

# FORMER DRY CLEANER – BLDG. 1623

## SS-27 (Formerly AOC-31)

Joint Base Andrews

February 2013

### BACKGROUND

Building 1623 was historically operated as an Army Air Force Exchange Service (AAFES) dry cleaning facility from the early 1980s to 1996. Prior to operating as an AAFES dry cleaning facility, Building 1623 was used as a snack bar and a TV repair shop. The building was demolished in 1996 when the dry cleaning operation ceased. The facility performed dry cleaning with Tetrachloroethene (PCE) and used chloroform as a spot remover.

The Preliminary Assessment (PA)/Site Investigation (SI) in 2006 and the Phase I and Phase II Remedial Investigations (RI) in 2007 and 2009, confirmed the presence of solvents in the soil and groundwater at the site. The RI used the EPA's Triad management approach, which integrates a Conceptual Site Model (CSM) with real time data so decisions were made expediently and correctly, saving time and money. The Feasibility Study (FS), completed in 2009, identified and evaluated four remedial action alternatives for the contaminated soil and groundwater.

### CHALLENGES

This site lies directly on top of the watershed boundary between Piscataway Creek and Meetinghouse Branch.

The Joint Base Andrews (JBA) community development plan intends to relocate administrative offices to this site, emphasizing the need for expedient restoration of this site to ensure the land will be available and suitable for the required use to support the JBA mission.

### PERFORMANCE-BASED APPROACH

A performance-based contract awarded in 2007 and Remediation in Place (RIP) was achieved in 2011. The remedy employs the lowest lifecycle cost while supporting the JBA mission, which requires that the site is available for office space in the near future. The Proposed Remedial Action Plan (PRAP) was available for public review and comment. The Record of Decision (ROD) was signed September 14, 2011.

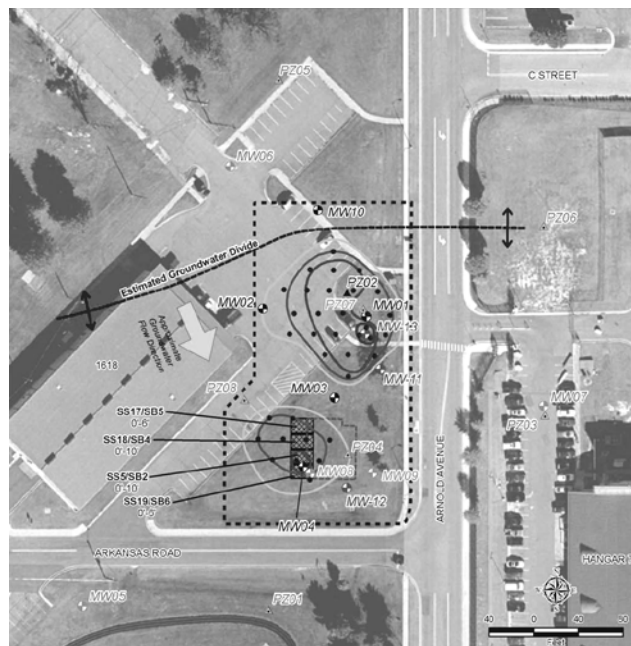


Figure 1: SS-27 and PCE Plume

The remedy included excavation of the vadose zone soil, enhanced anaerobic bioremediation coupled with abiotic transformations for groundwater with bioaugmentation contingency and institutional controls.

Any future structures at this site will have to be constructed with a vapor intrusion mitigation system unless/until such time that contaminant concentrations in site media no longer present a risk from vapor intrusion. The selected remedy is expected to aggressively treat the contamination and achieve site remediation goals in as few as seven years. The remedial action was performed in the summer of 2011 and semi-annual post-injection monitoring has been implemented.

### **RISK DRIVERS**

**Contaminants:** Tetrachloroethene (PCE), Trichloroethene (TCE), cis-1,2-Dichloroethene (DCE), Vinyl Chloride, and Chloroform

**Impacted Media:** Soil and Groundwater

**Exposure Pathways Completed:** Construction workers, future commercial workers

**Drainage:** Piscataway Creek and Meetinghouse Branch

**Current Land Use/ Surface Cover:** Industrial (aircraft operations and maintenance)

**Reasonably Anticipated Land Use:** commercial/administrative

**Relative Risk:** Medium