



# Vandenberg Air Force Base Installation Restoration Program Cleanup at Site 9



Vandenberg Air Force Base, California

June 2001

## Installation Restoration Program

### INTRODUCTION

This fact sheet describes the proposed environmental cleanup actions at an Installation Restoration Program (IRP) site on Vandenberg Air Force Base. The IRP is an Air Force program to identify and clean up contamination on military bases resulting from past activities. This fact sheet also describes how to review and comment on the proposed cleanup actions.

### SITE 9 BACKGROUND

IRP Site 9 consists of Space Launch Complex No. 4 West (SLC-4W) on the southern half of Vandenberg Air Force Base (AFB). The site is an active Titan Missile launch facility located on a hillside overlooking the Pacific Ocean between Surf Beach and Point Pedernales. Coast Road and Surf Road run parallel to the coastline between SLC-4 and the Pacific Ocean.

During the remedial investigation (RI) performed under the IRP, volatile organic compounds (VOCs) such as trichloroethene (TCE) were detected in groundwater at the site at concentrations exceeding California drinking water standards. Because the contaminated groundwater exceeds these standards and may discharge into the Pacific Ocean, removal of groundwater contamination is warranted to prevent potential adverse affects to public health, welfare, and the environment.

### SITE 9 STATUS

To address groundwater contamination at Site 9, Vandenberg AFB prepared an Engineering Evaluation/Cost Analysis (EE/CA) as part of a Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) non-time critical interim removal action (IRA). The purpose of an IRA is to reduce risks at a site prior to completion of the remedial investigation. The EE/CA summarizes the site characteristics, identifies removal action objectives, describes removal action alternatives, analyzes these alternatives, and describes the recommended removal action alternative for VOC contaminated groundwater at Site 9. The removal action objectives for Site 9 are to (1) control migration of the groundwater contaminant plume; (2) reduce VOC contamination in the aquifer; (3) minimize impacts to sensitive habitats in the Site 9 area; and (4) reduce the release of TCE contaminated groundwater via a spring located near the Ocean (Ocean Spring 14).

### SITE 9 CLEANUP/REMOVAL ALTERNATIVES

The following removal action alternatives for groundwater at Site 9 have been identified and screened:

- No action;
- Containment of the contaminant plume using a groundwater collection system along Surf Road; and
- Containment of the contaminant plume and source reduction in the SLC-4 area using air sparging, vapor extraction, or groundwater/vapor extraction technologies.



Titan II missile being launched from SLC-4W

## PROPOSED CLEANUP ACTION

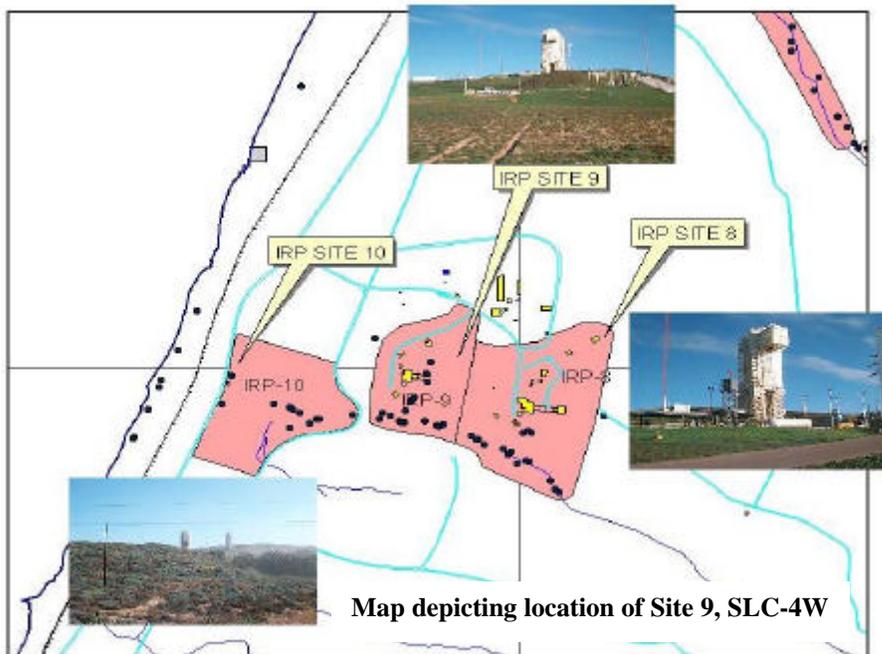
Vandenberg AFB has assessed cleanup alternatives at this site and recommends plume containment and source reduction by groundwater/vapor extraction. Plume containment will be accomplished by extracting groundwater from a horizontal well installed approximately 200 feet below Surf Road. The total length of the horizontal well is approximately 2,000 feet, and it is positioned perpendicular to the flow of the TCE contaminated groundwater. The TCE contaminated groundwater extracted from the horizontal well will be treated by an activated carbon adsorption system prior to discharge. Source reduction will occur up gradient of the horizontal well using an array of vertical extraction wells. Both groundwater and vapor will be extracted from the vertical wells. The TCE contaminated groundwater and vapors will also be treated by an activated carbon adsorption system prior to discharge. The treated groundwater and vapor streams will be sampled and tested to ensure compliance with regulatory requirements. This alternative will comply with regulatory requirements, is cost effective, and is the most protective of human health and the environment.

## PUBLIC COMMENT PERIOD

A 30-day public review and comment period has been set for July 3 through August 2, 2001, to receive public input on the Draft EE/CA for Site 9. Also available for review and comment during this time will be the Draft Negative Declaration, a

finding by DTSC that the proposed cleanup actions will not have a significant effect on the environment, in accordance with the California Environmental Quality Act (CEQA). The documents will be available at two information repositories: Lompoc Library, Public Documents Section, 501 East North Ave., Lompoc; and Vandenberg AFB Library, Public Documents Section, 100 Community Loop, Bldg. 10343, Vandenberg AFB. Comments on the EE/CA must be postmarked by August 2nd and sent to Mr. Ron MacLelland, Community Relations Coordinator, 806 13th Street, Suite 116, Vandenberg AFB, CA 93437. Comments on the Negative Declaration should be postmarked by August 2nd and sent to: Dr. Ning-Wu Chang, DTSC Project Manager, 5796 Corporate Ave., Cypress, CA 90630. E-mailed comments will also be accepted at [nchange@dtsc.ca.gov](mailto:nchange@dtsc.ca.gov).

If you have questions about this site or any aspect of the IRP, please contact Mr. Ron MacLelland, Community Relations Coordinator, 806 13th Street, Suite 116, Vandenberg AFB, CA 93437-5242.



Map depicting location of Site 9, SLC-4W

Installation Restoration Program  
30 CES/CEVR  
806 13th Street, Suite 116  
Vandenberg Air Force Base, California 93437-5242