations at SSFL, pending completion of the SSFL Area IV Environmental Impact Statement (EIS). Area IV has an area of about 290 acres, and Figure 2 shows the arrangement of the site.

The climate at SSFL is generally dry, with variable winds. The site is situated between Simi Valley and San Fernando Valley. While the land immediately surrounding Area IV is undeveloped, suburban residential areas are at greater distances.

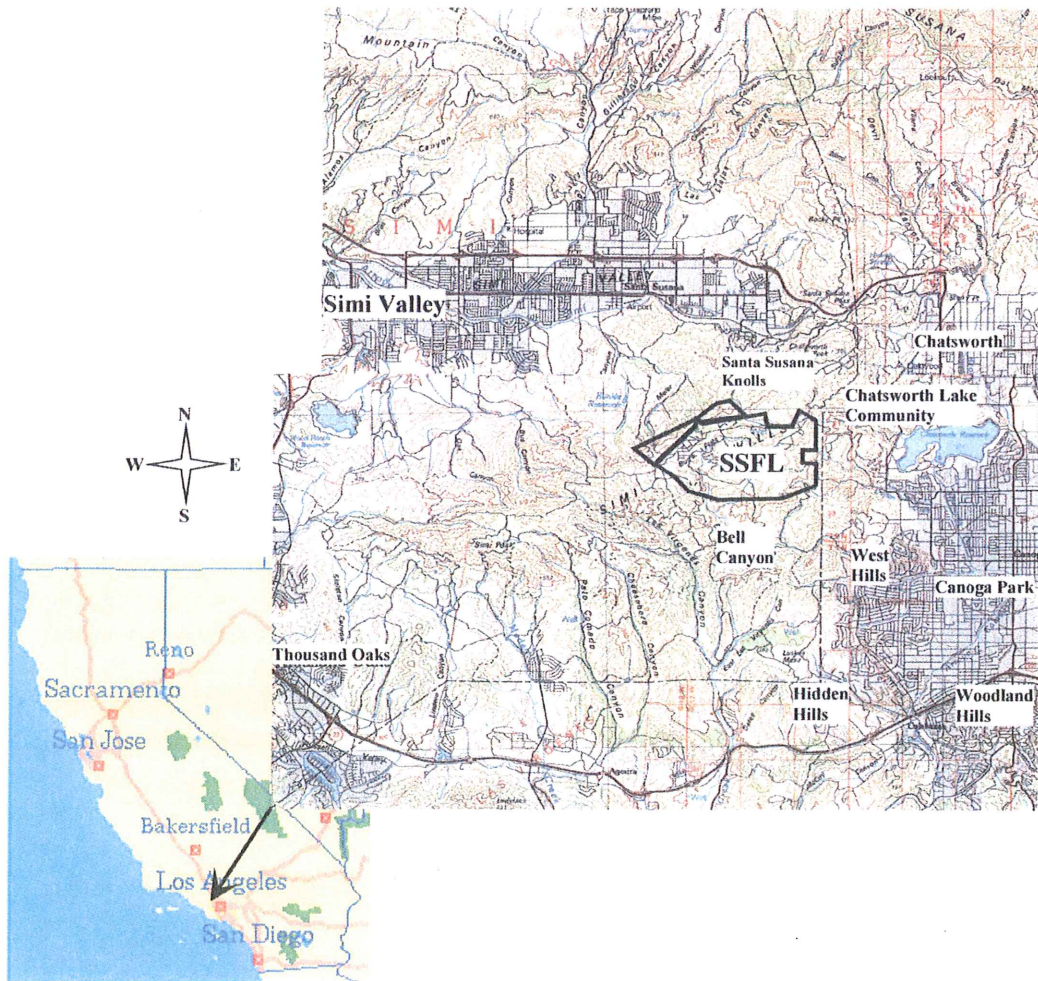
### Source Description

There are two radiological facilities or buildings remaining in Area IV of the SSFL, as shown in Figure 3. The Radioactive Materials Handling Facility (RMHF) is used for processing, packaging, and temporary storage of radioactive waste, which is eventually shipped off-site to DOE approved disposal facilities. The potential emission source at this facility is the exhaust stack through which radioactive effluents are filtered and monitored before released into the atmosphere. No radioactive liquid effluents are released from the facility.

Since DOE suspended D&D operations at SSFL in May 2007, the RMHF has been placed into a safe shutdown mode. No effluents were released to the atmosphere through the RMHF exhaust stack during 2012.

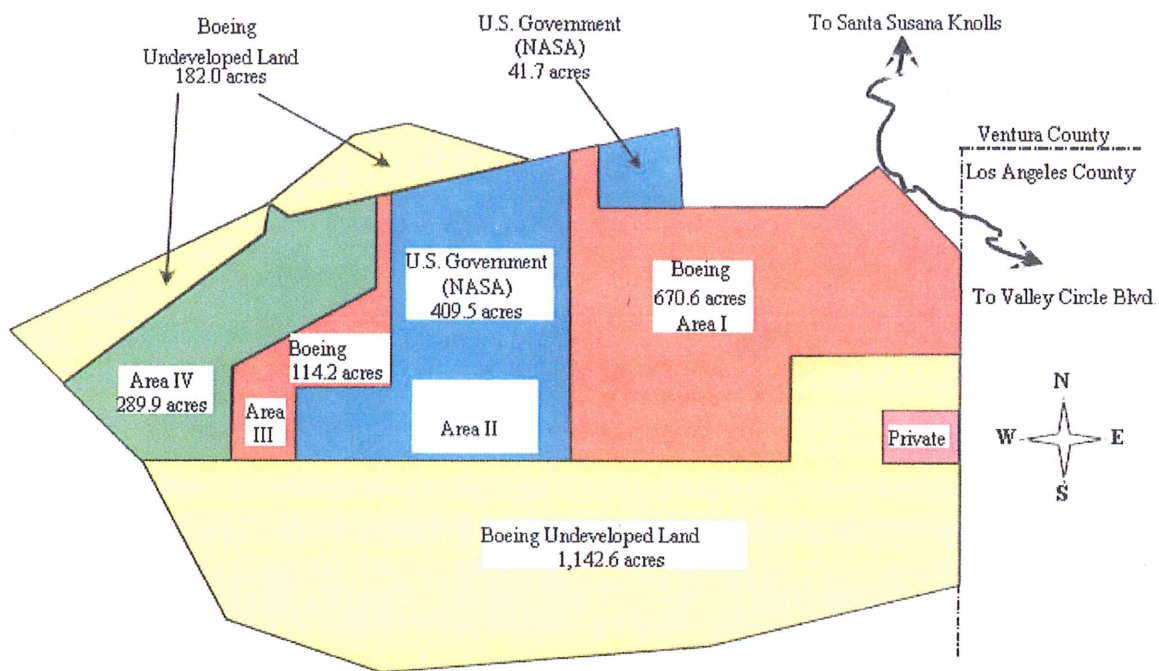
Building 4024 housed experimental SNAP reactor systems during the 1960s. After the project was terminated, all equipment and fuel were removed from the facility. In 2005, portions of the building were demolished following release for unrestricted use by the State of California, Department of Public Health (DPH). This building is currently in a safe shutdown mode and is not considered a potential emission source for NESHAPs reporting.





**Figure 1. Location of Santa Susana Field Laboratory**

Subdivisions			
Owner	Jurisdiction	Acres	Subtotals
The Boeing Co.	Area IV	289.9	2,399.3
	Area I and III	784.8	
	Undeveloped land	1,324.6	
Government	NASA (former AFP 57)	409.5	451.2
	NASA (former AFP 64)	41.7	
Total Acres			2,850.5



**Figure 2. Santa Susana Field Laboratory Site Arrangement**



**Figure 3. Potential Source Locations in Area IV at Santa Susana Field Laboratory**

## Section II. Air Emission Data

### Point Source

<u>Point Source</u>	<u>Type Control</u>	<u>Efficiency</u>	<u>Location of MEI</u>
-------------------------	-------------------------	-------------------	----------------------------

N/A

<u>Point Source Radionuclides</u>	<u>Annual Release Quantity</u>	
	<u>(Ci)</u>	<u>(Bq)</u>
N/A	0	0

### Area (Non-Point) Source

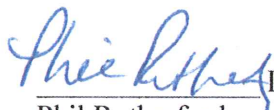
N/A

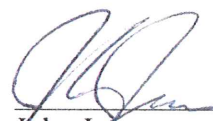
## Section III. Dose Assessments

Due to the fact that no effluents were released to the atmosphere from DOE's operations at SSFL in 2012, the potential radiation exposure doses to the Maximally Exposed Individual (MEI) as well as the population in the surrounding area were zero.

### Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment. (See, 18 U.S.C. 1001).

 Date: 5/24/2013  
Phil Rutherford  
Manager  
Health, Safety & Radiation Services  
Santa Susana Field Laboratory  
The Boeing Company

 Date: 5/24/13  
John Jones  
Federal Project Director  
Energy Technology Engineering Center  
U. S. Department of Energy