



Number 9 ♦ March 1995

Restoration Advisory Board Fact Sheet

# ERA: Expedited Removal Actions

*This fact sheet is one in a series prepared for RAB members about the Travis AFB Installation Restoration Program (IRP).*

Occasionally a cleanup technology is applied during the investigation phase, instead of waiting for the end of a Remedial Investigation/Feasibility Study (RI/FS). Because cleaning up hazardous waste at Superfund sites is a lengthy process, an accelerated cleanup is often necessary or desirable. Although the entire operable unit (OU) has not been characterized, investigators know enough about the specific contaminant and the site to prevent potential exposure to the public or the environment. Called an expedited removal action (ERA), this shortened process incorporates data review and agency decision steps to select the best technology and begin implementing it quickly.

Even though cleanup is accelerated, it must be consistent with CERCLA and other applicable laws governing the removal of hazardous waste from the environment and site restoration. An engineering evaluation/cost analysis (EE/CA) is developed to select the cleanup alternative and document the decision. This fact sheet discusses the ERA process and the EE/CA document.

## WHO'S IN CHARGE?

A Remedial Project Management (RPM) team, made up of project managers from Travis AFB, U.S. Environmental Protection Agency, the Regional Water Quality Control Board (RWQCB), and California Department of Toxic Substances Control (DTSC), reviews assessment information to consider response options. The RPMs ensure coordination, communication, and integration of all Superfund program requirements. They help assess the appropriate removal action and begin preparation of the EE/CA Approval Memorandum, the EE/CA, and the Action Memorandum (see figure on reverse).

## WHEN DOES IT HAPPEN?

The remediation of hazardous waste from a Superfund site occurs on three timeframes—emergency, time-critical, or non-time-critical. The timeframe selected for a removal action is based on the type of situation, the urgency and threat of release or potential release, and the subsequent timeframe on which remediation must begin. At Travis AFB there are no emergency or time-critical areas (areas requiring a response in less than six months), there are only non-time-critical ERAs. Non-time-critical removal actions respond to releases requiring action that can start later than six months after the determination that a response is necessary.

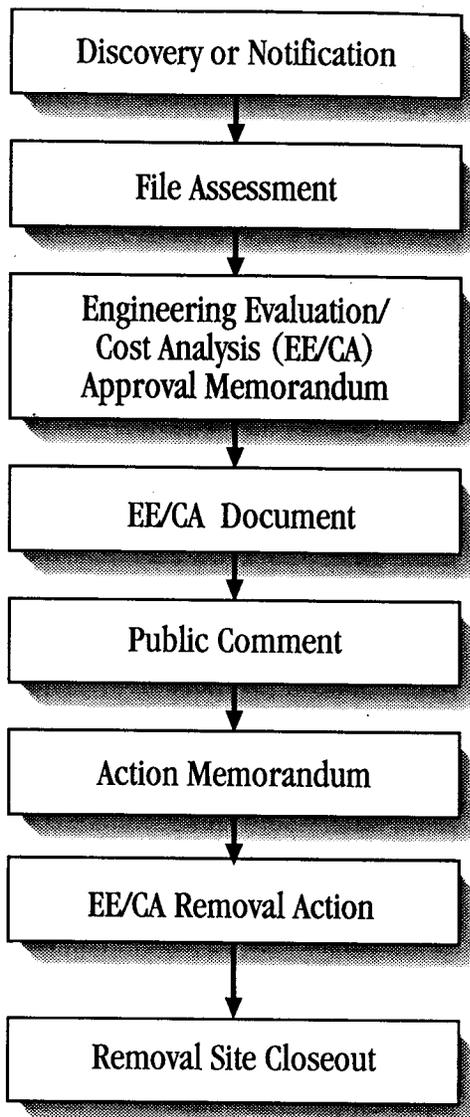
## THE FIRST STEP

The first step is the Approval Memorandum, which summarizes the technology to be evaluated. This provides a written record of the decision to select a removal action. As the primary decision document, it substantiates the need for a removal action, identifies the proposed action, and explains the rationale for the removal action selected.

## THE EE/CA DOCUMENT

The EE/CA identifies the objectives of the removal action and analyzes the effectiveness, implementability, and cost of various alternatives that may satisfy these objectives. It is similar to an RI/FS, but is less comprehensive.

An ERA has been conducted in the Western Industrial Operable Unit (WIOU). In the EE/CA three technologies were evaluated, and a three-pump skimmer system was selected and is now removing spilled fuel that is floating on the water table.



*The steps involved in the EE/CA process.*

The EE/CA summarizes available data on physical, demographic, and other characteristics of the site and surrounding areas. Historical information is also used to identify hazardous substances, pollutants, or contaminants of concern, or areas of a site requiring additional sampling. These data are taken from a variety of sources, including previous investigations or other activities at the site. Whatever the source, site data provide the background information for analysis of removal alternatives.

The EE/CA also contains an analysis of the most qualified technologies that apply to the media (i.e. soil or groundwater) or source of contamination at a site.

### **STREAMLINED RISK EVALUATION**

An important part of the EE/CA process is a streamlined risk evaluation. This focuses on the specific problem that a removal action is to address. For example, if an accelerated removal action proposes to install a groundwater containment system, the risk evaluation addresses risk caused by consuming and using groundwater.

The streamlined risk evaluation helps to justify a removal action and identifies what current or potential exposures should be prevented. Using sampling data from the site to identify the chemicals of concern and the health effects associated with those chemicals, the risk evaluation projects the potential risk of health problems occurring if no cleanup action is taken. The results help determine the need for cleanup action at the site, what exposures are to be addressed, and, in some cases, appropriate cleanup levels.

### **OTHER ERAs AT TRAVIS AFB**

At Travis AFB, several ERAs have been conducted. Near the Base control tower, TCE had been discovered in the groundwater. Following an EE/CA, a pumping system was installed to extract contaminated groundwater and treat it. Another ERA involves pumping TCE directly from the monitoring well in the Eastern Industrial Operable Unit. An EE/CA is being prepared for another ERA, where a dual phase system will extract TCE from groundwater and soil vapor and pump it into a carbon treatment and ion exchange system.