

FIRE TRAINING AREA NO.1

FT-02

Joint Base Andrews

January 2018

BACKGROUND

Fire Training Area Number 1 (FT-02) is located on the west side of the airfield. The site was used as a fire training area from 1948 to 1958. Waste liquids (including waste solvents, fuel, and lubricants) were dumped, ignited, and extinguished with protein foams, carbon tetrachloride, and chlorobromomethane. An adjacent area was used to temporarily store 55-gallon drums of waste oil, jet fuel, paint thinner, and other flammable liquid wastes prior to training events. FT-02 was closed and the area was completely regraded during the 1960s flightline construction.

The investigation, decision, and initial remedy construction phases are complete. The remedy was installed in June 2010, using enhanced in-situ bioremediation through reductive dechlorination. The 97-acre site includes active taxiways and aircraft parking aprons with continuous heavy aircraft traffic.

CHALLENGES

The site includes the most active taxiways and aircraft parking aprons on the base, which necessitates additional planning to conduct any and all work, including temporary airfield construction waivers and security considerations related to distinguished VIPs.

A primary contaminant source area was never identified, and there is a real possibility for a sorbed-soil source to exist. If so, it could continue a slow desorption process into groundwater that would long outlast the initial injection.

The selected bioremediation process requires particular geochemical conditions and microbial populations to operate as designed, which may not have been properly established by the substrate that was initially injected in June 2010. As a result, a second injection was completed in 2013.

PERFORMANCE-BASED APPROACH

The Record of Decision (ROD) was completed for FT-02 in 2009. The site is currently in the remedial action-operations (RA-O) phase. Groundwater monitoring at the site was performed semi-annually until June 2014, and is now performed annually in accordance with the ROD. As documented in the 2014 RA-O Report, a reduction in contaminants of concern (COCs) has been observed. The current FY11 contract takes over the RA-O requirements outlined in the ROD, and encourages the selected contractor to optimize the exit strategy for achieving response complete by 2025 and site closure by 2031.

RA-O has continued at FT-02 through 2017. A third injection is planned for 2018.

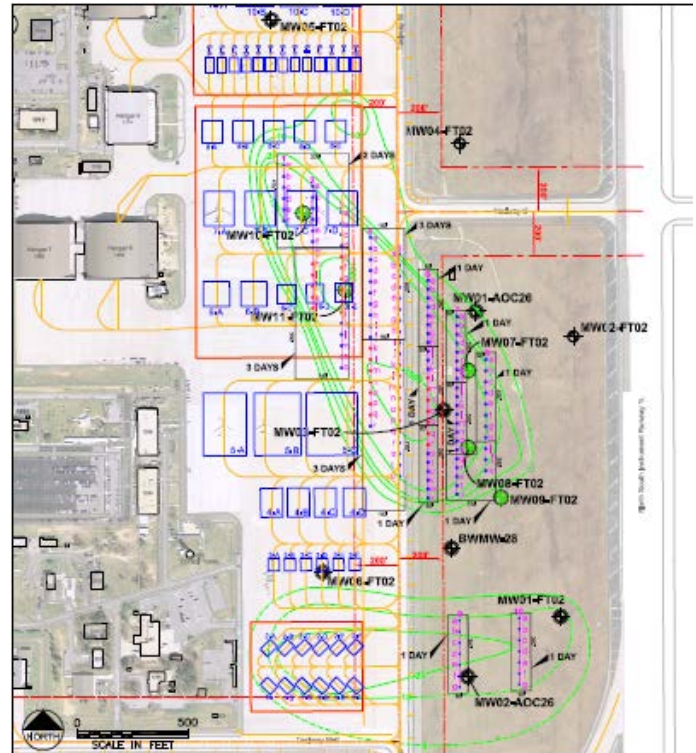


Figure 1 : Site FT-02 with TCE Plumes

RISK DRIVERS

Contaminants: Primarily trichloroethene from waste solvents. Other contaminants include petroleum constituents. The initial volatile organic compound and semi-volatile organic compound groundwater plume covered 97 acres of the active airfield.

Impacted Media: Groundwater

Exposure Pathways Completed: None

Drainage: Piscataway Creek

Current Land Use/Surface Cover: Airfield Operations

Reasonably Anticipated Land Use: Airfield Operations

Relative Risk: Low