

FIRE TRAINING AREA NO.4

FT-04

Joint Base Andrews

March 2013

BACKGROUND

Fire Training Area Number 4 (FT-04) is located near the southeast corner of Joint Base Andrews, and was used as a fire training area from 1973 to 1990. Waste petroleum hydrocarbons and flammable solvents were released into a bermed area and ignited, then extinguished. All liquids then flowed through an oil-water separator and into a leaching pond.

Much of the contaminated source material was removed from the site during the demolition and excavation of the site performed in 1992. A groundwater remediation system that used vacuum enhanced product recovery was installed as a pilot study in 1996 under an Interim Remedial Action Plan. The system was shut down in September 2000 with regulatory/partnering group concurrence after free phase petroleum product had been reduced to a periodic sheen.

A Treatability Study was conducted in 2004 to evaluate the possibility of using Hydrogen Release Compound (HRC) to remediate the solvent contaminated groundwater beneath the site. HRC stimulates the microbial communities that consume the carbon tetrachloride. The proposed plan was implemented according to the Record of Decision (ROD) that was signed in November 2005. Groundwater monitoring continues semi-annually to track the restoration progress. The Air Force is enforcing institutional controls at the site to prevent the risk of human exposure to the contaminants in the groundwater.

CHALLENGES

A new Air National Guard 113th Air Sovereignty Alert (ASA) Facility has been constructed on the site. The project was part of a Homeland Defense initiative. During construction, the inoperable groundwater treatment system and several of the monitoring wells included in the long-term groundwater monitoring network were destroyed. Although the wells have been replaced, there is a discontinuity in the data being gathered which poses a statistical challenge during the 5-year review process.

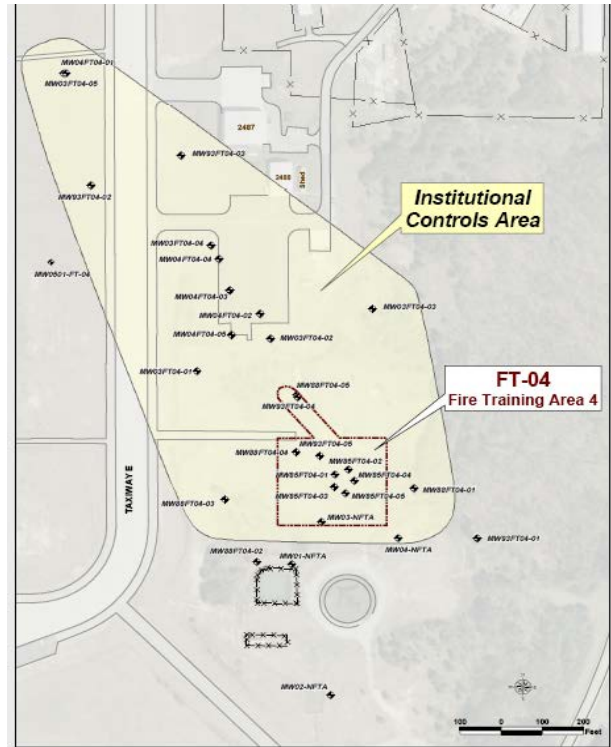


Figure 1: FT-04 Land Use Control Area

PERFORMANCE-BASED APPROACH

The Remedial Action – Operations (RA-O) monitoring and statistical evaluation will continue at the site to verify the effectiveness of the in-situ biodegradation groundwater remedy through three rounds of injections of a Hydrogen Releasing Compound (HRC). An Interim Remedial Action Completion Report (IRACR) has been signed by the AF and submitted to regulators in 2011 to document successful implementation of the remedy.

A FY11 contract takes over the RA-O requirements outlined in the ROD, and encourages the selected contractor to optimize the exit strategy for achieving site closure.

RISK DRIVERS

Contaminants: Benzene, carbon tetrachloride, arsenic and manganese

Impacted Media: Groundwater

Exposure Pathways Completed: None

Drainage: Piscataway Creek

Current Land Use/ Surface Cover: Industrial/Airfield

Reasonably Anticipated Land Use: Industrial/Airfield

Relative Risk: No Unacceptable Risk