



# ERP Fact Sheet

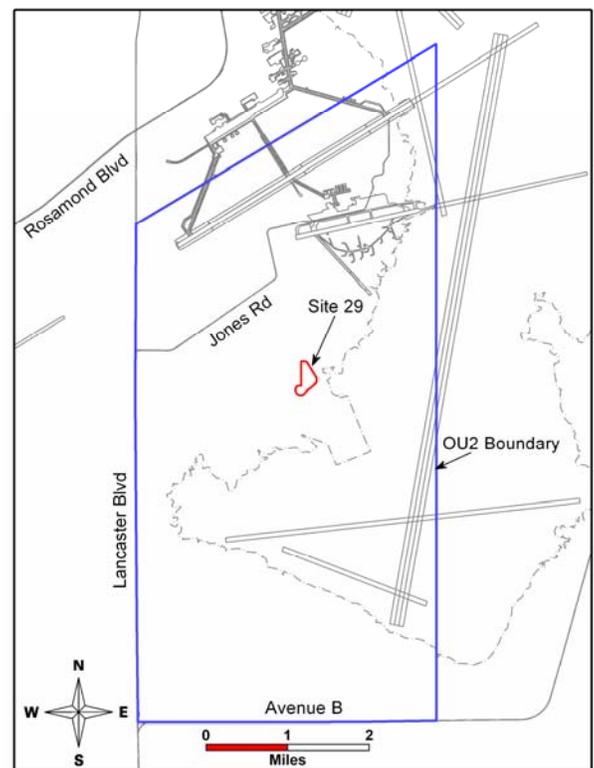
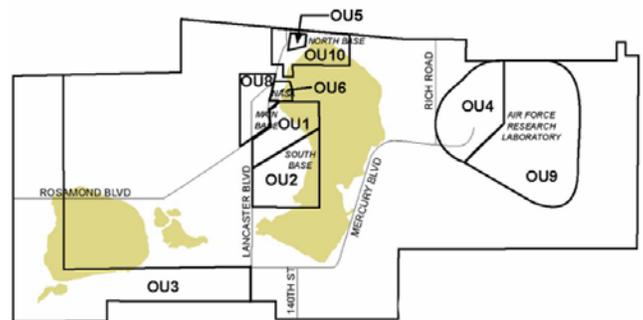
February 2006

## Enhancing Groundwater Protection at Site 29

This Fact Sheet describes how Edwards AFB proposes to enhance groundwater protection at Site 29, South Base Abandoned Landfill.

**A**ir Force environmental engineers recommend surface debris removal, land-use and stormwater controls, and long-term monitoring as the preferred method to ensure contamination does not leak from the landfill into the groundwater at Site 29.

The South Base Abandoned Landfill is located in Operable Unit (OU) 2. The site covers approximately 35 acres and consists of two former landfill areas. The older western landfill area encompasses approximately 3 acres and was active in the late 1930s. In the mid-1950s, a second landfill encompassing approximately 20 acres was opened at Site 29. Waste was deposited in the eastern landfill area for 20 years until the 1970s. Household and industrial wastes, construction rubble (mainly concrete and asphalt), and asbestos-containing materials were deposited in the landfill. There are anecdotal reports that the landfill may contain unexploded ordnance. More recently, in 1985, construction rubble from the demolition of parts of South Base was placed on the surface of the landfill.



Comments to: Gary Hatch  
5 E. Popson Ave., Bldg. 2650A  
Edwards AFB Calif., 92324-8060  
E-mail: 95 ABW/PAE@edwards.af.mil

The top map shows the location of OU2 within the boundary of Edwards AFB. The bottom map shows Site 29 in OU2.

In 1998, the Air Force installed an 8-foot high chain-link fence to prevent unauthorized dumping and started a long-term groundwater monitoring program to provide early warning of a chemical release to groundwater before it could impact groundwater supply wells. Additionally, a total of 645 cubic yards of nonfriable asbestos-containing material and 15 cubic yards of friable asbestos-containing material were removed from the site. (Friable means the material is able to be crushed into a powder by hand.)

Currently, no contaminants have been detected above regulatory guidelines in groundwater that could be used for drinking water, and surface soil contaminants above regulatory guidelines have been detected in only a few isolated hot spots. However, the Air Force is proposing to protect the groundwater from future release of contaminants that may be present in the landfill, protect the public from the physical hazards of surface debris, and prevent unauthorized dumping at the site.

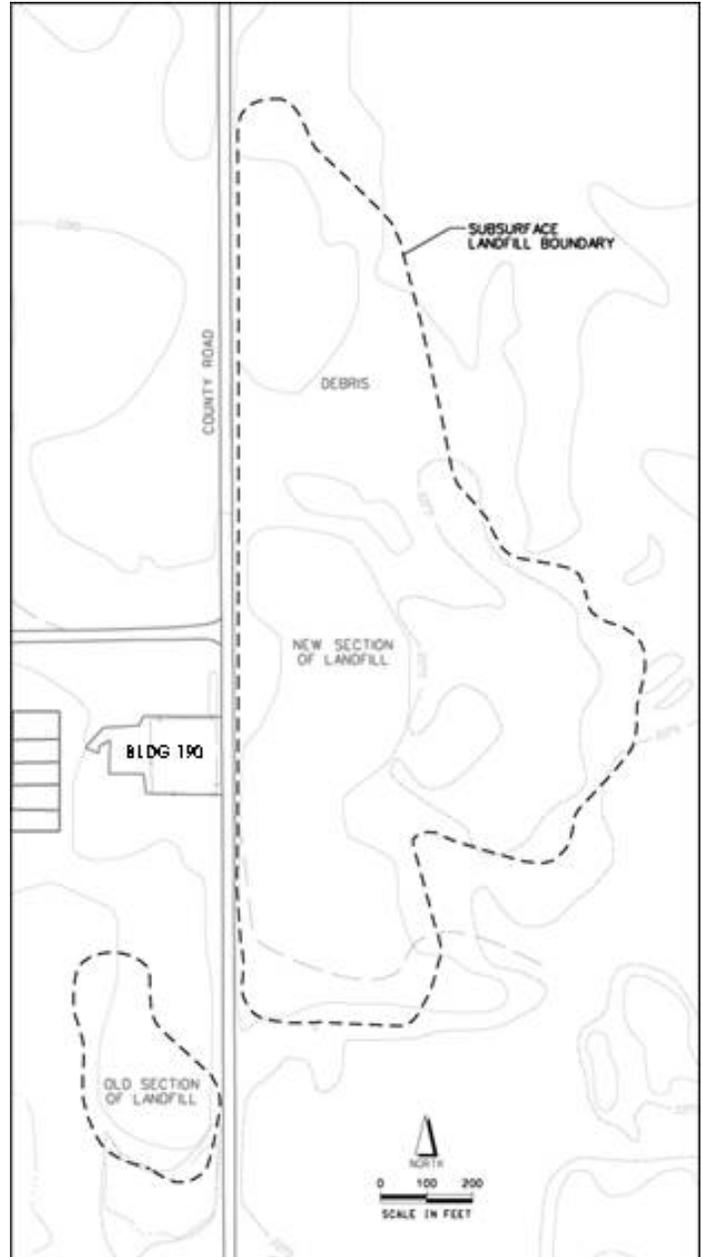
The Air Force proposes Removal of Recently Emplaced Surface Debris, Land Use Controls (LUCs), Stormwater Controls, and Long-Term Monitoring as the preferred alternative for accomplishing these goals.

This alternative includes long-term monitoring and the implementation of LUCs to minimize the potential for human exposure to physical hazards, limit unauthorized dumping, ensure access for monitoring and maintenance, and protect the monitoring wells. Procedures to maintain LUCs would be documented in the *Base Comprehensive Plan*. Existing stormwater drainage channels would be improved and maintained. Concrete debris would be crushed and stockpiled near the site for later use as road base. Metal debris (primarily pipes and rebar) and asphalt would be trucked to a recycling center. Nonrecyclable debris would be sent to a landfill.

The OU2 Proposed Plan offers three alternatives to the preferred alternative – No Action; Land Use Controls, Stormwater Controls, and Long-term Monitoring; and Engineered Landfill Cover, Land Use Controls, and Long-term Monitoring.

The No Action alternative would not cost anything, and existing protections would not be maintained.

The Land Use Controls, Stormwater Controls, and Long-term Monitoring alternative is similar to the preferred alternative except that it would leave surface debris in place. This alternative would cost an estimated \$2.3 million over 30 years. Leaving the surface debris in place would cause the site to be out of compliance with existing landfill regulations and create a physical hazard to site



**This figure shows Site 29, which covers approximately 35 acres and consists of two former landfill areas.**

workers. Adding an Engineered Landfill Cover would bring the site in full compliance with existing landfill regulations, but at a cost of \$11 million over 30 years, and would not be significantly more protective of groundwater.

The preferred alternative, Removal of Recently Emplaced Surface Debris, Land Use Controls (LUCs), Stormwater Controls, and Long-Term Monitoring, would cost an estimated \$4.4 million over 30 years, would be fully compliant with landfill regulations as they apply to an existing site, and would be protective of groundwater.