

## **SUBSURFACE INVESTIGATION AND CORRECTIVE ACTION PLAN REPORT**

### **EXECUTIVE SUMMARY**

This report contains information on subsurface investigations and corrective actions that were initiated to remediate soils with petroleum hydrocarbons at Hill Air Force Base (HAFB), Site 1314. Site 1314 contained an underground storage tank (UST) used to store heating fuel. Fuel was released to subsurface soils through probable spills and overfills. Plans are presented to continue remediation efforts with the goal of eventually reducing petroleum hydrocarbon concentrations in soils through bioventing to Tier I, Risk Based Corrective Action (RBCA) levels.

HAFB is located in northern Utah, near the city of Ogden. Site 1314 is located on the base, within the western boundary of the controlled area for missile and munitions storage (MAMS I). The UST at Site 1314 had a 100,695 gallon capacity, and measured 40 feet in diameter and 10 feet in height. The reinforced concrete tank was buried below grade with part of the top exposed at ground surface. The tank was installed in 1941 by HAFB to store water. In 1970, it was converted to store diesel fuel used for heating purpose. The tank and associated piping were removed during tank closure in 1995.

The native soil type is sands with interbedded clay layers. Depth to ground water ranges between 80 and 92 feet below ground surface.

Petroleum hydrocarbons are concentrated in soils directly beneath the tank from a depth of 12 feet to about 22.5 feet below ground surface (bgs). The largest concentrations were found below the north-eastern edge of the tank excavation. The separation distance between contaminated soil and ground water is about 60 feet.

The risk of exposure to humans is low. Site 1314 is located in a highly restricted, fenced area at HAFB. Building 1590, located about 340 feet to the northwest, is the closest building to the site and is separated from the site by a chain link fence. A buried electrical utility located near the site is above the zone of contamination. Base maintenance personnel are present periodically near the site.

Several technologies were considered for soil remediation. Bioventing was selected based on cost, feasibility, and current and future land use. Bioventing has proven to be a cost effective and efficient method of treating soils at HAFB. The property currently belongs to the Air Force and will likely remain Air Force property in the foreseeable future.