

Executive Summary

This document presents the Performance Standard Verification Plan (PSVP) for Operable Unit 7 (OU7) at Hill Air Force Base (HAFB). The PSVP establishes a monitoring program for OU7 post-Record of Decision (ROD) operations, including a long-term plan to reach site closeout. The PSVP defines long-term goals, types of decisions to be made, data analysis procedures, and reporting formats. The PSVP also defines a standardized assessment and monitoring protocol to provide HAFB with an improved, documented understanding and agreement with the regulatory agencies and the public. The documenting of procedures and decision criteria provides continuity during personnel turnover, lowers costs by ensuring only necessary data are collected, and optimizes sampling frequencies to meet specific information goals.

The *Final Record of Decision for Operable Unit 7 (ROD)* (MW, 1995) requires a performance and compliance sampling program, referred to in this document as the PSVP. The PSVP includes both compliance and performance monitoring to determine if Remedial Action Objectives (RAOs) are being met. These monitoring requirements are meant to ensure that selected remedies achieve appropriate protection of human health and the environment, comply with regulatory requirements, and continue to pursue attainment of remediation goals. The long-term RAOs for OU7 are to:

- Reduce contaminant transport from within source areas and reduce chemical transport from soil to groundwater by minimizing surface water infiltration.
- Prevent human exposure to contaminated soil through ingestion, inhalation, and dermal contact, such that the additional risk to an individual for cancer is below 1×10^{-6} and the noncancer threshold is less than 1.0.
- Reduce contaminant concentrations to meet risk levels and/or reduce contaminant transport to rates that will not impact groundwater quality above Maximum Contaminant Levels (MCL).

Media-specific RAOs, established in the *Final Remedial Investigation/Feasibility Study for Operable Unit 7 (RI/FS)* (MW, 1995a), are to protect human health, protect the environment, and address potential future unacceptable risk scenarios. The various components of the remedial actions were evaluated to determine which media-specific RAOs were associated with the remedial actions. This data is summarized in Table ES-1.

The PSVP outlines the RAOs, identifies data needs, and addresses the issues of whether OU7 remedial actions are "operating properly and successfully." The phrase "operating properly and successfully" involves two separate concepts. A remedial action is operating "properly" if it is operating as designed. The system is operating "successfully" if its operation will achieve the cleanup levels or performance goals delineated in the decision document. Additionally, in order to be successful, "that remedy must be protective of human health and the environment."

An evaluation will be conducted to determine whether the OU7 remedial actions are operating properly and successfully. Results of the evaluation will be documented in the OU7 Performance Standard Verification Report (PSVR). The first PSVR will be completed after the scheduled review of the OU7 Remedial Action operations in 2006. The frequency of the first review period will allow sufficient data to be collected during OU7 operations to provide confidence that data collected represents true contaminant concentrations at OU7. As part of the PSVR, any needed changes to the monitoring program, data assessment methods, data collection frequency, review frequency, etc. will be recommended, and the PSVP will be modified as appropriate. Any changes to the PSVP found to be necessary before the PSVR is implemented will be annotated by letter.

OU7 is a soils-only operable unit, and consists of the following source areas: Building 225 Former Metal Plating Shop; Building 225 Polychlorinated Biphenyl (PCB) Spill Area; miscellaneous areas in Building 225; Base Supply Well 6; and Building 220. Based on the findings and conclusions of the *RI/FS* and the associated risk assessments, no current or future health risks or threats to groundwater were found at the Building 225 PCB Spill Area; miscellaneous areas in Building 225; Base Supply Well 6; or Building 220. Therefore, no remedial actions were required by the *ROD* and these sites are not further addressed in this document.

Remediation systems have been constructed at the former metal plating shop and consist of the following remedies:

- Maintain the existing building floor in the area of the former plating shop.
- Perform long-term groundwater monitoring.
- Establish an inspection, maintenance, and repair program for the building floor.
- Implement institutional controls.

Performance monitoring parameters are established for direct measurement of performance of the remedial actions in achieving the RAOs. The performance monitoring criteria include visual inspection of caps, analytical sampling of groundwater, and inspection of institutional and engineering controls.

The performance indicators, monitoring network, monitoring frequency, data evaluation, and anticipated timeframe for achieving the RAOs have been identified for each of the remedial actions. These indicator criteria will be used to assess whether the treatment system is performing as anticipated. Exceedance of these criteria is not considered proof that the RAO is not being achieved. However, if these criteria are exceeded, a review will be conducted to determine if modification to the system operation is warranted. Remedial action closure criteria were also developed for each remedial action. An OU7 Annual Report will be prepared to summarize monitoring activities conducted during the preceding 12 months. The OU7 Annual Report will be made up of three subreports: the Treatment System Operation Report (TSOR); the Inspection, Monitoring, and Maintenance Report (IMMR); and the Annual Groundwater Sampling Report. The intent of the OU7 Annual Report will be to document the monitoring results for the preceding year. The annual report will serve as a repository for the monitoring criteria result database [water level measurements, water quality field measurements and analytical reports, total operation and maintenance (O&M)

costs, etc.]. The data documented in the annual reports will be interpreted in the PSVR. The PSVR process will thoroughly evaluate the performance of the OU7 system operation performance and progress toward RAOs. General evaluations regarding the effectiveness and efficiency of each remedial component of the selected remedy, as well as the cumulative effect of all components of the selected remedy, will be included in the PSVR report.

TABLE ES-1
 Remedial Action Objective Matrix
 Hill Air Force Base Operable Unit 7 Performance Standard Verification Plan

		REMEDY	
		Maintain Existing Structures	Institutional Controls
Remedial Action Objectives⁽¹⁾			
Overall RAOs			
1	Reduce contaminant transport from within source areas and reduce chemical transport from soil to groundwater by minimizing surface water infiltration.	X	
2	Prevent human exposure to contaminated soil through ingestion, inhalation, and dermal contact, such that the additional risk to an individual for cancer is below 1×10^{-6} and the noncancer threshold is less than 1.0.	X	X
3	Reduce contaminant concentrations to meet risk levels and/or reduce contaminant transport to rates that will not impact groundwater quality above MCLs.	X	

¹ Remedial action objectives from the ROD, Section 5.1 (MW, 1995).