

FUEL HYDRANT SYSTEM

AOC-26

Joint Base Andrews

February 2013

BACKGROUND

AOC-26 consisted of two 600-gallon per minute (gpm) Pritchard hydrant refueling systems constructed in the early 1960s. The hydrants distributed jet fuel to aircraft on the west apron of the airfield. The site includes the west side tank farm, fuel supply lines, two pump houses, four 50,000-gallon underground storage tanks (USTs), and lateral distribution lines from the pump houses to the apron. Typically JP-4 was actively pumped, although JP-5 was used on occasion. The lateral piping failed hydrostatic testing in 1993, requiring the system to be removed from service. The lateral lines were abandoned in place in 1994 by draining, cleaning, and filling with a concrete slurry. A flight-line site characterization study performed in 1995 indicated residual petroleum in the soils and groundwater adjacent to the hydrant system. The two pump house buildings (Buildings 2511 and 2581) and ancillary USTs were excavated and removed in 1998 when a replacement hydrant refueling system was installed. The active system is not part of AOC-26.

RISK DRIVERS

Contaminants: Jet fuels (JP-4 and JP-5)

Impacted Media: Soil and Groundwater

Exposure Pathways Completed: Underground Utility Maintenance Worker

Drainage: Piscataway Creek

Current Land Use/Surface Cover: Industrial/Airfield

Reasonably Anticipated Land Use: Industrial/Airfield

Relative Risk: NR

CHALLENGES

Contaminants of concern include diesel range petroleum hydrocarbons. Soil samples collected during the Site Investigation (SI) in 2003 did not identify impacts from the fuel hydrant system. Groundwater samples show diesel range petroleum concentrations that exceed residential clean-up standards; however, given the ongoing flight-line activities here, residential clean-up standards do not reflect current or future exposure scenarios. A no further remedial action planned (NFRAP) decision document was signed in September 2007.



Figure: AOC-26 Site Map (Source: URS 2003)

PERFORMANCE BASED APPROACH

Since this was a petroleum site, the Maryland Department of the Environment (MDE) managed the restoration of the site. A Phase II SI conducted in 2003-2004 confirmed that a significant risk resulting from petroleum contamination is not present, so MDE authorized the NFRAP decision.

- 1995 – Site Characterization Study Report, CDM
- 1995 – Environmental Assessment, CDM Federal Program
- 1996 – Basewide PA/SI, Tetra-Tech
- 2003-2004 – Phase II SI, ENSR Corp.
- 2007 – NFRAP Decision Document Signed

The proposed schedule for this site is:

Remedial Investigation (RI)	9/2004 (Complete)
Feasibility Study (FS)	9/2004 (Complete)
Proposed Plan (PP)	9/2007 (Complete)
Record of Decision (ROD)	9/2007 (Complete)
Remedial Design (RD)	N/A
Remedial Action-Construction (RA-C)	N/A
Remedy In Place (RIP)	9/2007 (Complete)
Remedial Action-Operation (RA-O)	N/A
Response Complete (RC)	9/2007 (Complete)
Site Closure (SC)	9/2007 (Complete)