

Executive Summary

This Engineering Evaluation/Cost Analysis addresses the rationale for selecting a removal action for the storm water retention pond, Pond 1, within Operable Unit (OU) 9 at Hill Air Force Base, Utah. Portions of the pond sediments are contaminated with fuel-related hydrocarbons, metals, and polychlorinated biphenyls at levels that exceed risk-based standards. The risk-based standards used for this assessment are the OU9 residential risk-based screening levels (RBSLs). For the calculation of the OU9 screening levels, background concentrations of metals were taken into account. Previous investigations conducted during the last ten years have provided adequate sediment sampling to identify the contaminants and define the extent of the contaminated areas.

Contaminated pond sediments are present in four areas within Pond 1. Four alternatives are presented to address the contaminated sediments: no action, contaminated sediment removal with off-site disposal, soil cover with Pond 1 expansion, and contaminated sediment removal with on-site landfill disposal. Based on the engineering evaluation and cost analysis conducted, it is recommended that the soil cover with Pond 1 expansion alternative be implemented. This action is to excavate the pond sediments that exceed residential RBSLs in two areas, combine these sediments with the other two areas, and place an 8-foot soil cover on top.