

EXECUTIVE SUMMARY

Introduction

Radian Corporation prepared this plan to satisfy the Utah Department of Environmental Quality, Division of Environmental Response and Remediation (DERR) Corrective Action Plan (CAP) report requirements (40 CFR 280.66 and 280.67). These requirements set forth the scope of investigation, and format for the analysis of corrective action alternatives. The subject site is in the Tooele Rail Yard on Hill Air Force Base (Hill AFB) property.

Two 1,000-gallon steel underground storage tanks (USTs) and a pump station for dispensing fuel were at the subject site. UST number 1705.1 contained diesel fuel and UST number 1705.2 contained leaded gasoline. The USTs were used for fueling vehicles and equipment.

Previous Investigations

In June of 1991, both tanks failed a leak detection test. An Underground Storage Tank Closure Plan was prepared and submitted to the DERR in January, 1992. In March of 1992 the two tanks were removed. Soil samples taken from the excavation site were analyzed for total petroleum hydrocarbons (TPH). Analytical results indicated TPH contamination in the center of the excavation. The condition of the excavated tanks was fairly good, and personnel inspecting the tanks concluded that the contamination could have come from leaking piping instead of from the tanks themselves.

The hydrocarbon contamination at the Building 1705 site appears to be limited to an area just south and west of where the tanks were located. Five soil samples taken from the excavated area showed that only the center of the area was contaminated. The contaminated soil sample contained 2,440 mg/kg diesel/TPH. The sample did not contain

gasoline above the detectable limit. Approximately 70 cubic yards of contaminated soil was excavated and sent to ET Technologies, of Salt Lake City, for disposal. The excavation was stopped when the backhoe could reach no further. Subsequent samples taken by Hill AFB personnel in the excavation showed that some residual contamination still remained. The excavation was then backfilled with clean fill.

In accordance with DERR requirements, a combined Abatement and Initial Site Characterization and Subsurface Investigation (AISC/SI) was conducted. In November, 1992, four hollow-stem auger borings were drilled to facilitate the AISC/SI. One boring was completed as a groundwater monitoring well; one as an air injection well; and two for installation of soil vapor probes. Nine soil samples were taken from these borings and two water samples were taken from the monitoring well. The soil and water samples were analyzed for Benzene, Toluene, Ethylbenzene, Xylenes (BTEX), Naphthalene, and TPH. Four of the soil samples also were analyzed for total lead. Of these samples, the soil sample collected from the air injection well VW-1 at a depth of 10 feet was contaminated with petroleum hydrocarbons. A second soil sample from the same boring taken from a depth of 21 to 23 feet below ground surface was not contaminated. The two groundwater samples collected from the monitoring well did not contain petroleum hydrocarbons. Total lead was

Drawings and specifications are provided in this report for the bioventing alternative. The proposed system will use existing well VW-1 for air injection and wells VW-2 and VW-3 as monitoring points for soil vapor probes. Provisions for adding moisture and nutrients are also included. The pilot testing phase is especially important in the implementation of bioventing. Tests for blower sizing and monitoring biodegradation are recommended. Startup, operation, and maintenance concerns are also discussed.