

EXECUTIVE SUMMARY

In an effort to reduce potential risks to off-Base receptors, and minimize the potential migration of contaminants, Hill Air Force Base (AFB) implemented an Interim Remedial Action (IRA) in May 1998, pending completion of a comprehensive Remedial Investigation and before implementation of future remedial actions at Operable Unit (OU) 8. An Interim Record of Decision (ROD) for an IRA at OU 8 was finalized in May 1997. The interim ROD identified a groundwater hydraulic containment system, with direct discharge to the sanitary sewer system as the selected remedy (Hill AFB, 1997).

Based on the remedial action objectives stated in the IRA ROD, the objectives of the IRA system are to:

- Contain contaminated groundwater at the southern boundary of Hill AFB to prevent off-Base transport of contaminants above maximum contaminant levels (MCLs) in the shallow groundwater, thereby reducing potential future risks to off-Base receptors.
- Reduce the spread of contaminants, thereby controlling the volume and areal extent of contaminated groundwater at OU 8
- Reduce future cleanup costs by controlling the spread of contamination.

The system has been in operation since May 1998, and is planned to be in operation until the final remedy for OU 8 is implemented. Additional operational performance objectives were identified as follows:

- Detect any leakage in the OU 8 IRA conveyance system
- Comply with the terms and conditions of permits or limits placed on discharges to the North Davis County Sewer District (NDCSD) treatment system.

Attainment of the above objectives will be measured using the following performance criteria:

Containment and prevention of off-Base transport of contaminants above MCL

- Piezometric surface plots indicating capture based on flow line construction
- Long-term groundwater quality plots indicating downgradient trichloroethene (TCE) concentrations are declining.

Data collected to date indicate that sufficient drawdown has been maintained to achieve hydraulic containment of groundwater at the southern Base boundary.

Reduce spread of contaminants

- Performance criteria applicable to this objective are addressed by those defined for containment.

Compliance with Discharge Permit Conditions

- Weekly data indicating that discharge flow rates remain below permitted level of 144,000 gallons per day
- Total Toxic Organics in the system effluent not to exceed the current permit limit of 2.02 milligrams per liter (mg/l).

In the event that system performance criteria are compromised, system operation will be reviewed and revised to regain containment. It is unlikely that discharge limits will be exceeded because the concentration of groundwater contaminants in the vicinity of the containment system is an order of magnitude less than the permit limit.

The routine operation of the system and associated performance monitoring will be documented in the following reports:

- Monthly operational reports containing water level data, a piezometric surface map, monthly throughput, and system operational parameters
- Quarterly operations reports containing groundwater quality data, sewer discharge, analytical data, significant activities affecting system performance, evaluation of trends, and costs
- Treatment System Operating Report (TSOR) containing a summary of costs and performance for each calendar year.

Evaluation of whether the containment system is operating properly and successfully relative to the performance objectives will be documented in a Performance Standard Verification Report (PSVR). The first PSVR will be completed in 2003, approximately 5 years after system startup. Long-term monitoring at the IRA will continue in an effort to provide adequate and sufficient data for continued evaluation of system performance and compliance.

In order to provide adequate data for evaluation of current and potential future remedial actions at OU 8, a site-wide long-term groundwater monitoring program will be implemented. The objectives of the long-term groundwater monitoring program are to:

- Provide a continued basis for future data comparability and trends analysis to verify the conceptual site model and plume stability
- Collect necessary data to support decisions pertaining to current and potential future remedial actions.

Based on the site conceptual model knowledge and available data, 102 of the total 220 existing monitoring wells at OU 8 have been identified for the long-term monitoring program. This total includes wells designated in the IRA groundwater monitoring program. Data collected during the long-term program will be reported in annual analytical data summary and recommendations reports.