

# Speaking of

## The Santa Susana Field Laboratory

### Area IV Radiological Characterization Study

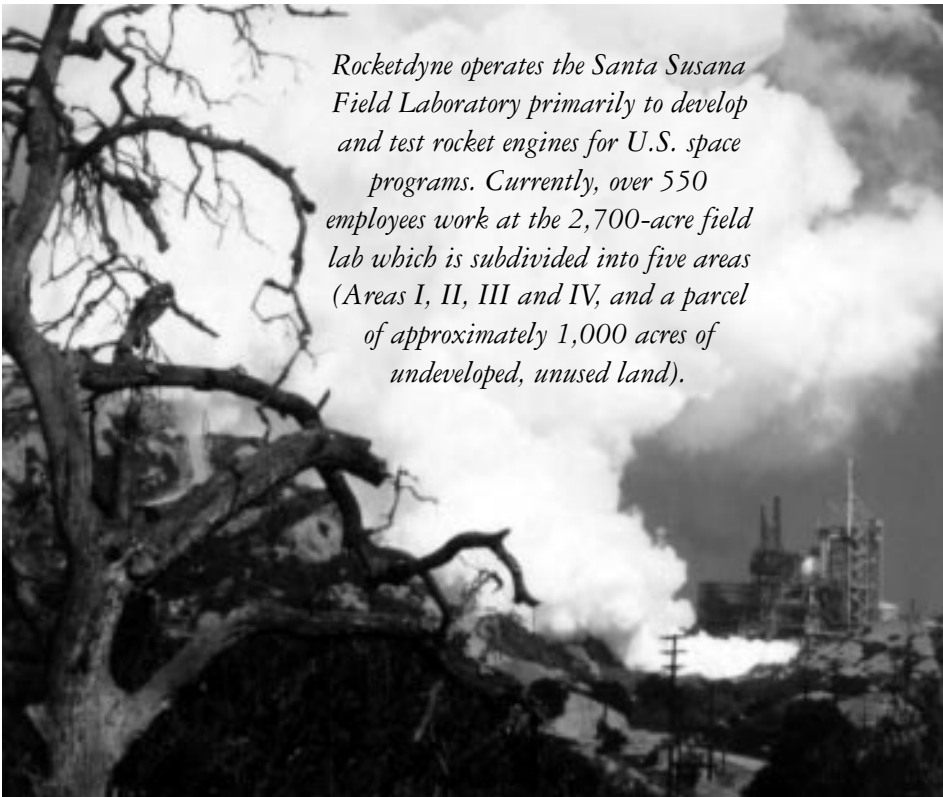


Number 2

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#### *Commitment*

At Rocketdyne, we are firmly committed to safety, respect for the environment and, in particular, the well-being of our employees and neighbors. As part of that commitment we want to continue to provide you with information about our environmental activities at the Santa Susana Field Laboratory. This fact sheet is intended to inform you about our efforts to investigate areas for radioactive contamination.



*Rocketdyne operates the Santa Susana Field Laboratory primarily to develop and test rocket engines for U.S. space programs. Currently, over 550 employees work at the 2,700-acre field lab which is subdivided into five areas (Areas I, II, III and IV, and a parcel of approximately 1,000 acres of undeveloped, unused land).*

#### *History*

Operations are conducted in three areas at the Santa Susana Field Laboratory. Areas I, II and III, which make up the majority of the industrial portion of the field lab, have been used to test rocket engines

since the 1950s. Beginning at about the same time, Atomic International (a sister division to Rocketdyne) operated nuclear research facilities and small nuclear reactors in support of programs for the Atomic Energy Commission (predecessor to the U.S. Department of Energy).

This work was done at Area IV (270 acres at the northwest corner of the site). The last reactor was shut down in 1974, and the last research activity ended in 1988. Today, the only work dealing with radioactivity at the field lab is associated with the cleanup at Area IV.

#### *Background*

At one time or another, 25 facilities in Area IV were involved in nuclear energy research. As nuclear research began to diminish in the late 1960s, facilities were shut down and clean-up began by removing the radioactive contamination and shipping it off-site to disposal facilities approved by the U.S. Department of Energy. When all nuclear work ended in 1988, final cleanup efforts began. To date, 19 of the facilities have been completely cleaned up and surveyed. Of the six facilities remaining that contain radioactive contamination, one has levels low enough to be left in place to allow the radioactivity to fall to "background" levels naturally. The other five facilities are undergoing cleanup; two will be cleaned up by the end of the year, and cleanup of the other three facilities will be completed by the year 2000. Following cleanup, each facility will be surveyed to confirm that the contamination has been removed. The U.S. Environmental Protection Agency and the California Department of Health Services have determined



## Background Radiation

People are exposed to various amounts of radiation. For example, radiation comes from the sun and from elements found in soil and rocks. This type of radiation is referred to as "background." While the level of these background exposures can vary (for example, the radiation effect of the sun is greater at higher altitudes), they are useful points of comparison against which to measure other, non-background radiation sources.

that the remaining radioactive contamination at the field lab does not pose a threat to surrounding communities.

In response to concerns raised by our neighbors, Rocketdyne put together a plan to look at all of Area IV—even those areas where nuclear work never occurred—to ensure they are free of radioactive contamination. This plan, entitled the *Radiological Characterization Plan, Santa Susana Field Laboratory, Area IV*, includes a review of all previous studies done to identify areas of potential radioactive contamination and describes in detail the methods and procedures for surveying Area IV (Area IV Survey).

## Area IV Survey

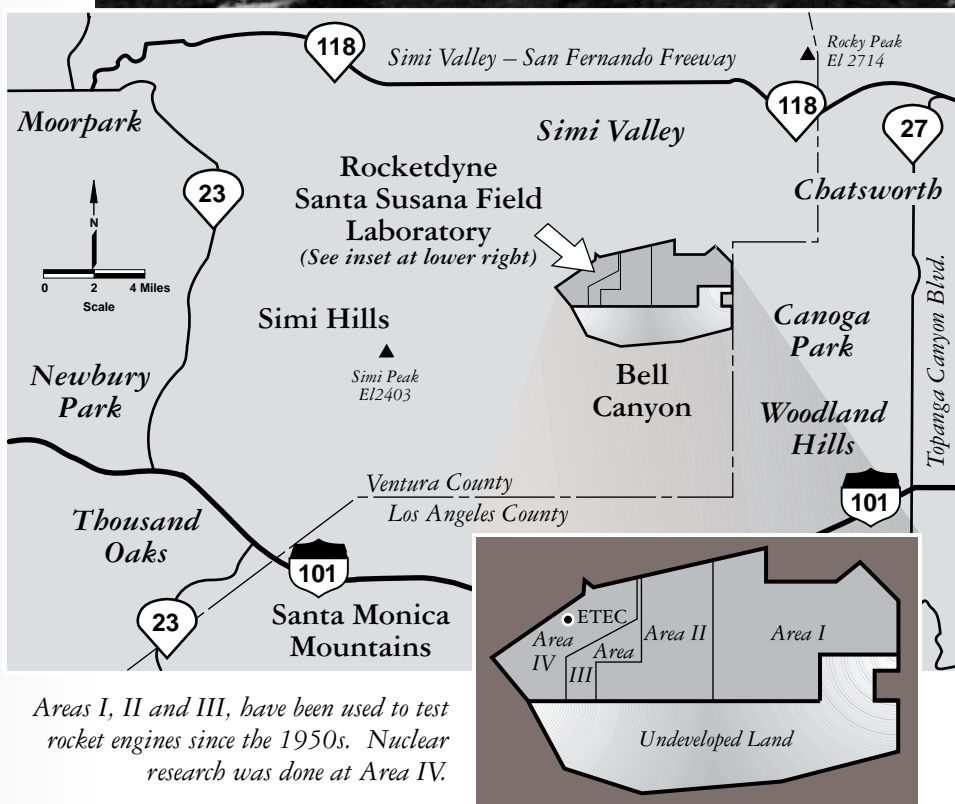
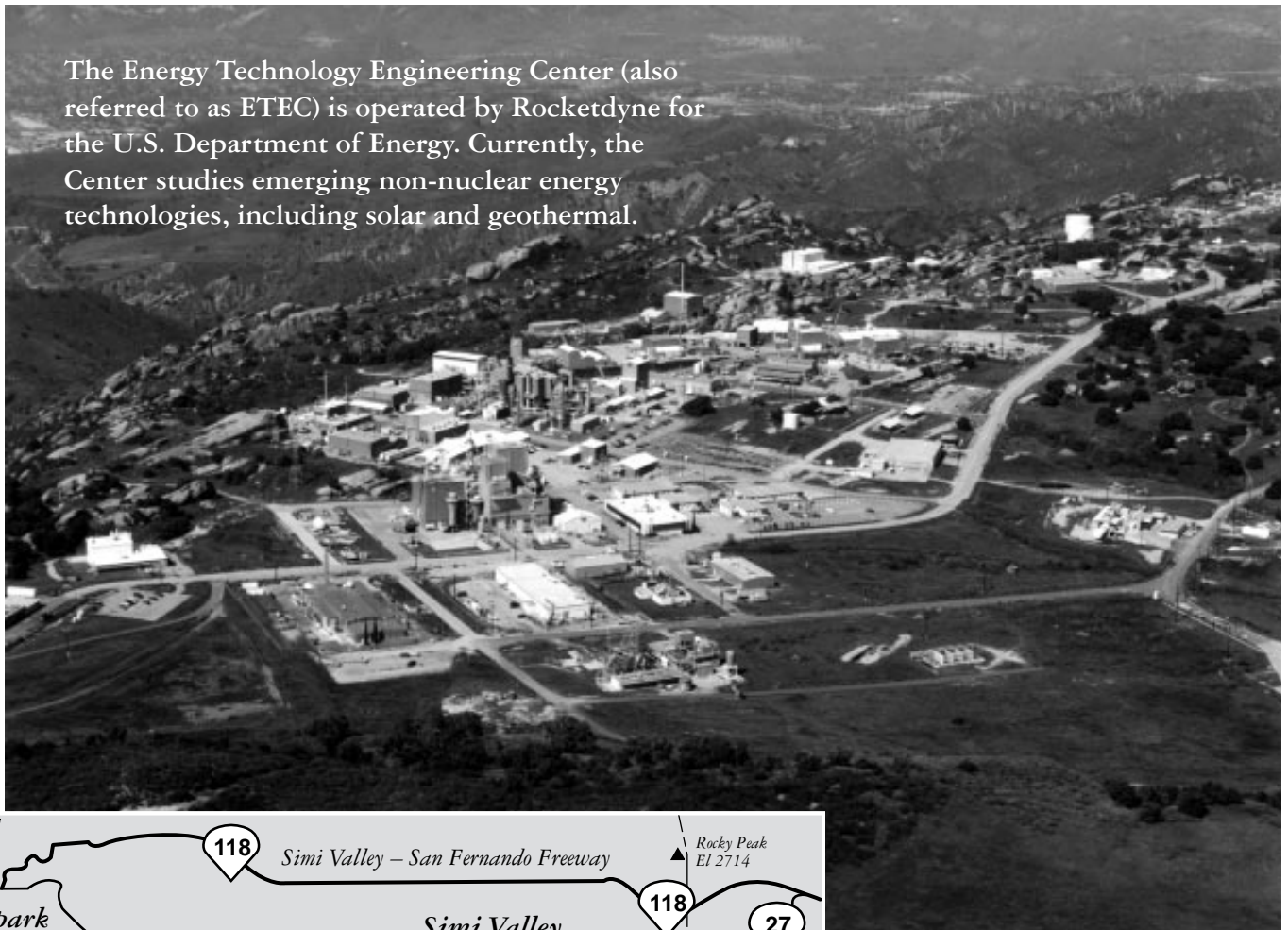
Under the oversight of the California Department of Health Services and the U.S. Department of Energy, the comprehensive Survey enables us to systematically look at soils throughout Area IV to verify that they are free of radioactive contamination. This is done by taking radiation measurements and soil samples through the use of grids and study blocks to ensure that no area is overlooked. All of Area IV is covered in the Survey with the exception of facilities previously surveyed or currently undergoing cleanup and areas of inaccessible terrain.

The Survey, which began in 1994, was 85% complete as of July 1, 1995. No results to date have indicated the need for any cleanup. The survey of the remaining areas will be completed and we will prepare a report summarizing the findings by the end of 1995.

## Radioactivity and Radiation

*The distinction between radioactivity and radiation can be confusing. The analogy of a light bulb may be useful to understand the distinction. If we liken a light bulb to radioactive material, the size (or power) of the light bulb is measured in watts in the same way that the "activity" of radioactive material (radioactivity) is measured in curies and is an expression of the quantity of material present. The light bulb emits light (and heat) energy. In a similar way, the radioactive material also emits energy in the form of radiation. Radiation travels from the radioactive source (like light from a light bulb), outward in all directions. The intensity of both light and radiation decrease with distance from the source in the same way. Similarly, both light and radiation may be shielded or absorbed.*

The Energy Technology Engineering Center (also referred to as ETEC) is operated by Rocketdyne for the U.S. Department of Energy. Currently, the Center studies emerging non-nuclear energy technologies, including solar and geothermal.



Areas I, II and III, have been used to test rocket engines since the 1950s. Nuclear research was done at Area IV.

## What's Next

Following the completion of the Area IV Survey, our efforts will continue to focus on the continued cleanup of the few remaining buildings in Area IV. Cleanup and survey of the last of these facilities—the Radioactive Materials Disposal Facility, which is used to package radioactive materials removed during cleanup of the other facilities—is planned for the year 2000. The combined efforts of the Area IV Survey and the building cleanup provide a comprehensive evaluation of Area IV and will ensure that no contamination remains that would pose a threat to the environment or nearby communities.



## *We Want to Hear from You*

Because we're interested in maintaining an open, two-way line of communication with all of our

neighbors, please let us know what you think about our mailings and any suggestions you may have about topics for future informational materials or neighborhood meetings.

### **MAILING LIST**

If you would like to be added to our mailing list to receive more information about Rocketdyne's Santa Susana Field Laboratory, please complete the following and mail to:

Environmental Communications  
Rocketdyne  
P.O. Box 7922 (AB57)  
Canoga Park, CA 91309-7922

*Please print clearly*

Name: \_\_\_\_\_

Affiliation: \_\_\_\_\_

Address: \_\_\_\_\_

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

Telephone: \_\_\_\_\_

## **Information Resources**

We are committed to sharing information that we hope will be useful to you. Copies of the plan described in this fact sheet and other documents related to the environmental activities at the Santa Susana Field Laboratory are available for public review at:

California State University,  
Northridge  
Urban Archives Center  
Oviatt Library, Basement, Room 4  
18111 Nordhoff Street  
Northridge  
818/885-2832

Simi Valley Library  
2969 Tapo Canyon Road  
Simi Valley  
805/526-1735

Platt Branch Library  
23600 Victory Boulevard  
Woodland Hills  
818/340-9386

Contact our Environmental Communications Office for more information or to discuss your ideas by writing or calling:

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