FINAL
PRELIMINARY ASSESSMENT REPORT FOR PERFLUORINATED COMPOUNDS AT JOINT BASE ANDREWS PRINCE GEORGE'S COUNTY, MARYLAND

Prepared for:

Air Force Civil Engineer Center
2261 Hughes Avenue, Suite 155
Lackland AFB, Texas 78236-9853

Contract No. FA8903-08-D-8772
Task Order 0065
CDRL A001A

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Prepared by:

HydroGeoLogic, Inc.
404 East Ramsey Road, Suite 210
San Antonio, Texas 78216

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This is a Preliminary Assessment Report of locations at Joint Base Andrews where perfluorinated compounds may have been released to the environment through the use or discharge of aqueous film forming foam.

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LIST OF ACRONYMS AND ABBREVIATIONS

AFB	Air Force Base
AFCEC	Air Force Civil Engineer Center
AFFF	aqueous film forming foam
Air Force	U.S. Air Force
ASA	Air Sovereignty Alert
AST	aboveground storage tank
ARW	Air Refueling Wing
bgs	below ground surface
CDC	Child Development Center
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CES/WFSM	Civil Engineering Squadron/Water Fuels System Maintenance
DRMO	Defense Reutilization and Marketing Office
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
ERP	Environmental Restoration Program
FFA	Federal Facilities Agreement
FTA	Fire Training Area
HEF	high expansion foam
HGL	HydroGeoLogic, Inc.
JBA	Joint Base Andrews
PA	Preliminary Assessment
PAG	Presidential Airlift Group
PFOA	perfluorooctanoic acid
PFOS	pefluorooctane sulfonate
PFCs	Perfluorinated Compounds
PWS	public water supply
RIV	Rapid Intervention Vehicle
WSSC	Washington Suburban Sanitary Commission

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FINAL
PRELIMINARY ASSESSMENT REPORT
FOR PERFLUORINATED COMPOUNDS
JOINT BASE ANDREWS
PRINCE GEORGE'S COUNTY, MARYLAND

1.0 INTRODUCTION

HydroGeoLogic, Inc. (HGL) has been contracted by the Air Force Civil Engineer Center (AFCEC) to perform preliminary assessment (PA) activities at multiple U.S. Air Force (Air Force) and Air National Guard Fire Training Areas (FTAs) and Non-FTAs to determine locations of potential environmental release of perfluorinated compounds (PFCs). Specifically, the HGL Team is to complete PA activities to determine potential releases of PFCs at 82 Air Force and Air National Guard installations from FTAs and other known and suspected releases of PFCs from Aqueous Film Forming Foam (AFFF) usage or storage areas. The work is being performed by HGL under the existing 4P Architecture and Engineering contract, Contract No. FA8903-08-D-8772, Task Order 0065.

HGL conducted activities associated with this PA at Joint Base Andrews (JBA) during the week of January 26, 2015, in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 Preliminary Assessment processes. JBA is an active military installation that includes the former Brandywine Defense Reutilization and Marketing Office (DRMO) and the Brandywine Receiver Site. The installation is located in Camp Springs, Prince George's County, Maryland. Figure 1.1 illustrates the location of JBA and Brandywine. Figure 1.2 presents the locations assessed at JBA during this PA.

1.1 BACKGROUND

PFCs are compounds used in the formulation of AFFF, which the Air Force has used in fire training exercises, suppressing aircraft and other vehicle fires, and in aircraft hangar fire suppression systems. Although PFCs are not regulated under CERCLA or the Resource Conservation and Recovery Act, there is evidence that pefluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA), which can be found in the environment following AFFF release, may present potential, non-carcinogenic risks to human health and the environment (Chang et al., 2014; Porter, 2011; Rak et al., 2009).

Several federal government documents confirm the initial use of AFFF by the Air Force beginning in 1970:

- MILSpec for AFFF (MIL-F-24385) formally issued in 1969
- General Accounting Office determination on sole source award protest to provide AFFF to the Navy in December 1969

- A History of Fire Protection Training at Chanute Air Force Base, 1964-1976 (Coates, 1977)

Based on Air Force performance testing results on AFFF, the Air Force Director of Civil Engineering, M.G. Goddard, in 1970 issued authorization for the Air Force to procure AFFF. No usage within the Air Force is documented or suspected prior to 1970.

1.2 PURPOSE AND OBJECTIVES

The purpose and objective of this PA report is to identify locations at JBA where PFCs may have been released to the environment and to conduct an initial assessment of possible migration pathways and receptors of potential contamination. PFCs are compounds used in the formulation of AFFF, which the Air Force has used in fire training exercises, for suppressing aircraft and other vehicle fires, and in aircraft hangar fire suppression systems. Although PFCs are not regulated under CERCLA or the Resource Conservation and Recovery Act, there is evidence that PFOS and PFOA, which are constituents of AFFF, may present potential non-carcinogenic risks to human health and the environment (Chang et al., 2014; Porter, 2011; Rak et al., 2009; US Air Force, 2012).

This PA report documents the known FTAs, as well as additional locations (non-FTAs) where AFFF may have been released into the environment at JBA (Table 1.1). Locations that are considered non-FTAs include but are not limited to hangars, fire stations, emergency response locations and any other areas where the potential exists for AFFF to have been released into the environment. This PA report also differentiates locations that pose little or no potential threat to human health and the environment from locations that warrant further investigation.

Table 1.1
FTAs and Non-FTAs Identified for Potential AFFF Releases
Joint Base Andrews, Maryland

Fire Training Areas
FT-02
FT-03
FT-04
AT069 (SWMU-69)
Building 2491 FTA with Recirculating Pond
Non-Fire Training Areas
Hangars
Hangar 1 (Building 1914)
Hangar 2 (Building 1794)
Hangar 3 (Building 1754)
Hangar 4 (Building 1734)
Hangar 5 (Building 1714)
Hangar 6 (Building 1279)
Hangar 7 (Building 1280)
Hangar 8 (Building 1225)
Hangar 9 (Building 1228)
Hangar 10 (Building 3640)
Hangar 11 (Building 3635)

Table 1.1 (Continued)
FTAs and Non-FTAs Identified for Potential AFFF Releases
Joint Base Andrews, Maryland

Non-Fire Training Areas
Hangar 12 (Building 3188)
Hangar 13 (Building 3168)
Hangar 14 (Building 3148)
Hangar 16 (Building 3119)
Hangar 18 (Building 1288)
Hangar 19 (Building 5016)
West Side Fuel Cell (Building 1915)
East Side Fuel Cell (Building 3629)
Building 3002 (113th)
Building 2487 (MD State Police)
Building 2489 (Air Sovereignty Alert)
Fire Stations
Fire Station #1 (Building 1287)
Fire Station #2 (Building 3464)
Emergency Response
On-base Emergency Response
Other Spills, Releases, and Miscellaneous
LF-05
SS-01
Building 1539 (Communication Squadron)
Building 3444 (Warehouse)
Building 3066 (Base Supply)
Hare Berry Farm

1.3 BASEWIDE ENVIRONMENTAL SETTING

1.3.1 Geology

JBA is located in the Atlantic Coastal Plain physiographic province, approximately 12 miles east of the Fall Line. The Fall Line is the boundary between the Atlantic Coastal Plain and the Piedmont physiographic provinces, marking the contact where older Piedmont rocks, exposed to the northwest, dip beneath Coastal Plain sediments that thicken to the east (Baywest, 2014).

The Coastal Plain deposits are characterized by an eastward thickening wedge of unconsolidated sediments consisting of sand, silt, and clay. Coastal Plain sediments are approximately 2,000 feet thick in the vicinity of JBA (Baywest, 2014). Except for Quaternary sediments, the Atlantic Coastal Plain formations strike northeast and dip gently to the southeast. In order from youngest to oldest age of deposition, unconsolidated sediments consist of Upland Deposits, the Calvert Formation, the Nanjemoy Formation, Marlboro Clay, the Magothy Formation, the Upper Patapsco Formation, the Arundel Clay, and the Patuxent Formation (Mack, 1966).

1.3.2 Hydrogeologic Setting

Contours of the piezometric surface illustrate that nine groundwater drainage basins occur within the boundaries of JBA (Baywest, 2014). The central portions of JBA serve as areas of groundwater recharge. Groundwater generally flows radially outward from these areas and toward the streams and base boundaries. The relationship between the groundwater and surface water drainage suggests that groundwater at the base flows to six streams that discharge from JBA: Cabin Branch, Charles Branch, Henson Creek, Meetinghouse Branch, Paynes Branch, and Piscataway Creek. A portion of the subsurface flow in the groundwater basins enters the streams, whereas the remainder continues downgradient in the subsurface. The basin discharging to Piscataway Creek is the largest of the groundwater basins within the base boundaries and encompasses much of the southern and central portions of the base.

Both unconfined and confined aquifers are present at JBA. An unconfined groundwater table is present within the surficial Upland Deposits that is derived preliminarily from precipitation recharge in the area. The Calvert Formation is below the Upland Deposits and acts as a confining layer averaging 79 feet in thickness across JBA. Calculations completed within the 2014 Conceptual Site Model indicate that the Calvert Formation has the ability to impede vertical migration of contaminated groundwater. Based on hydraulic conductivity values, it would take between 63 and 1,911 years for groundwater to seep vertically to more permeable areas.

There are a total of 318 groundwater monitoring wells at JBA (Baywest, 2014). Based on 114 monitoring wells that are representative of JBA, the depth to groundwater ranges from 0.29 to 21.87 feet below top of casing. Groundwater elevations range from 210.27 to 266.12 feet above mean sea level. Ground surface elevations range from 215 to 281 feet above mean sea level.

JBA and most of Prince George's County obtains its public water supply (PWS) from the Washington Suburban Sanitary Commission (WSSC) water utility. The source of the PWS is surface water from the Potomac and Patuxent Rivers. No drinking water supply wells are located on JBA and new drinking water supply wells are not permitted on JBA.

1.3.3 Hydrologic Setting

JBA covers approximately 4,300 acres and, given its size, drainage occurs in two separate watersheds fed by multiple streams. JBA straddles a drainage divide between the Potomac River Basin to the west and the Patuxent River Basin to the east. Henson Creek, Meetinghouse Branch, Paynes Branch, and Piscataway Creek are all tributaries of the Potomac River. This area makes up the Middle Potomac-Anacostia-Occoquan Watershed. Charles Branch and Cabin Branch are tributaries of the Patuxent River. This northeastern section of JBA feeds into the Patuxent Watershed. Base flow for these streams is maintained through surface runoff originating from precipitation and hydrologically connected surficial Upland Deposits.

1.3.4 Ecological Receptors

Ecological receptors include any living organisms other than humans, the habitat that supports such organisms or natural resources that could be adversely affected by environmental contaminations resulting by a release at or migration from an identified location.

The primary surface water features for JBA includes Henson Creek, Meetinghouse Branch, Paynes Branch, Piscataway Creek, Charles Branch, and Cabin Branch. These streams are considered primary ecological receptors for JBA including associated plant species and animal species. As previously stated, drainage water on JBA flows to one of these six streams, while the majority of JBA is drained by Piscataway Creek.

There are officially designated wilderness areas and officially designated wildlife preserves within a mile of JBA (EDR, 2015c). There are sensitive species project areas that contain species or natural communities of concern to the Maryland Department of Natural Resources in the southeast portion of JBA (EDR, 2015c). These sensitive species project areas have no official status. The following endangered species have the potential to exist at the wilderness areas and wildlife preserves.

Table 1.2
Endangered Species
Joint Base Andrews, Maryland

BIRDS
Bald Eagle
MAMMALS
Delmarva Peninsula Fox Squirrel
CLAM
Dwarf Wedge Mussel
PLANTS
Canby's Dropwort
Sandplain gerardia*

*Source FT-03 Remedial Investigation, October 2007

The aforementioned endangered species are listed for Prince George's County and therefore have the potential to exist within the boundaries of JBA. The Sandplain gerardia is identified as a federally listed endangered plant (Earth Tech, 2007). In addition to the listed species, approximately four dozen wetlands were identified within the JBA boundaries as sensitive environmental receptors located within each of the drainage basins (EDR, 2015c). Examples of the wetland types found at JBA are: Palustrine, emergent, persistent, temporarily flooded; Palustrine, forested, broad leaved deciduous, temporarily flooded; and Palustrine, unconsolidated bottom, semi-permanently flooded.

1.4 PRELIMINARY ASSESSMENT METHODS

The performance of this PA included:

- Reviewing information and reports in the Administrative Record.

- Reviewing documents related to Air Force use of AFFF.
- Conducting a PA visit to JBA.
- Conducting interviews with base environmental management personnel, JBA Fire Department personnel, and aircraft hangar maintenance and operations personnel.
- Photographing locations where AFFF has been used.
- Performing environmental data records searches to document nearby populations, water supply well information, and wetlands.

If the operational history of an identified location indicates that AFFF was not used, then no exposure pathway could exist and the pathway and environmental hazard assessments within the PA will not be applicable.

1.5 REPORT ORGANIZATION

This PA report is organized as follows:

- Section 1.0, Introduction, provides a project overview, provides a basewide environmental setting, and describes the methods used to conduct the PA.
- Section 2.0, Fire Training Areas, describes the FTAs identified during the PA visit.
- Section 3.0, Non-Fire Training Areas, describes the non-FTAs identified during the PA visit.
- Section 4.0, Summary and Conclusions, summarizes and provides conclusions for both FTAs and non-FTAs.
- Section 5.0, References, provides references consulted during the preparation of this PA report.
- Appendix A, Photo Documentation, provides photos taken during the PA visit.
- Appendix B, Field Documentation, provides JBA fire reports acquired during the PA and the Potential Hazardous Waste Site Preliminary Assessment Forms.
- Appendix C, Records of Communications, provides records of all communications during the PA visit.

FIGURES

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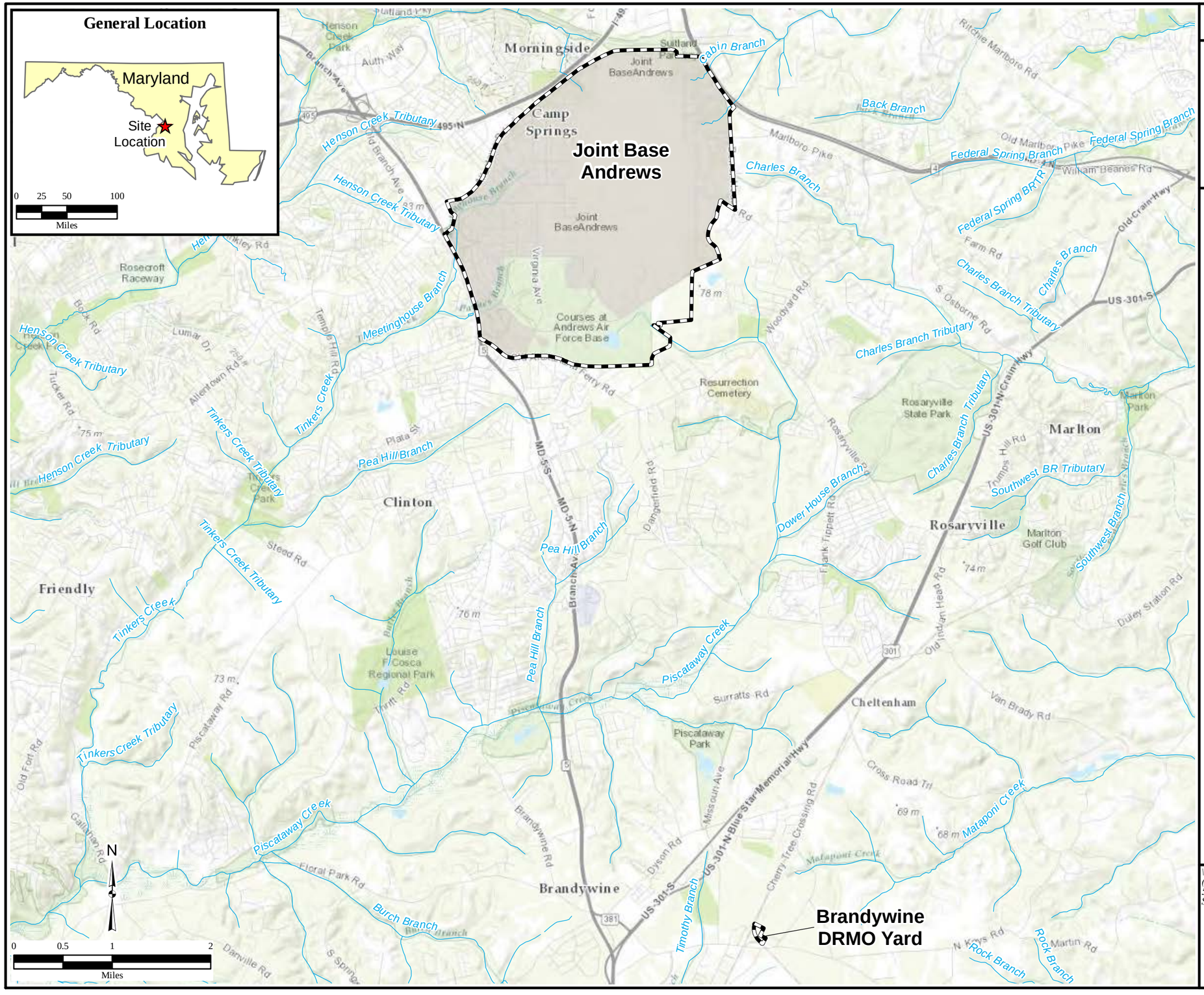
Figure 1.1
Joint Base Andrews and Brandywine DRMO Yard Prince George's County, MD



Legend

- Surface Water Course
- Installation Boundary

Notes:
DRMO=defense reutilization and marketing office

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(1-01)JBA_Overview.mxd
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Source: HGL, JBA
ArcGIS Online

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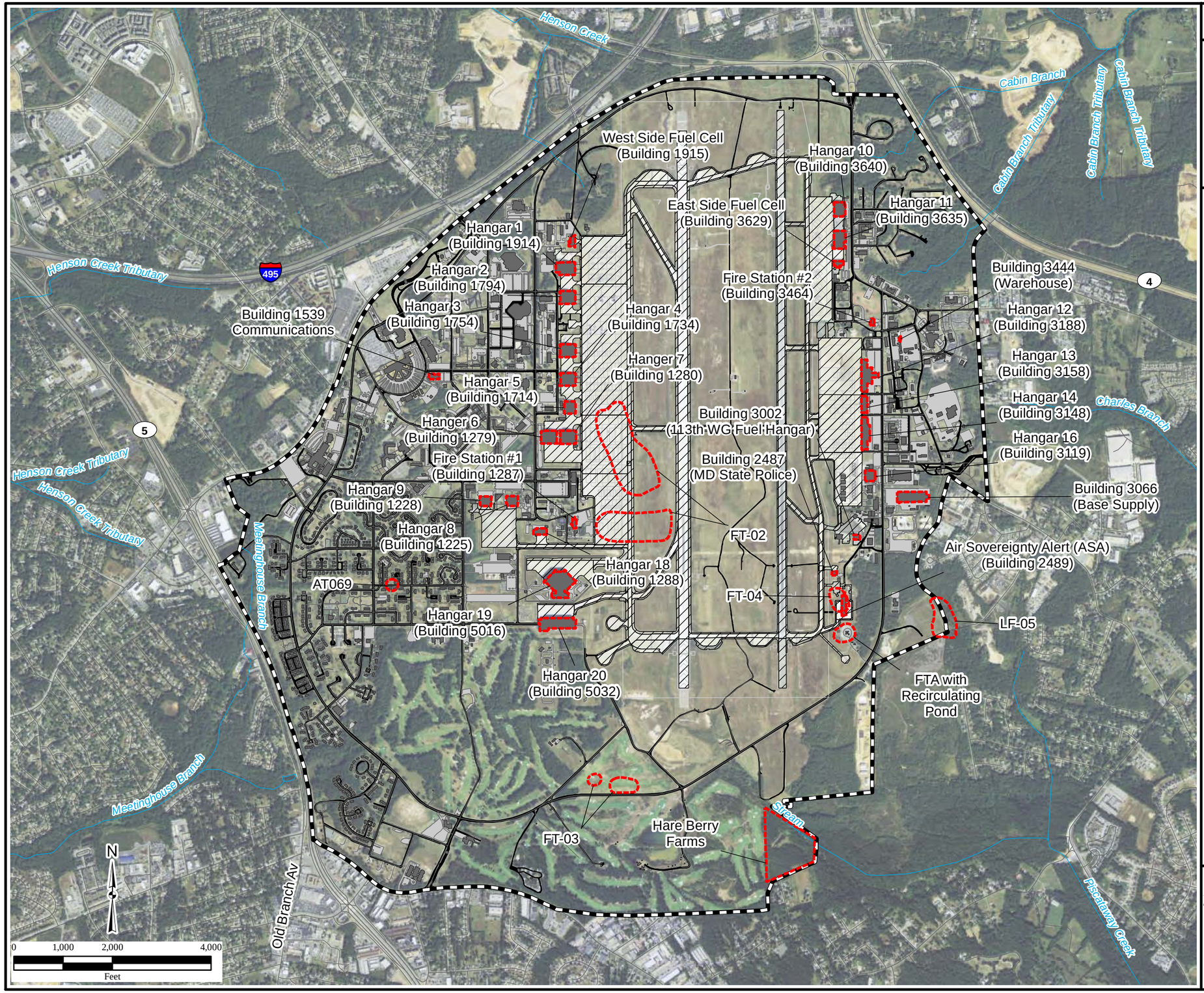
Figure 1.2
Joint Base Andrews
Prince George's County, MD



Legend

- Surface Water Course
- Inferred Location Boundary
- Installation Boundary
- Airfield
- Building
- Driveway
- Parking
- Road
- Sidewalk
- Slab

Notes:
FTA=fire training area
LF=land fill

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5/12/2015 JG
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

2.0 FIRE TRAINING AREAS

2.1 FT-02 (FIRE TRAINING AREA NO. 1)

2.1.1 Description and Operational History

FT-02, also known as FTA No.1, is a former FTA that has undergone extensive reconfiguration since this FTA was in operation. FT-02 is an open Environmental Restoration Program (ERP) site, estimated to be 97 acres in size with an active groundwater remedy in place addressing the solvent plume in accordance with the Record of Decision (Air Force, 2013). This site is located within the secured Pathfinder area and requires authorization and clearance to gain access. The site is bordered to the north by an airfield apron, to the west by hangars and the control tower, to the south by a taxiway, and to the east by the airfield runway (Figure 2.1). The approximate geographic coordinates of the site (east of Building 1220) are 38°48'21.92" N Latitude and 76°52'30.21" W Longitude.

The Remedial Investigation and the Federal Facilities Agreement (FFA) identified Site FT-02 as former Fire Protection Training Area No. 1 (Earth Tech, 2007; Air Force and EPA, 2011). The Remedial Investigation documented multiple areas believed to be the fire training site but was unable to identify the exact location. The Remedial Investigation cites work done by URS identifying another potential location of the FTA as approximately 900 feet east of the present location of Building 1220. The area believed to have contained fire training activities is currently an active part of airfield operations. The area is comprised of buildings, a control tower, hangars and airfield apron, and is located in the central portion of JBA (Figure 2.1).

As documented in the 2001 FFA, the site occasionally served as an FTA from 1948 through 1958. The site consisted of a 150- to 200-foot diameter bermed area and an adjacent drum storage area. During fire training activities, the bermed area was first saturated with water. Then an estimated 1,000 gallons of flammable liquids consisting of waste fuels, oils, and solvents were poured into the bermed area and ignited. Protein foams, carbon tetrachloride, and chlorobromomethane were then used to extinguish the fires (Earth Tech, 1997). Fire training activities were reported to have occurred two or three times per day at the site (Tetra Tech, 1996).

According to the JBA Assistant Fire Chief, fire training activities have not been conducted at this site during his tenure with the fire department dating back to 1988 (Appendix C, Records of Communication). The operational history of Site FT-02 pre-dates the use of AFFF by the Air Force for fire training operations. PFC contamination to the environment at Site FT-02 is not likely. Photo documentation of the site is provided in Appendix A.

Details on historical investigations conducted at the site are provided in the *Record of Decision, FT-02, Fire Training Area 1* (Air Force, 2009).

2.1.2 Waste Characteristics

Not Applicable.

2.1.3 Pathway and Environmental Hazard Assessment

2.1.3.1 Groundwater Pathway

Not Applicable.

2.1.3.2 Surface Water Pathway

Not Applicable.

2.1.3.3 Soil Exposure and Air Pathways

Not Applicable.

2.2 FT-03 (FIRE TRAINING AREA NO. 2)

2.2.1 Description and Operational History

FT-03, also known as FTA No.2, comprises approximately 16 acres southwest of the JBA western runway. The site was located in the current location of the JBA golf course and green space located north of Perimeter Road in the south central portion of JBA (Figure 1.2). The site is bordered to the north by Wheeling Road, to the east by Wisconsin Road, and to the south by Perimeter Road (Figure 2.2). The approximate geographic coordinates of the site are 38°47'22.29" N Latitude and 76°52'28.72" W Longitude. Piscataway Creek is located approximately 1,200 feet east of the site and Base Lake is less than 500 feet south of the site.

FT-03 is a current ERP site and occupies approximately 16 acres southwest of the runway. Institutional controls and long term monitoring are in place in accordance with the Record of Decision (Air Force, 2008).

Fire training operations at Site FT-03 occurred between 1959 and 1972. The site consisted of a 300- to 400-foot diameter bermed area and an adjacent drum storage area. During fire training activities, the bermed area at Site FT-03 was saturated with water. An estimated 1,000 to 2,000 gallons of flammable liquids consisting of waste oil, jet fuel, paint thinner, and other liquids were poured into the bermed area and ignited. Protein foams, carbon tetrachloride, and chlorobromomethane were then used to extinguish the fires (Earth Tech, 2007). Fire training activities were reported to have occurred two or three times per day until the mid-1960s, when they were reduced to once per day (Earth Tech, 2007). The Site FT-03 burn pit was demolished circa 1972 and contaminated soil was removed. There is no record of the volume of soil removed or if any cleanup criteria were established (Air Force, 2008). According to the Record of Decision, clean soil was brought in and sewage sludge was applied to aid in grass growth, when the area was converted to a golf course in 1995.

According to the JBA Assistant Fire Chief, fire training activities at Site FT-03 ceased prior to his arrival at the fire department in 1988 He did not have knowledge or record logs documenting the use of AFFF during fire training activities at Site FT-03 (Appendix C, Records of Communication). No additional information is available for AFFF use at this FTA.

Therefore, it is assumed that AFFF was never used at this site and only the non-AFFF chemicals mentioned in the Earth Tech (2007) reports were used at FT-03.

Details on historical investigations conducted at the site are provided in the *Record of Decision, FT-03, Fire Training Area 2* (Air Force, 2008).

2.2.2 Waste Characteristics

2.2.3 Pathway and Environmental Hazard Assessment

2.2.3.1 Groundwater Pathway

Not Applicable.

2.2.3.2 Surface Water Pathway

Not Applicable.

2.2.3.3 Soil and Air Exposure Pathways

Not Applicable.

2.3 FT-04 (FIRE PROTECTION TRAINING AREA 4)

2.3.1 Description and Operational History

FT-04 is located in the southeastern portion of JBA where the Air National Guard 113th Air Sovereignty Alert (ASA) facility currently resides (Figure 1.2). FT-04 is an ERP site, estimated to be two acres in size with ongoing groundwater monitoring of the groundwater plume and Institutional Controls in accordance with the Record of Decision (Air Force, 2005). This site is located within the secured Pathfinder area and requires authorization and clearance to gain access. The site is adjacent to the southeast corner of the airfield bordered to the north by a parking area followed by Building 2488, to the east by wooded areas, to the west by the JBA airfield, and to the south by a restricted airfield ramp and lightly vegetated areas (Figure 2.3). Piscataway Creek is located approximately 3,000 feet southwest of the site. The geographic coordinates of FT-04 are 38°47’59.92” N Latitude and 76°51’34.63” W Longitude. FT-04 was used for fire training activities from 1973 to 1990.

2.3.2 Waste Characteristics

Documents indicate that approximately 300 gallons of JP-4, motor oil, and possibly solvents were placed in the 2,000-gallon aboveground storage tank (AST) and released to the burn area through the fuel distribution system during weekly exercises (URS, 2005). The fuel distribution system included the 2,000-gallon AST that was used to supply fuel to the burn area (Air Force, 2011). Combustible liquids, consisting of a mixture of chlorinated solvents and waste petroleum products were released into the burn area, ignited and extinguished with AFFF and water (Air Force, 2005). The Assistant Fire Chief did not have knowledge or

record logs of the quantity of AFFF used or released during fire training activities during the training period (Appendix C, Records of Communication).

Following each exercise, excess fluids flowed by gravity across the burn area into the oil-water separator where oil was collected for off-site disposal. Residual foam and water passed through the oil-water separator and flowed to the 44,700-gallon gravel bottom leaching pond. Typically, liquids seeped into the ground through the gravel. However, the leaching pond often became plugged, and the material discharged to the ground surface or was taken to another oil-water separator and discharged to the sanitary sewer system (Dames and Moore, 1992). A new FTA was constructed south of Site FT-04 in 2000. Photo documentation of FT-04 is provided in Appendix A. The potential exists for PFC contamination to the environment atFT-04 based on historical records and documented use of AFFF to extinguish fires during fire training activities.

Details on historical investigations conducted at the site are provided in the *Record of Decision, FT-04, Fire Training Area 4* (Air Force, 2005).

2.3.3 Pathway and Environmental Hazard Assessment

A complete exposure pathway typically includes the following components:

- A source of contamination (an environmental medium contaminated at the source or a release mechanism by which chemicals are released from a source medium and transported),
- An exposure medium by which a receptor comes into contact, and
- A route of intake for the contaminant into the receptor's body at the exposure point.

If any of these elements are missing, the pathway is incomplete. Other release mechanisms resulting in exposure media for receptors may include the uptake of soil contaminants by plants and animals and the emission of soil contaminants into the air in association with dust particles.

2.3.3.1 Groundwater Pathway

The basewide geologic and hydrogeological settings are provided in Section 1.0. The Upland Deposits are reported as the surficial unit atFT-04. Upland Deposits are approximately 30 feet thick at FT-04 and the water table is between 5 to 10 feet bgs (Baywest, 2014).

JBA and most of Prince George's County obtains its PWS from the WSSC water utility. The source of the PWS is surface water from the Potomac and Patuxent Rivers. Drinking water supply wells are not located or permitted on JBA.

The nearest PWS well from the site is located approximately 4.5 miles southeast of JBA. The PWS well is part of the Cheltenham Boys Village system that supplies a population of 330 residents (EDR, 2015a).

The majority of the off-base population within a 4-mile radius of the site relies on municipal water taken from the Potomac and Patuxent Rivers. The off-base population within four miles of the site is approximately 54,000 residents (EDR, 2015b). The closest residential area is approximately 2,900 feet south of this location with a population of 3,188 residents (EDR, 2015b).

2.3.3.2 Surface Water Pathway

The surface water drainage from FT-04 flows toward the southwest ultimately discharging to Piscataway Creek. Piscataway Creek is known to be used for recreational fishing by residents or nearby communities and could provide exposure pathways to humans through dermal contact and ingestion of fish. Ingestion of surface water by aquatic or other animals is also a potential pathway for ecological receptors. The site is not located within any floodplains.

The nearest body of water is Base Lake, located approximately 4,900 feet southwest of the site. Base Lake drains via channels to Piscataway Creek approximately 1,300 feet downstream of the lake.

There are no identified surface water intakes or downstream fisheries adjacent to the surface water migration path 15 miles downstream of the site (EDR, 2015c; Geo Fin, 2015). There are wetlands and officially designated wildlife preserves adjacent to the surface water migration path 15 miles downstream of the site that would be considered ecologically sensitive environments (EDR, 2015c).

2.3.3.3 Soil and Air Exposure Pathways

The site is a former FTA that has been inactive since 1990. Building 2489 is located on the general area of FT-04 and is operated by the ASA in a restricted area on the airfield. Access to the site is limited to JBA personnel that support mission operations. This area includes a large impervious apron and hangar surrounded by vegetation. The number of workers at the ASA varies daily. There are no residents on site. The nearest residential area is approximately 3,000 feet south of the site. Population details within a 4-mile radius are discussed in Section 2.3.3.1. The potential for soil exposure to burrowing animals exists.

There are no schools or daycare facilities within a 200-foot radius of the site. The nearest school is Francis T. Evans Elementary School, located adjacent to the Virginia Gate located approximately 10,000 feet southwest of the site. The nearest day care facility is the JBA CDC #1 (Building 4575), located on Virginia Avenue approximately 9,000 feet southwest of the site.

The site is located within 0.5 miles of the designated sensitive species project area, discussed in Section 1.3.4, Ecological Receptors.

2.4 AT069

2.4.1 Description and Operational History

AT069, also known as Solid Waste Management Unit (SWMU) 69, is the location of a former FTA that is located in the west central portion of the JBA, near the intersection of Tucson Avenue and Waco Lane (Figure 1.2). The former FTA operated between the 1960s and the 1970s by the H-43 Helicopter Squadron and was located adjacent to a former runway. The area was redeveloped as military family housing in the early 1970s but has recently been demolished. Aerial interpretation of photos and historical documents place the location at 2101/2103 Tucson Avenue, located within ERP Site ST-19. According to the Draft Final Remedial Investigation, this site is an active ERP site currently in the remedial investigation phase (Baywest, 2015).

The site is bordered to the north and south by lightly vegetated undeveloped land that was formerly military housing, to the west by Waco Lane and lightly vegetated undeveloped land, and to the east by Newark Court and lightly vegetated undeveloped land (Figure 2.4). The former site more recently comprised recently demolished military housing. The site now consists of open space comprised of concrete, asphalt, and grass. The geographic coordinates of the site are 38°48'03.07" N Latitude and 76°53'26.44" W Longitude. Photo documentation of the site is provided in Appendix A.

Aerial photographs depict an area measuring 300 feet in diameter with visible staining suggesting burning activities. Stains were limited to a 100-foot diameter area. Fire training activities consisted of the daily release of approximately 300 gallons of clean fuel to the water-soaked pit followed by ignition. Fires were reportedly extinguished with protein foams (AMEC, 2014).

Approximately 300 gallons of clean fuel was released daily into the burn area and ignited (Baywest, 2015). According to the JBA Assistant Fire Chief, fire training activities at this location predated his tenure with the fire department dating back to 1988. He did not have any knowledge of fire training activities at AT069 (Appendix C, Records of Communication). Although the operational history is within the timeframe when the Air Force used AFFF, the period of operation in the 1970s is unknown and there are no documented releases of AFFF at the site. PFC contamination to the environment at AT069 is not likely because it was documented that fires were extinguished with protein foams and there have been no documented releases of AFFF.

Details on historical investigations conducted at the site are provided in the *Draft Final Remedial Investigation at SWMU 69* (Baywest, 2015).

2.4.2 Waste Characteristics

Not Applicable.

2.4.3 Pathway and Environmental Hazard Assessment

Not Applicable.

2.4.3.1 Groundwater Pathway

Not Applicable.

2.4.3.2 Surface Water Pathway

Not Applicable.

2.4.3.3 Soil and Air Exposure Pathways

Not Applicable.

2.5 BUILDING 2491, FTA WITH RECIRCULATING POND

2.5.1 Description and Operational History

The Building 2491 FTA is an active FTA located in the southeastern portion of JBA (Figure 1.2). The building is bordered to the north by Building 2489, to the west by the JBA airfield, to the south by an open grassy field that surrounds the airfield, and to the east by a wooded area (Figure 2.5). Building 2491 is located within the secured Pathfinder area and requires authorization and clearance to gain access.

Piscataway Creek is approximately 3,000 feet southwest, and the runway is approximately 1,050 feet west of Building 2491. The location includes a mock aircraft on a lined burn pit, a lined recirculating pond that is approximately 5,625 square feet, and a burn building. The geographic coordinates of Building 2491 are 38°47'52.96" N Latitude and 76°51'32.18" W Longitude.

According to the Assistant Fire Chief, this FTA, which began operating in 1995, is the only active FTA at JBA. In addition to fire training activities, the area is also used for time and distance testing for fire trucks using AFFF (Appendix C, Records of Communication). Photo documentation of the location is provided in Appendix A.

Fires at this aircraft FTA are ignited using propane during fire training activities. These fires are extinguished with water. However, releases of AFFF have occurred during fire training activities, and annual training requires the use of AFFF. In addition to fire training activities, the Fire Chief indicated that the pit is also used for the time and distance testing for fire trucks using AFFF. Historically, testing is conducted several times a year to test the fire truck settings to ensure proper equipment operation (Appendix C, Records of Communication). However, over the last 10 to 11 months, five fire trucks and two rapid intervention vehicles (RIVs) require monthly performance testing that discharges AFFF from all equipment due to equipment failures during a test last year. Table 3.1 presents a list of the vehicles containing AFFF that are tested monthly.

An estimated 2 to 3 gallons of AFFF is used per truck once per month to ensure proper equipment operations, since the equipment failure. This testing has been ongoing for the last 10 to 11 months, and was cleared through the JBA Environmental Office, according to the Department Fire Chief (Appendix C, Records of Communication). The equipment test of the seven vehicles results in a discharge of 14 to 21 gallons of AFFF per month during the monthly testing. The Assistant Fire Chief did not have record logs for the quantity of AFFF used or released during fire training activities during previous training periods, nor did he have any knowledge of AFFF ever releasing into the environment (Appendix C, Records of Communication). It is understood that all AFFF was released into the lined burn pit or lined holding pond.

2.5.2 Waste Characteristics

2.5.3 Pathway and Environmental Hazard Assessment

2.5.3.1 Groundwater Pathway

Not Applicable.

2.5.3.2 Surface Water Pathway

Not Applicable.

2.5.3.3 Soil and Air Exposure Pathways

Not Applicable.

FIGURES

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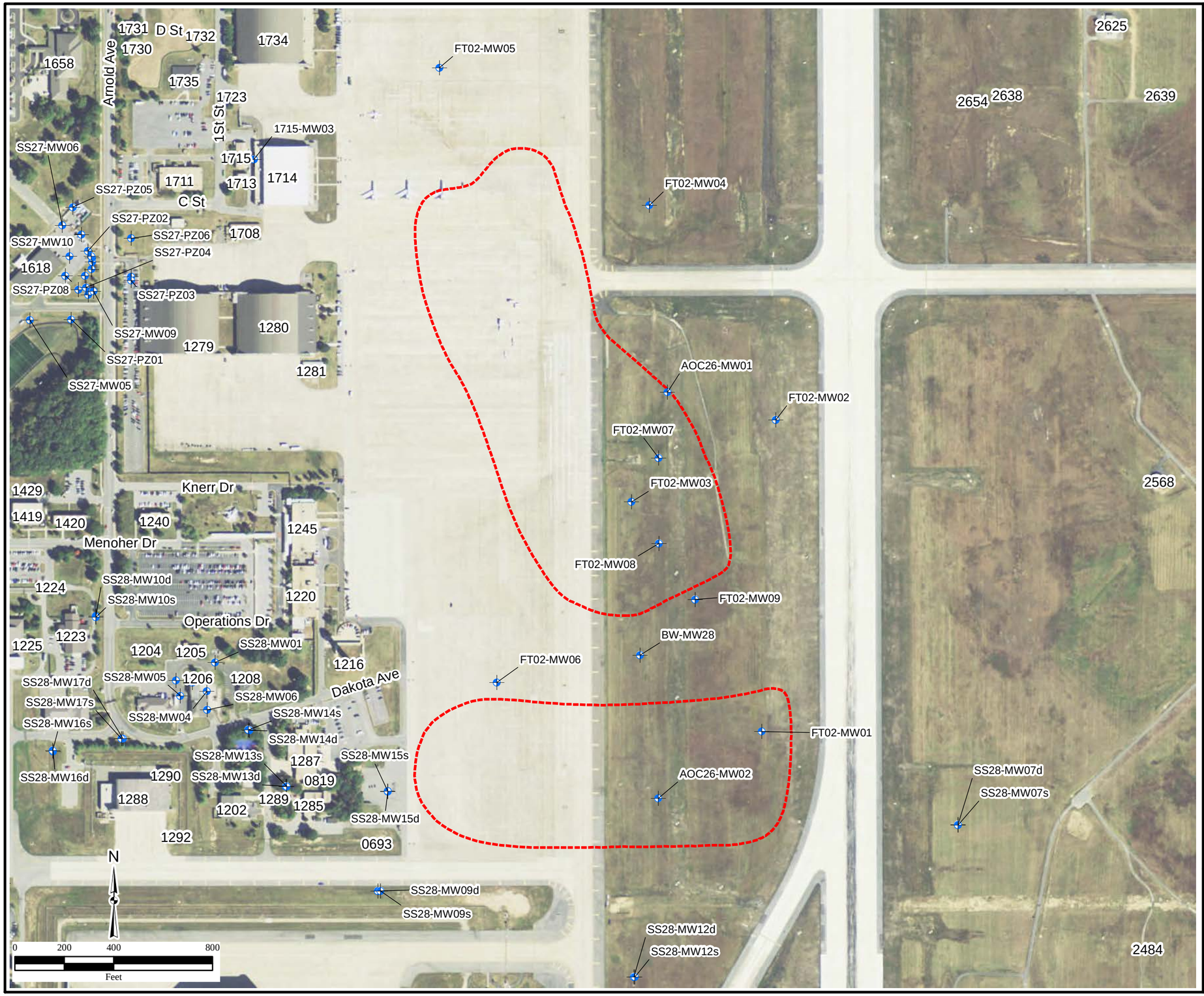
Figure 2.1
FT-02
Joint Base Andrews
Prince George's County, MD



Legend

- Well
- 1245 — Building Number
- Inferred Location Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(2-01)FT-02.mxd
5/12/2015 JG
Source: HGL, JBA
ArcGIS Online Imagery

HydroGeoLogic, Inc

Figure 2.2
FT-03
Joint Base Andrews
Prince George's County, MD

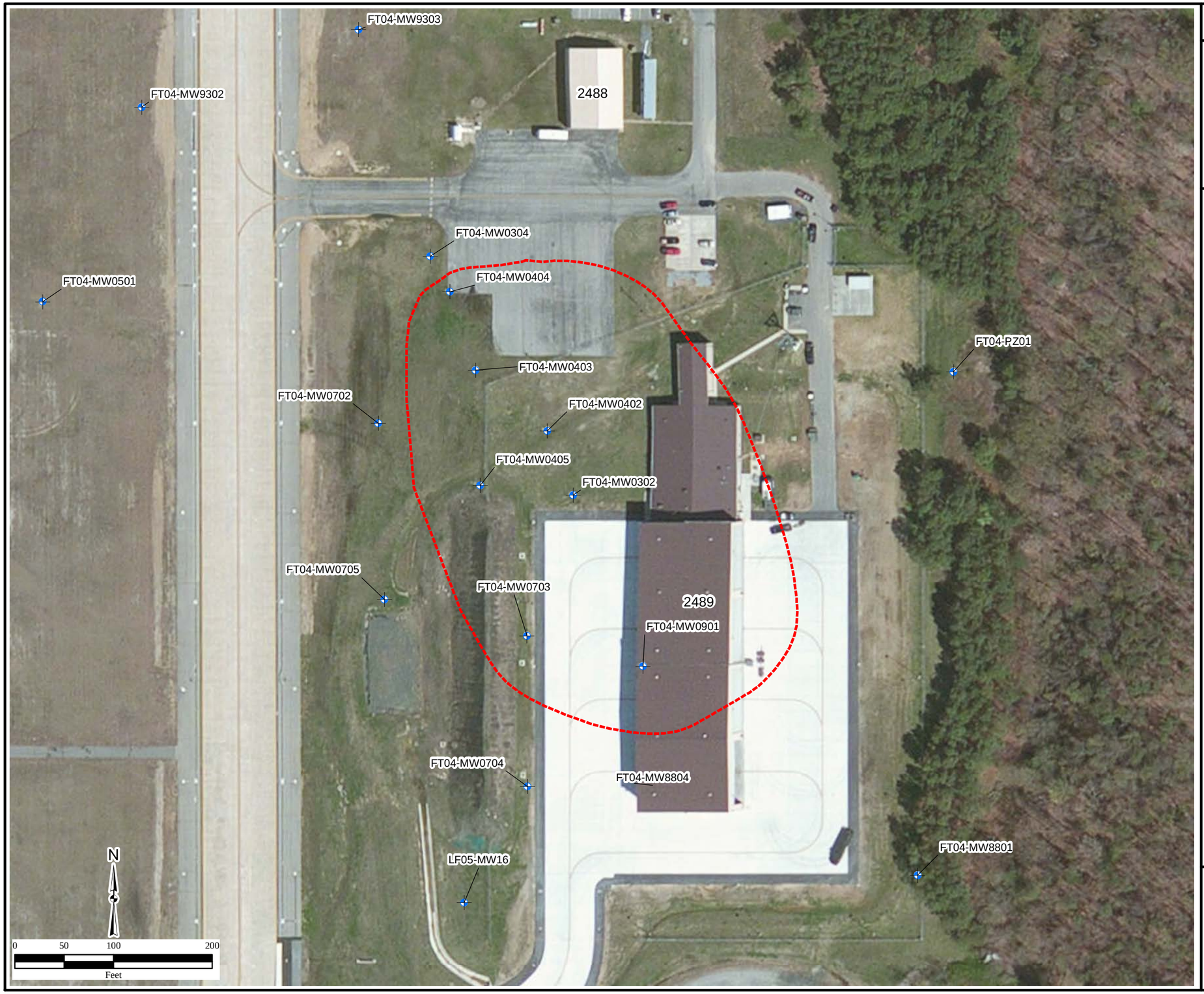
Legend

- Well
- 4925 — Building Number
- Inferred Location Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(2-02)FT-03.mxd
5/12/2015 JG
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

Figure 2.3
FT-04
Joint Base Andrews
Prince George's County, MD



Legend

- Well
- 2489 — Building Number
- Inferred Location Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(2-03)FT-04.mxd
5/12/2015 JG
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

Figure 2.4
AT069
Joint Base Andrews
Prince George's County, MD

Legend

2081 Building Number

Inferred Location Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(2-04)AT069.mxd
5/12/2015 JG
Source: HGL, JBA
NAIP 2013 Imagery

HGL HydroGeoLogic, Inc

Figure 2.5
Fire Training Area
with Recirculating Pond
Joint Base Andrews
Prince George's County, MD

Legend

- Well
- 2491 Building Number
- Inferred Location Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(2-05)FTA_RecirculatingPond.mxd
5/12/2015 ARW
Source: HGL, JBA
ArcGIS Online Imagery

HydroGeoLogic, Inc

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3.0 NON-FIRE TRAINING AREAS

3.1 HANGARS

Hangars have fixed foam suppression systems that are either deluge (water), AFFF or high-expansion foam (HEF). The fire department and suppressions system installers (or operation and maintenance staff) are interviewed for the types of systems that have been used historically and currently at each hangar. Systems are either charged with foam, not charged with foam or removed.

Escorts to these hangars were provided by the 11th Civil Engineering Squadron/Water Fuels System Maintenance (CES/WFSM) staff knowledgeable on the operations and maintenance of the fire suppression systems. In addition to information provided by the 11 CES/WFSM escort during the PA visit, fire department personnel, and building facility managers were interviewed for the types of systems that have been used historically and currently at each hangar (Appendix C, Records of Communication).

The subsequent sections identify hangars that have had AFFF fire suppression systems and those that have not. Hangars 12, 13, 14, 20, and the ASA Facility have fire suppression systems that have never been charged with AFFF; therefore, it is unlikely that the surrounding environmental media has been impacted by PFCs. However, the remaining hangars at JBA have either historically contained AFFF fire suppression systems or are currently equipped with AFFF.

Information on historical investigations of AFFF and fire suppression system discharges at JBA is provided in the *Aqueous Film Forming Foam (AFFF) Spill Control Conceptual Design Report* (Parson, 2000). Due to the limited historical knowledge of the current CES/WFSM staff at JBA, this report was identified as the best available information for system discharges prior to 2000. Discussion with environmental staff on base confirmed that there were multiple releases as documented in this report.

Details on discharges since 2000 are limited. However, any recent discharge would have most likely been confined to the engineered containment systems found within most hangars. Specifics on discharges at each hangar and the associated containment systems are discussed in the following sections that present the hangars in order from north to south starting on the west side of airfield followed by the east side of the airfield (Figure 1.2). Additionally, the Air Force Real Estate Records were queried for category code 880217 to identify buildings documented to have AFFF Fire Suppression Systems, though this source wasn't always reliable (Appendix C, Records of Communication). The *Emergency Planning and Community Right-to-Know Act (EPCRA) Report Section 311 and 312 Report* was also used as a resource on AFFF information at JBA (AMEC, 2014).

3.1.1 West Side Fuel Cell (Building 1915)

3.1.1.1 Description and Operational History

The West Side Fuel Cell, Building 1915, is located behind the secured Pathfinder gate, in a restricted area on the north side of the west portion of the JBA airfield and is currently occupied by the 89th Air Wing with operations managed by Dyncorp (Figure 1.1). Building 1915 is bordered to the north by lightly vegetated undeveloped land and a concrete area used for storage and parking, to the east by a restricted airfield ramp and concrete apron, to the south by lightly vegetated undeveloped land, and to the west by a parking area and a drive way (Figure 3.1).

The building is equipped to service fuel cells. This hangar is currently configured with an HEF fire suppression system and a secondary containment system, but previously had been configured with an AFFF fire suppression system. The hangar mechanical room is located on the west side of the hangar and currently consists of a 600-gallon AST containing HEF. The geographic coordinates of Building 1915 are 38°49'11.60" N Latitude and 76°52'42.40" W Longitude.

The hangar was formerly equipped with an AFFF fire suppression system, as evidenced by the "AFFF FOAM ROOM" sign on the entrance to the Mechanical Room. Building 1915 was constructed in 1969 (Real Estate Records, 2015). Records relating to the conversion of the fire suppression system from AFFF to HEF were not identified for this location. It is estimated that the conversion occurred in the last 5 to 10 years based on conversations with the Fire Chief (Appendix C, Records of Communication). One documented AFFF system discharge occurred at this location prior to 2000; however, there is no documentation on the AFFF containment or management on the system release (Parsons, 2000). Per the *Aqueous Film Forming Foam (AFFF) Spill Control Conceptual Design Report,* drainage from within the hangar discharges north to a conventional 2,000-gallon gravity multi-chambered oil-water separator (Parson, 2000).

An AFFF discharge occurred in Building 1915 some time prior to 2005 when a steam pipe running above the fire panel in the AFFF tank room developed a leak. The released steam set off the AFFF system. When the AFFF fire suppression system discharged, it drained into the trench drainage systems to the north side of the hangar to the associated oil-water separator. The oil-water separator is connected to the sanitary sewer and there was no control valve (Parsons, 2000). Because the AFFF discharged was contained within the hangar and the associated engineered containment system, there is a low potential for impacted environmental media surrounding the hangar.

Photo documentation is provided in Appendix A.

3.1.1.2 Waste Characteristics

Not Applicable.

3.1.1.3 Pathway and Environmental Hazard Assessment

3.1.1.3.1 Groundwater Pathway

Not Applicable.

3.1.1.3.2 Surface Water Pathway

Not Applicable.

3.1.1.3.3 Soil and Air Exposure Pathways

Not Applicable.

3.1.2 Hangar 1 (Building 1914)

3.1.2.1 Description and Operational History

Hangar 1, Building 1914, was constructed in 1961 and is located behind the secured Pathfinder gate, in a restricted area on the northern side of the west portion of the JBA airfield. The building is currently occupied by the 89th Air Wing with operations managed by Dyncorp (Figure 1.2). Hangar 1 is bordered to the north and south by restricted airfield ramps, and to the east and west by lightly vegetated areas and walkways. Hangar 1 is home to the 1st Heli-squadron (89th Air Wing) and contains 19 Twin Huey Helicopters (UH-1Ns). The geographic coordinates of Hangar 1 are 38°49'5.96" N Latitude and 76°52'43.99" W Longitude.

Hangar 1 is believed to have previously contained an AFFF fire suppression system, but is currently configured with an HEF fire suppression system and a secondary containment system. The hangar mechanical room is located on the west side of the hangar and currently consists of one 1,000-gallon AST containing HEF.

Based on the information provided by the Fire Chief, the hangar was equipped with an AFFF fire suppression system. He was not aware of when the system was retrofitted to an HEF system (Appendix C, Records of Communication). According to the *AFFF Spill Control Conceptual Design Report*, there are no documented releases of AFFF at Hangar 1. Due to current building operations, photos were limited to the mechanical room. PFC contamination to the environment at Hangar 1 is not likely because there have been no documented releases of AFFF.

3.1.2.2 Waste Characteristics

Not Applicable.

3.1.2.3 Pathway and Environmental Hazard Assessment

Not Applicable.

3.1.2.3.1 Groundwater Pathway

Not Applicable.

3.1.2.3.2 Surface Water Pathway

Not Applicable.

3.1.2.3.3 Soil and Air Exposure Pathways

Not Applicable.

3.1.3 Hangar 2 (Building 1794)

3.1.3.1 Description and Operational History

Hangar 2, Building 1794, was constructed in 1961 and is located behind the secured Pathfinder gate in a restricted area on the northern side of the west portion of the JBA airfield. The hangar is currently occupied by the Department of Energy and the U.S. Army Priority Air Transport with operations managed by Dyncorp (Figure 1.2). Hangar 2 is bordered to the north and south by restricted airfield ramps and to the east and west by lightly vegetated areas and walkways (Figure 3.3). The geographic coordinates of Hangar 2 are 38°49'0.46" N Latitude and 76°52'43.98" W Longitude.

This hangar houses multiple aircraft and is currently configured with an HEF fire suppression system and a secondary containment system. The hangar mechanical room is located on the east side of the hangar and currently consists of two 500-gallon upright ASTs containing HEF. Photo documentation is provided in Appendix A.

According to the Air Force Real Property record, this hangar was historically equipped with an AFFF fire suppression system. There were no records identifying the operational period of the AFFF fire suppression system or when Hangar 2 was retrofitted with the HEF fire suppression system that is currently in use (Appendix C, Records of Communication). PFC contamination to the environment at Hangar 2 is not likely because there have been no documented releases of AFFF.

3.1.3.2 Waste Characteristics

Not Applicable.

3.1.3.3 Pathway and Environmental Hazard Assessment

3.1.3.3.1 Groundwater Pathway

Not Applicable.

3.1.3.3.2 Surface Water Pathway

Not Applicable.

3.1.3.3.3 Soil Exposure and Air Pathways

Not Applicable.

3.1.4 Hangar 3 (Building 1754)

3.1.4.1 Description and Operational History

Hangar 3, Building 1754, is located behind the secured Pathfinder gate in a restricted area on the northern side of the west portion of the JBA airfield. Hangar 3 is currently occupied by the 89th Air Wing with operations managed by Dyncorp (Figure 1.1). Hangar 3 is bordered to the north and south by restricted airfield ramps and to the east and west by lightly vegetated areas and walkways (Figure 3.4). The geographic coordinates of Hangar 3 are 38°48'49.19" N Latitude and 76°52'44.05" W Longitude.

The hangar was constructed in 1961 and houses multiple aircraft. The hangar is currently equipped with an HEF fire suppression system. The hangar mechanical room is located on the east side of the hangar and currently consists of two 500-gallon upright ASTs containing HEF. Photo documentation is provided in Appendix A.

The hangar was originally equipped with an AFFF system according to the Air Force Real Property record. There were no records of when the AFFF fire suppression system was equipped or when Hangar 3 was retrofitted with the HEF fire suppression system that is currently in use (Appendix C, Records of Communication). PFC contamination to the environment at Hangar 3 is not likely because there have been no documented releases of AFFF.

3.1.4.2 Waste Characteristics

Not Applicable.

3.1.4.3 Pathway and Environmental Hazard Assessment

3.1.4.3.1 Groundwater Pathway

Not Applicable.

3.1.4.3.2 Surface Water Pathway

Not Applicable.

3.1.4.3.3 Soil Exposure and Air Pathways

Not Applicable.

3.1.5 Hangar 4 (Building 1734)

3.1.5.1 Description and Operational History

Hangar 4, Building 1734, is located behind the secured Pathfinder gate in a restricted area on the northern side of the west portion of the JBA airfield. The hangar is currently occupied by the 89th Air Wing with operations managed by Dyncorp (Figure 1.1). Hangar 4 is bordered to the north and south by restricted airfield ramps and to the east and west by lightly vegetated areas and walkways (Figure 3.5). The geographic coordinates of Hangar 4 are 38°48'43.55" N Latitude and 76°52'43.84" W Longitude.

The hangar was constructed in 1960 and houses multiple aircraft. The hangar is currently equipped with an HEF fire suppression system. The hangar mechanical room is located on the east side of the hangar and currently consists of two 500-gallon upright ASTs containing HEF. Photo documentation is provided in Appendix A.

The hangar was originally equipped with an AFFF system according to the Air Force Real Property record. There were no records of when the AFFF Fire Suppression system was equipped or when Hangar 4 was retrofitted with the HEF fire suppression system that is currently in use (Appendix C, Records of Communication). PFC contamination to the environment at Hangar 4 is not likely because there have been no documented releases of AFFF.

3.1.5.2 Waste Characteristics

Not Applicable.

3.1.5.3 Pathway and Environmental Hazard Assessment

Not Applicable.

3.1.5.3.1 Groundwater Pathway

Not Applicable.

3.1.5.3.2 Surface Water Pathway

Not Applicable.

3.1.5.3.3 Soil and Air Exposure Pathways

Not Applicable.

3.1.6 Hangar 5 (Building 1714)

3.1.6.1 Description and Operational History

Hangar 5, Building 1714, is located behind the secured Pathfinder gate in a restricted area on the central portion of the west side of the JBA airfield. The hangar is currently occupied by the 375th Air Wing and the Defense Intelligence Agency with operations managed by Dyncorp (Figure 1.2). Hangar 5 is bordered to the north and south by restricted airfield ramps, to the east by lightly vegetated areas and walkways, and to the west by a driveway followed by Buildings 1713 and 1715 (Figure 3.6). The geographic coordinates of Hangar 5 are 38°48'37.74" N Latitude and 76°52'43.10" W Longitude.

The hangar was constructed in 1958 and houses multiple aircraft. According to the *AFFF Spill Control Conceptual Design Report* (Parson, 2000), the original fire suppression system was charged with AFFF, and multiple AFFF discharges occurred due to electrical or mechanical malfunctions. The AFFF system included two 1,200-gallon AFFF ASTs (Parsons, 2000).

When the discharge of the AFFF fire suppression system occurred, the AFFF drained into the trench drainage systems on the north side of the hangar to the 2,000-gallon gravity multi-chambered oil-water separator. The oil-water separator is connected to the sanitary sewer and there was no control valve (Parsons, 2000). The quantity of AFFF discharged was not documented and the 11 CES/WFSM escort was unaware of any releases at this location (Appendix C, Records of Communication).

The hangar is currently equipped with an HEF fire suppression system. The hangar mechanical room is located on the west side of the hangar and currently consists of one 1,000-gallon upright AST containing HEF. The hangar is also currently equipped with a containment system that seals off the pathway to the sanitary sewer. The installation of the containment system was promulgated by multiple historical discharges of AFFF at JBA and is the result of the 1995 AFFF compliance plan and the 2000 AFFF spill control conceptual design (EA, 1995; Parsons, 2000).

Due to the presence of an engineered drainage system at Hangar 5 at the time of AFFF discharge, the surrounding environmental media is likely not contaminated by PFCs.

3.1.6.2 Waste Characteristics

Not Applicable.

3.1.6.3 Pathway and Environmental Hazard Assessment

3.1.6.3.1 Groundwater Pathway

Not Applicable.

3.1.6.3.2 Surface Water Pathway

Not Applicable.

3.1.6.3.3 Soil and Air Exposure Pathways

Not Applicable.

3.1.7 Hangar 6 (Building 1279)

3.1.7.1 Description and Operational History

Hangar 6, Building 1279, is located behind the secured Pathfinder gate in a restricted area on the central northern side of the west portion of the JBA airfield. The hangar is currently occupied by the 89th Air Wing with operations managed by Dyncorp (Figure 1.1). The hangar is bordered to the north and south by restricted airfield ramps and to the east by lightly vegetated areas and walkways followed by Building 1280, and to the west by an asphalt parking lot (Figure 3.7). The geographic coordinates of Hangar 6 are 38°48'31.94" N Latitude and 76°52'43.76" W Longitude.

The hangar was constructed in 1960 and houses multiple aircraft. According to the Air Force Real Property record, Hangar 6 is documented as not having been equipped with an AFFF fire suppression system. However, the Fire Department Chief suggested that Hangar 6 did have an AFFF fire suppression system prior to the installation of the HEF system. The Assistant Fire Chief also recalls releases of AFFF at Hangar 6 (Appendix C, Records of Communication).

The hangar is currently equipped with an HEF fire suppression system. The hangar mechanical room is located on the west side of the hangar and currently consists of one 1,000-gallon upright AST containing HEF.

Photo documentation is provided in Appendix A.

3.1.7.2 Waste Characteristics

According to the Assistant Fire Chief, AFFF releases have occurred at the hangar though the exact date and volume of the release is unknown. The hangar is equipped with a containment system, installed sometime after 2000, that seals off the pathway to the sanitary sewer. The installation of the containment system was promulgated by multiple historical releases of AFFF at JBA and is the result of the 1995 AFFF compliance plan and the 2000 AFFF spill control conceptual design (EA, 1995; Parsons, 2000). The potential exists for AFFF releases prior to the installation of the containment system. Therefore, there is potential for PFC contamination to the environment at Hangar 6.

3.1.7.3 Pathway and Environmental Hazard Assessment

A complete exposure pathway typically includes the following components:

- A source of contamination (an environmental medium contaminated at the source or a release mechanism by which chemicals are released from a source medium and transported),
- An exposure medium by which a receptor comes into contact, and
- A route of intake for the contaminant into the receptor's body at the exposure point.

If any of these elements are missing, the pathway is incomplete. Other release mechanisms resulting in exposure media for receptors may include the uptake of soil contaminants by plants and animals and the emission of soil contaminants into the air in association with dust particles.

3.1.7.3.1 Groundwater Pathway

The basewide geologic and hydrogeological settings are provided in Section 1.0. Groundwater flow in this area flows southeast based on the basewide groundwater elevation Isopleth Map (Baywest, 2015).

JBA and most of Prince George's County obtains its PWS from the WSSC water utility. The source of the PWS is surface water from the Potomac and Patuxent Rivers. Drinking water supply wells are not located or permitted on JBA.

The nearest PWS well from Hangar 6 is located approximately 5.3 miles southwest of JBA. The PWS well is part of the Oxon Hill Recreation Club system that supplies a population of 50 residents (EDR, 2015a).

The majority of the off-base population within a 4-mile radius of Hangar 6 relies on municipal water taken from the Potomac and Patuxent Rivers. The off-base population within four miles of the hangar is approximately 60,000 residents (EDR, 2015b). The closest residential area is approximately 2,300 feet southwest (EDR, 2015b).

3.1.7.3.2 Surface Water Pathway

Based on the topography of the surrounding area, surface water drainage from Hangar 6 flows southwest toward Meetinghouse Branch. Meetinghouse Branch joins Paynes Branch to form Tinkers Creek a half of mile off base. Tinkers Creek is known to be used for recreational fishing by residents or nearby communities and could provide exposure pathways to humans through dermal contact and ingestion of fish. Ingestion of surface water by aquatic or other animals is a potential pathway for ecological receptors. The hangar and surrounding area are not located within any floodplains.

The nearest body of water is Base Lake, located approximately 1.4 miles southeast of Hangar 6. Base Lake drains via channels to Piscataway Creek approximately 1,300 feet downstream of the lake. There are wetlands and officially designated wildlife preserves adjacent to the surface water migration path 15 miles downstream of the hangar that would be considered ecologically sensitive environments (EDR, 2015c).

There are no identified surface water intakes or downstream fisheries adjacent to the surface water migration path 15 miles downstream of the hangar (EDR, 2015c; Geo Fin, 2015).

3.1.7.3.3 Soil and Air Exposure Pathways

Hangar 6 is an active hangar located in a restricted area on the airfield. Access to the building is limited to authorized personnel. Only authorized military, civilian and contractor personnel work at Hangar 6 performing airfield related operations and maintenance. The number of workers at Hangar 6 varies daily. There are no residents, and the nearest residential area is 2,300 feet southwest of the hangar. Population details within a 4-mile radius are discussed in the Section 3.1.7.3.1.

There are no schools or daycare facilities within a 200-foot radius of Hangar 6. The nearest school is Imagine Andrews Public Charter School, which is located approximately 1 mile southwest on San Antonio Boulevard (EDR, 2014b). The nearest day care facility is the JBA CDC #2 (Building 4783), located on San Antonio Boulevard approximately 1 mile southwest of the hangar (EDR, 2014b).

3.1.8 Hangar 7 (Building 1280)

3.1.8.1 Description and Operational History

Hangar 7, Building 1280 is located behind the secured Pathfinder gate, in a restricted area on the central portion on the west side of the JBA airfield and is currently occupied by the 89th Air Wing with operations managed by Dyncorp (Figure 1.1). The hangar is bordered to the north and south by restricted airfield ramps, to the east by lightly vegetated areas and walkways, and to the west by lightly vegetated areas and walkways followed by Building 1279 (Figure 3.8). The geographic coordinates of Hangar 7 are 38°48’32.07” N Latitude and 76°52’48.42” W Longitude.

The hangar was constructed in 1960 and houses multiple aircraft. The hangar was originally equipped with an AFFF system according to the Air Force Real Property record; however, there were no records of when the AFFF fire suppression system was installed. Hangar 7 was retrofitted with the HEF fire suppression system that is currently in use though available documents do not indicate when this occurred. The hangar mechanical room is located on the east side of the hangar and currently consists of one 1,000-gallon upright AST containing HEF. Photo documentation is provided in Appendix A.

3.1.8.2 Waste Characteristics

According to the Assistant Fire Chief, AFFF releases have historically occurred at Hangar 7 though the exact date and volume of the release is unknown (Appendix C, Records of Communication). The hangar is equipped with a containment system that seals off the pathway to the sanitary sewer. The installation of the containment system was promulgated by multiple historical releases of AFFF at JBA and is the result of the 1995 AFFF compliance plan and the 2000 AFFF spill control conceptual design (EA, 1995; Parsons, 2000). The potential exists for

AFFF releases prior to the installation of the containment system sometime after 2000 at Hangar 7; therefore, there is potential for PFC contamination to the environment at this location.

3.1.8.3 Pathway and Environmental Hazard Assessment

A complete exposure pathway typically includes the following components:

- a source of contamination (an environmental medium contaminated at the source or a release mechanism by which chemicals are released from a source medium and transported),
- an exposure medium by which a receptor comes into contact, and
- a route of intake for the contaminant into the receptor's body at the exposure point.

If any of these elements are missing, the pathway is incomplete. Other release mechanisms resulting in exposure media for receptors may include the uptake of soil contaminants by plants and animals and the emission of soil contaminants into the air in association with dust particles.

3.1.8.3.1 Groundwater Pathway

The basewide geologic and hydrogeological settings are provided in Section 1.0. Groundwater flow in this area flows southeast based on the basewide groundwater elevation Isopleth Map (Baywest, 2015).

JBA and most of Prince George's County obtains its PWS from the WSSC water utility. The source of the PWS is surface water from the Potomac and Patuxent Rivers. Drinking water supply wells are not located or permitted on JBA.

The nearest PWS well from Hangar 7 is located approximately 5.3 miles southwest of JBA. The PWS well is part of the Oxon Hill Recreation Club system that supplies a population of 50 residents (EDR, 2015a).

The majority of the off-base population within a 4-mile radius of the hangar relies on municipal water taken from the Potomac and Patuxent Rivers. The off-base population within four miles is approximately 60,000 residents (EDR, 2015b). The closest residential area is approximately 2,300 feet southwest of the hangar (EDR, 2015b).

3.1.8.3.2 Surface Water Pathway

Surface drainage originating from Hangar 7 drains to Meetinghouse Branch. Based on the topography of the surrounding area, surface water drainage flows southwest toward Meetinghouse Branch. Meetinghouse Branch joins Paynes Branch to form Tinkers Creek a half mile off base. Tinkers Creek is known to be used for recreational fishing by residents or nearby communities and could provide exposure pathways to humans through dermal contact and ingestion of fish. Ingestion of surface water by aquatic or other animals is a potential

pathway for ecological receptors. Hangar 7 and the surrounding area are not located within any floodplains.

The nearest body of water is Base Lake, located approximately 1.4 miles southeast of the hangar. Base Lake drains via channels to Piscataway Creek approximately 1,300 feet downstream of the lake. There are wetlands and officially designated wildlife preserves adjacent to the surface water migration path 15 miles downstream that would be considered ecologically sensitive environments (EDR, 2015c).

There are no identified surface water intakes or downstream fisheries adjacent to the surface water migration path 15 miles downstream of the hangar (EDR, 2015c; Geo Fin, 2015).

3.1.8.3.3 Soil and Air Exposure Pathways

Hangar 7 is an active hangar located in a restricted area on the airfield. Access to the hangar is limited to authorized personnel. Only authorized military, civilian and contractor personnel work at Hangar 7 performing airfield related operations and maintenance. The number of workers at Hangar 7 varies daily. There are no residents with the nearest residential area located 2,300 feet southwest of Hangar 7. Population details within a 4-mile radius are discussed in the Section 3.1.8.3.1.

There are no schools or daycare facilities within a 200-foot radius of Hangar 7. The nearest school is Imagine Andrews Public Charter School, which is approximately 1 mile southwest of on San Antonio Boulevard (EDR, 2014b). The nearest day care facility is the JBA CDC #2 (Building 4783), located on San Antonio Boulevard approximately 1 mile southwest (EDR, 2014b).

3.1.9 Hangar 8 (Building 1225)

3.1.9.1 Description and Operational History

Hangar 8, Building 1225, is located behind the secured Pathfinder gate in a restricted area on the central portion of the west side of the JBA airfield and is currently occupied by the 113th Wing/201st Air Squadron (Figure 1.1). The hangar is bordered to the north by lightly vegetated area followed by Menoher Drive, to the west by a parking area followed by lightly vegetated areas followed by an unnamed road, to the east by lightly vegetated areas, and to the south by a concrete apron (Figure 3.9). The geographic coordinates of Hangar 8 are 38°48’19.69” N Latitude and 76°52’58.03” W Longitude.

This hangar houses C-38 and C-40 aircraft and is equipped with an AFFF fire suppression system. The hangar mechanical room is located on the second story of the north side of the hangar and consists of two 1,100-gallon ASTs containing AFFF labeled as Ansul. The AFFF system was installed in 1999 (Parsons, 2000).

Hangar 8 has a secondary containment system on the northeast side of the hangar to capture foam discharge. According to the Air Force Real Property record, this hangar was constructed

in 1953 and did not originally include an AFFF fire suppression system. As indicated above, the system was installed in 1999 (Parsons, 2000). During the PA visit, it was observed that the AFFF fire suppression system includes four oscillating cannons along with an overhead sprinkler system to disperse the foam.

According to the 113th Deputy Base Civil Engineer, there are no document releases of AFFF at the hangar (Appendix C, Records of Communication). The hangar has a trench drain that is connected to the containment system located in the northeast corner of the hangar that seals off the pathway to the sanitary sewer in the event of an AFFF discharge. The installation of the containment system was promulgated by multiple historical releases of AFFF at JBA and is the result of the 1995 AFFF compliance plan and the 2000 AFFF spill control conceptual design (EA, 1995; Parsons, 2000). Although the AFFF system is still active, PFC contamination to the environment at Hangar 8 is not likely because there have been no documented releases of AFFF. Photo documentation is provided in Appendix A.

3.1.9.2 Waste Characteristics

Not Applicable.

3.1.9.3 Pathway and Environmental Hazard Assessment

Not Applicable.

3.1.9.3.1 Groundwater Pathway

Not Applicable.

3.1.9.3.2 Surface Water Pathway

Not Applicable.

3.1.9.3.3 Soil and Air Exposure Pathways

Not Applicable.

3.1.10 Hangar 9 (Building 1228)

3.1.10.1 Description and Operational History

Hangar 9, Building 1228, is located behind the secured Pathfinder gate in a restricted area on the central portion of the west side of the JBA airfield and is currently occupied by the 113th WG/201st AS (Figure 1.1). The hangar is bordered to the north by an asphalt parking lot, to the west and east by lightly vegetated areas and an unnamed road, and to the south by a concrete apron (Figure 3.10). The geographic coordinates of Hangar 9 are 38°48’19.57” N Latitude and 76°53’4.98” W Longitude.

This hangar houses C-38 and C-40 aircraft and is equipped with an AFFF fire suppression system. The hangar mechanical room is located on the second story of the north side of the hangar and consists of two 1,100-gallon ASTs containing AFFF labeled as Ansul. The AFFF system was installed in 1999 (Parsons, 2000). Photo documentation is provided in Appendix A.

According to the 113th Deputy Base Civil Engineer, there are no documented releases of AFFF at the hangar (Appendix C, Records of Communication). According to the *AFFF Spill Control Conceptual Design Report*, the hangar has a trench drain that is assumed to be connected to a containment system (Parson, 2000). Although the hangar is currently equipped with an AFFF fire suppression system, PFC contamination to the environment at Hangar 9 is not likely because there are no documented AFFF releases.

3.1.10.2 Waste Characteristics

Not Applicable.

3.1.10.3 Pathway and Environmental Hazard Assessment

Not Applicable.

3.1.10.3.1 Groundwater Pathway

Not Applicable.

3.1.10.3.2 Surface Water Pathway

Not Applicable.

3.1.10.3.3 Soil and Air Exposure Pathways

Not Applicable.

3.1.10.4 Hangar 18 (Building 1288)

3.1.10.5 Description and Operational History

Hangar 18, Building 1288, is located behind the secured Pathfinder gate in a highly restricted area on the central portion of the west side of the JBA airfield and was historically occupied by the 89th Wing, but has recently been vacated and turned over to the 11th CES (Figure 1.2). The hangar is bordered to the north by a parking area followed by lightly vegetated areas, to the east and west by lightly vegetated areas, and to the south by a restricted airfield ramp (Figure 3.11). The geographic coordinates of Hangar 18 are 38°48’13.33” N Latitude and 76°52’50.82” W Longitude.

The hangar is currently unoccupied, but previously contained aircraft of the 89th Wing. Hangar 18 is equipped with an AFFF fire suppression system. The mechanical room is located

on the south side of the hangar and includes two 1,000-gallon ASTs containing AFFF. The system also includes overhead sprinklers and 4 cannons to disperse the foam. Photo documentation is provided in Appendix A.

Hangar 18 has one documented AFFF discharge caused by electrical or mechanical malfunction in the fire alarm panel that occurred prior to 1997 (Parsons, 2000). However, there is no documentation on the quantity of AFFF discharged during this incident. The 11 CES/WFSM escort was unaware of any releases at this location (Appendix C, Records of Communication).

According to the *AFFF Spill Control Conceptual Design Report* (Parson, 2000), at the time of the spill there was one trench drain in this hangar that discharges to the oil-water separator and was connected to the sanitary sewer. The system did not include a control valve (Parsons, 2000). The hangar is currently equipped with a containment system that seals off the pathway to the sanitary sewer, located on the southwest side of the hangar. The installation of the containment system was promulgated by multiple historical releases of AFFF at JBA and is the result of the 1995 AFFF compliance plan and the 2000 AFFF spill control conceptual design (EA, 1995; Parsons, 2000).

Due to the presence of an engineered drainage system at Hangar 5 at the time of AFFF discharge, the surrounding environmental media is likely not contaminated by PFCs.

3.1.10.6 Waste Characteristics

Not Applicable.

3.1.10.7 Pathway and Environmental Hazard Assessment

3.1.10.7.1 Groundwater Pathway

Not Applicable.

3.1.10.7.2 Surface Water Pathway

Not Applicable.

3.1.10.7.3 Soil and Air Exposure Pathways

Not Applicable.

3.1.11 Hangar 19 (Building 5016)

3.1.11.1 Description and Operational History

Hangar 19, Building 5016, is located behind the secured Pathfinder gate in a highly restricted area on the central portion of the west side of the JBA airfield. The hangar was occupied by the Presidential Air Group (PAG) (Figure 1.1). Hangar 19 is bordered to the north by a

restricted airfield ramp, to the west and east by lightly vegetated areas and driveways, to the south by lightly vegetated areas and a driveway (Figure 3.12). The geographic coordinates of Hangar 19 are 38°48'2.98" N Latitude and 76°52'45.59" W Longitude.

The hangar is equipped with an AFFF fire suppression system that is secondary to the HEF system. This is a secured facility and no drawings of the perimeter/exterior or photos were permitted. The hangar includes three mobile 250-gallon AFFF totes equipped with cannons.

According to the facility manager, the hangar had an AFFF system that was converted to HEF in 2005. The AFFF system consisted of two 2,500-gallon holding tanks that fed seven floor cannons and the closed overhead sprinkler system. During a visit related to a 2000 study, the AFFF holding tanks were corroded and at the time had leaking pipes (Parson, 2000). There are two documented AFFF discharges at this location (Parsons, 2000). Hangar 19 has one AFFF discharge that resulted from an electrical storm setting off the system. There is no documentation on the quantity spilled during this discharge. The other AFFF discharge was identified during a visit for a 2000 study. This discharge occurred as a result of corroded AFFF tanks and leaking pipes within the building. The amount of AFFF discharged is unknown. Both the 11 CES/WFSM escort and facility manager were unaware of any AFFF releases at this location because it predated their tenure (Appendix C, Records of Communication).

According to the information included in the *AFFF Spill Control Conceptual Design Report* (Parson, 2000), there are three main trench drains in the hangar that are connected to an underground oil-water separator/holding tank. Downstream of the holding tank is a control valve that was open to the sanitary sewer during the 2000 visit (Parsons, 2000).

3.1.11.2 Waste Characteristics

Not Applicable.

3.1.11.3 Pathway and Environmental Hazard Assessment

3.1.11.3.1 Groundwater Pathway

Not Applicable.

3.1.11.3.2 Surface Water Pathway

Not Applicable.

3.1.11.3.3 Soil and Air Exposure Pathways

Not Applicable.

3.1.12 Hangar 20 (Building 5032)

3.1.12.1 Description and Operational History

Hangar 20, Building 5032, is located behind the secured Pathfinder gate in a highly restricted area on the central portion of the west side of the JBA airfield and is occupied by the PAG (Figure 1.2). The hangar is bordered to the north by a restricted airfield ramp, to the west by a driveway/parking area, to the east by lightly vegetated areas and a driveway, and to the south by a driveway/parking area (Figure 3.13). The geographic coordinates of Hangar 20 are 38°47'54.43" N Latitude and 76°52'46.29" W Longitude.

The hangar was constructed in 2009 and has always been equipped with an HEF fire suppression system. The hangar did not include an AFFF fire suppression system. This is a secured facility and no notes or photos were permitted. PFC contamination to the environment at Hangar 20 is not likely because the hangar has never been equipped with an AFFF fire suppression system and no AFFF releases have been documented.

3.1.12.2 Waste Characteristics

Not Applicable.

3.1.12.3 Pathway and Environmental Hazard Assessment

Not Applicable.

3.1.12.3.1 Groundwater Pathway

Not Applicable.

3.1.12.3.2 Surface Water Pathway

Not Applicable.

3.1.12.3.3 Soil and Air Exposure Pathways

Not Applicable.

3.1.13 Hangar 10 (Building 3640)

3.1.13.1 Description and Operational History

Hangar 10, Building 3640, is located behind the secured Pathfinder gate in a restricted area on the north side of the eastern portion of the JBA airfield and is occupied by the 459th Air Refueling Wing (ARW) (Figure 1.2). The hangar is bordered to the north and south by a driveway/parking area, to the east by a parking lot followed by Patrick Avenue, and to the west by a concrete apron (Figure 3.14). The geographic coordinates of Hangar 10 are 38°49'17.69" N Latitude and 76°51'34.25" W Longitude.

The hangar is a two bay hangar that houses multiple KC-135s and is equipped with an AFFF fire suppression system. The mechanical room is located on the south side of the hangar and consists of one 1,000-gallon AST containing AFFF that feeds three floor cannons. There are no AFFF sprinklers located at this hangar. The AFFF is labeled as 3% Chemguard. Photo documentation is provided in Appendix A.

According to the Air Force Real Property record, this hangar was constructed in 1944. The hangar includes two trench drains and a secondary containment tank installed to capture AFFF during a foam discharge. It was noted by 459th staff with 30 years of institutional knowledge that the floor drains only go to the containment tank when the valve is tripped by the sensors. When the AFFF dumps, sensors trip and the valve closes isolating the foam to the suppression capture system (Appendix C, Records of Communication). The underground containment system is located in the northeast corner of the hangar. Multiple historical AFFF discharges are known to have occurred at this location, which has resulted in the installation of the foam suppression capture system (Appendix C, Records of Communication).

As indicated above, there are multiple historical AFFF discharges though most are anecdotal and are not well documented. There are two documented AFFF discharges, with the most recent occurring in 2008 or 2009 (Appendix C, Records of Communication). One discharge resulted from a burst pipe. Other spills were caused by pressure drops in the AFFF fire suppression system that resulted in the system being set off (Parson, 2000). Prior to the installation of the containment system at Hangar 10, trench drains discharged to the oil-water separator that did not have a control valve and was located at the northeast corner of the hangar (Parson, 2000).

There is no documentation on the quantity spilled during discharges. The hangar is currently equipped with a containment system that seals off the pathway to the sanitary sewer, located on the northeast side of the hangar. The installation of the containment system was promulgated by multiple historical releases of AFFF at JBA and is the result of the 1995 AFFF compliance plan and the 2000 AFFF spill control conceptual design (EA, 1995; Parsons, 2000).

3.1.13.2 Waste Characteristics

Not Applicable.

3.1.13.3 Pathway and Environmental Hazard Assessment

3.1.13.3.1 Groundwater Pathway

Not Applicable.

3.1.13.3.2 Surface Water Pathway

Not Applicable.

3.1.13.3.3 Soil and Air Exposure Pathways

Not Applicable.

3.1.14 Hangar 11 (Building 3635)

3.1.14.1 Description and Operational History

Hangar 11, Building 3635, is located behind the secured Pathfinder gate in a restricted area on the north side of the eastern portion of the JBA airfield and is occupied by the 459th ARW (Figure 1.1). The hangar is bordered to the north by a driveway/parking area, to the east by a parking lot followed by Patrick Avenue, to the west by the concrete apron, and to the south by a restricted airfield ramp (Figure 3.15). The geographic coordinates of Hangar 11 are 38°49'11.91" N Latitude and 76°51'34.19" W Longitude.

The hangar is equipped with an AFFF fire suppression system and houses multiple KC-135s. The mechanical room is located on the south side of the hangar and consists of two 1,000-gallon ASTs containing AFFF that feed six cannons and a closed overhead sprinkler system. The AFFF is labeled as Arrow®. Photo documentation is provided in Appendix A.

According to the Air Force Real Property record, Hangar 11 was constructed in 1944. The hangar includes two trench drains and a secondary containment tank installed to capture AFFF during a release. Prior to 2000, all trench drains discharged directly into the storm sewer (Parson, 2000). After 2000, the two trench drains discharge to one 10,000-gallon underground tank in the event of an AFFF release. When the AFFF foam dumps, sensors trip and close a valve isolating the foam to the suppression capture system. According to the Air Force Spill Incident Report Internet System, AFFF is removed by a contractor and disposed of off base (Appendix C, Records of Communication). There are documented AFFF releases at this location.

3.1.14.2 Waste Characteristics

Multiple AFFF releases have occurred at Hangar 11 (Appendix C, Records of Communication). One spill, prior to 2000, was caused by an electrical storm that activated the UV-IR detectors and activated the AFFF fire suppression system (Parson, 2000). A trench drain discharged out to the oil-water separator and flowed to the sanitary sewer system (Parson, 2000). In July 2005, 750 gallons of AFFF was released during a system release due to system pressurization issues. The AFFF was released to the hangar floor and flowed outside of the hangar on the asphalt and concrete areas resulting in a release to the storm drain system. Significant foam was identified in Cabin Branch Creek as a result of the release (Appendix C, Records of Communication).

According to an After Action Report, an AFFF release also occurred at the hangar in March 2007. A contractor working outside on the south side of Hangar 11 hit an AFFF line. Approximately 15 gallons of AFFF was released and drained into the nearest storm drain

(Appendix C, Records of Communication). The potential exists for PFC contamination impacting the environment at Hangar 11 because of the multiple documented AFFF releases.

3.1.14.3 Pathway and Environmental Hazard Assessment

A complete exposure pathway typically includes the following components:

- A source of contamination (an environmental medium contaminated at the source or a release mechanism by which chemicals are released from a source medium and transported),
- An exposure medium by which a receptor comes into contact, and
- A route of intake for the contaminant into the receptor's body at the exposure point.

If any of these elements are missing, the pathway is incomplete. Other release mechanisms resulting in exposure media for receptors may include the uptake of soil contaminants by plants and animals and the emission of soil contaminants into the air in association with dust particles.

3.1.14.3.1 Groundwater Pathway

The basewide geologic and hydrogeological settings are provided in Section 1.0. Groundwater flow in this area flows northeast based on the basewide groundwater elevation Isopleth Map (Baywest, 2015).

JBA and most of Prince George's County obtains its PWS from the WSSC water utility. The source of the PWS is surface water from the Potomac and Patuxent Rivers. Drinking water supply wells are not located or permitted on JBA.

The nearest PWS well is located approximately 6 miles southeast of JBA. The PWS well is part of the Cheltenham Boys Village system that supplies a population of 330 residents (EDR, 2015a).

The majority of the off-base population within a 4-mile radius of Hangar 11 relies on municipal water taken from the Potomac and Patuxent Rivers. The off-base population within four miles is approximately 54,000 residents (EDR, 2015b). The closest residential area is approximately 1.8 miles southeast with a population of 3,995 residents (EDR, 2015b).

3.1.14.3.2 Surface Water Pathway

Surface drainage originating from Hangar 11 drains east and discharges to Cabin Branch. Cabin Branch joins several other streams to become the Western Branch Patuxent River. The Patuxent River is known to be used for recreational fishing by residents or nearby communities and could provide exposure pathways to humans through dermal contact and ingestion of fish. Ingestion of surface water by aquatic or other animals is also a potential pathway for ecological receptors. The hangar and surrounding area are not located within any floodplains.

The nearest body of water is Base Lake, located approximately 12,000 feet southwest of the hangar. Base Lake drains via channels to Piscataway Creek approximately 1,300 feet downstream of the lake. There are wetlands and officially designated wildlife preserves adjacent to the surface water migration path 15 miles downstream that would be considered ecologically sensitive environments (EDR, 2015c).

There are no identified surface water intakes or downstream fisheries adjacent to the surface water migration path 15 miles downstream of the hangar (EDR, 2015c; Geo Fin, 2015).

3.1.14.3.3 Soil and Air Exposure Pathways

Hangar 11 is an active hangar located in a restricted area on the airfield. Access is limited to authorized personnel. Only authorized military, civilian and contractor personnel work at Hangar 11. The number of workers at Hangar 11 varies daily. There are no residents, and the nearest residential area is 1,500 feet west of the hangar. Population details of the residential areas within a 4-mile radius are discussed in Section 3.1.15.3.1.

There are no schools or daycare facilities within a 200-foot radius of Hangar 11. The nearest school is Imagine Andrews Public Charter School, which is located approximately 2.0 miles southwest on San Antonio Boulevard (EDR, 2014b). The nearest day care facility is the JBA CDC #3 (Building 3725), located on Fetchet Avenue approximately 0.4 miles east of Hangar 11.

3.1.15 East Side Fuel Cell (Building 3629)

3.1.15.1 Description and Operational History

The East Side Fuel Cell, Building 3629, is located behind the secured Pathfinder gate in a restricted area on the north side of the eastern portion of the JBA airfield and is occupied by 459th ARW (Figure 1.1). The hangaris bordered to the north by a restricted airfield ramp, to the east by a parking lot, to the west by the concrete apron, and to the south by a driveway/parking area (Figure 3.16). The geographic coordinates of the East Side Fuel Cell are 38°49’6.65” N Latitude and 76°51’34.21” W Longitude.

The building is equipped to perform repairs and maintenance on aircraft fuel systems and is equipped with an AFFF fire suppression system. The hangar mechanical room is located on the south side of the hangar and consists of two 1,000-gallon ASTs containing AFFF that feed three floor cannons and a closed overhead system (Parson, 20000). Photo documentation is provided in Appendix A. There are documented AFFF releases at this location, including releases outside of the building.

3.1.15.2 Waste Characteristics

There are multiple documented releases of AFFF at the East Side Fuel Cell (Appendix C, Records of Communication). JBA environmental staff provided photos of recent foam releases (Appendix A). Three of the five known AFFF releases were documented as having been

caused by electrical storms that activated the AFFF fire suppression system. According to 459th staff, these were complete system releases (2,000 gallons) that occurred in the summers of 2003 and 2004 due to sensor failures (Appendix C, Records of Communication). Sensors were changed out in 2004 and there have not been any sensor related releases since that time.

The 11 CES Tanks Manager provided an email from March 2001 documenting approximately 15 gallons of AFFF released to the sanitary sewer (Appendix C, Records of Communication). The 11 CES Tanks Manager also provided photos from a July 2013 AFFF release though no other additional details for this release were provided.

According to the *AFFF Spill Control Conceptual Design Report* (Parson, 2000), the trench drain in the hangar drains to the oil-water separator/interceptor on the west side of the building then into the sanitary sewer. In the event of a spill, a valve is activated on this system and switches the flow to a 500-gallon underground storage tank. However, AFFF that releases outside of the building would not be contained in the engineered drainage system and could potentially result in PFC contamination to surrounding environmental media.

3.1.15.3 Pathway and Environmental Hazard Assessment

3.1.15.3.1 Groundwater Pathway

The basewide geologic and hydrogeological settings are provided in Section 1.0. Groundwater flow in this area flows northeast based on the basewide groundwater elevation Isopleth Map (Baywest, 2015). Several of the 318 base monitoring wells associated with the ERP program are in the vicinity of this location.

JBA and most of Prince George's County obtains its PWS from the WSSC water utility. The source of the PWS is surface water from the Potomac and Patuxent Rivers. Drinking water supply wells are not located or permitted on JBA.

The nearest PWS well from the East Side Fuel Cell is located approximately 6 miles southeast of JBA. The PWS well is part of the Cheltenham Boys Village system that supplies a population of 330 residents (EDR, 2015a).

The majority of the off-base population within a 4-mile radius of the East Side Fuel Cell relies on municipal water taken from the Potomac and Patuxent Rivers. The off-base population within four miles of the location is approximately 54,000 residents ((EDR, 2015b). The closest residential area is approximately 1.7 miles southeast from the East Side Fuel Cell (EDR, 2015b).

3.1.15.3.2 Surface Water Pathway

Surface drainage originating from East Side Fuel Cell drains east and discharges to Cabin Branch. Cabin Branch joins several other streams to become the Western Branch Patuxent River. The Patuxent River is known to be used for recreational fishing by residents or nearby communities and could provide exposure pathways to humans through dermal contact and

ingestion of fish. Ingestion of surface water by aquatic or other animals is also a potential pathway for ecological receptors. The hangar is not located within any floodplains.

The nearest body of water is Base Lake, located approximately 11,000 feet southwest of the East Side Fuel Cell. Base Lake drains via channels to Piscataway Creek approximately 1,300 feet downstream of the lake. There are wetlands and officially designated wildlife preserves adjacent to the surface water migration path 15 miles downstream of the location that would be considered ecologically sensitive environments (EDR, 2015c).

There are no identified surface water intakes or downstream fisheries adjacent to the surface water migration path 15 miles downstream of the hangar (EDR, 2015c; Geo Fin, 2015).

3.1.15.3.3 Soil and Air Exposure Pathways

The East Side Fuel Cell is an active hangar located in a restricted area on the airfield. Access to the hangar is limited to authorized personnel. Only authorized military, civilian and contractor personnel work at East Side Fuel Cell. The number of workers at the East Side Fuel Cell varies daily. There are no residents at the East Side Fuel Cell. The nearest residential area is 1.7 miles southeast of the hangar. Population details of the residential areas within a 4-mile radius are discussed in Section 3.1.16.3.1.

There are no schools or daycare facilities within a 200-foot radius of the East Side Fuel Cell. The nearest school is Imagine Andrews Public Charter School, which is located approximately 2.0 miles southwest on San Antonio Boulevard (EDR, 2014b). The nearest day care facility is the JBA CDC #3 (Building 3725), located on Fetchet Avenue approximately 0.4 miles east of the East Side Fuel Cell.

3.1.16 Hangar 12 (Building 3188)

3.1.16.1 Description and Operational History

Hangar 12, Buildings 3188, is located behind the secured Pathfinder gate in a restricted area on the central portion of the eastern side of the JBA airfield and is occupied by the Navy (Figure 1.2). The hangar is bordered to the north by a driveway and a lightly vegetated area, to the east by a parking lot followed by Perimeter Road, to the west by a concrete apron, and to the south by a parking area followed by Pensacola Street (Figure 3.17). The geographic coordinates of the hangar are 38°48’44.16” N Latitude and 76°51’27.71” W Longitude.

Hangar 12 houses C-37s, C-20s, C-130s, and UC-35s. According to the Air Force Real Property record, the hangar was built in 1961 and has never been equipped with an AFFF fire suppression system. Observations and the Fire Department Chief confirmed this (Appendix C, Records of Communication). Hangar 12 has two mechanical rooms with a new HEF system being installed. Photo documentation is provided in Appendix A.

PFC contamination to the environment at Hangar 12 is not likely because the hangar has never been equipped with an AFFF fire suppression system and there have been no documented releases of AFFF.

3.1.16.2 Waste Characteristics

Not Applicable.

3.1.16.3 Pathway and Environmental Hazard Assessment

Not Applicable.

3.1.16.3.1 Groundwater Pathway

Not Applicable.

3.1.16.3.2 Surface Water Pathway

Not Applicable.

3.1.16.3.3 Soil and Air Exposure Pathways

Not Applicable.

3.1.17 Hangar 13 (Building 3158)

3.1.17.1 Description and Operational History

Hangar 13, Buildings 3158 is located behind the secured Pathfinder gate in a restricted area on the central portion of the eastern side of the JBA airfield and is occupied by the Navy (Figure 1.2). The hangar is bordered to the north by a driveway followed by Buildings 3164 and 3165, to the east by a parking lot, to the west by a concrete apron, and to the south by a lightly vegetated area followed by Bainbridge Street (Figure 3.18). The geographic coordinates of the hangar are 38°48’38.45” N Latitude and 76°51’27.72” W Longitude.

Hangar 13 houses C-37s, C-20s, C-130s, and UC-35s. According to the Air Force Real Property record, the hangar was built in 1961 and has never been equipped with an AFFF fire suppression system. Observations and the Fire Department Chief confirmed this (Appendix C, Records of Communication). The hangar mechanical room is located in the central portion of the hangar with an HEF system installed. Photo documentation is provided in Appendix A.

PFC contamination to the environment at Hangar 13 is not likely because the hangar has never been equipped with an AFFF fire suppression system and there have been no reported releases of AFFF.

3.1.17.2 Waste Characteristics

Not Applicable.

3.1.17.3 Pathway and Environmental Hazard Assessment

Not Applicable.

3.1.17.3.1 Groundwater Pathway

Not Applicable.

3.1.17.3.2 Surface Water Pathway

Not Applicable.

3.1.17.3.3 Soil and Air Exposure Pathways

Not Applicable.

3.1.18 Hangar 14 (Building 3148)

3.1.18.1 Description and Operational History

Hangar 14, Buildings 3148, is located behind the secured Pathfinder gate in a restricted area on the central portion of the eastern side of the JBA airfield and is occupied by the Navy (Figure 1.2). The hangar is bordered to the north by Hangar 13, to the east by a parking lot, to the west by the concrete apron, and to the south by Hangar 16 (Figure 3.19). The geographic coordinates of the hangar are 38°48'44.16" N Latitude and 76°51'27.71" W Longitude.

Hangar 14 houses C-37s, C-20s, C-130s, and UC-35s. According to the Air Force Real Property record, the hangar was built in 1961 and has never been equipped with an AFFF fire suppression system. Observations and the Fire Department Chief confirmed this (Appendix C, Records of Communication). Hangar 14 has three mechanical rooms with a brand new HEF system installed. Photo documentation is provided in Appendix A.

The potential for PFC contamination to the environment at Hangar 12 is not likely because the hangar has never been equipped with an AFFF fire suppression system and there have been no reported releases of AFFF.

3.1.18.2 Waste Characteristics

Not Applicable.

3.1.18.3 Pathway and Environmental Hazard Assessment

Not Applicable.

3.1.18.3.1 Groundwater Pathway

Not Applicable.

3.1.18.3.2 Surface Water Pathway

Not Applicable.

3.1.18.3.3 Soil and Air Exposure Pathways

Not Applicable.

3.1.19 Hangar 16 (Building 3119)

3.1.19.1 Description and Operational History

Hangar 16, Building 3119, is located behind the secured Pathfinder gate in a restricted area on the central portion of the eastern side of the JBA airfield and is occupied by 113th WG (Figure 1.2). Hangar 16 is bordered to the north by a lightly vegetated area and Buildings 3120 and 3121, to the east by a parking lot followed by Perimeter Road, to the west by the concrete apron, and to the south by lightly vegetated areas followed by Buildings 3108 and 3109 (Figure 3.20). The geographic coordinates of Hangar 16 are 38°48'24.25" N Latitude and 76°51'26.25" W Longitude.

According to the Air Force Real Property record, the hangar was constructed in 1955. Hangar 16 houses multiple F-16s and is currently equipped with an HEF fire suppression system, but was originally equipped with an AFFF fire suppression system (Parsons, 2000). The hangar mechanical room is located on the northeast side of the hangar and currently consists of one 500-gallon upright AST containing HEF. According to the 113th Deputy Civil Engineer, the conversion of the fire suppression system from AFFF to HEF occurred in December 2009 (Appendix C, Records of Communication). Photo documentation is provided in Appendix A.

3.1.19.2 Waste Characteristics

The hangar is currently equipped with a containment system that seals off the pathway to the sanitary sewer, located on the northeast side of the hangar. The installation of the containment system was promulgated by multiple historical releases of AFFF at JBA and is the result of the 1995 AFFF compliance plan and the 2000 AFFF spill control conceptual design (EA, 1995; Parsons, 2000).

The *AFFF Spill Control Conceptual Design Report* documented at least one AFFF release that had been caused by an electrical storm that activated the UV-IR detectors and activated the AFFF fire suppression system (Parsons, 2000). The 11 CES/WSFM escort did not identify any additional releases and there is no documented AFFF releases between 2000 and 2009 when the system was converted to HEF. There is no documentation on the quantity of AFFF released at Hangar 16.

Prior to the conversion to HEF in 2009, one 850-gallon AFFF tank fed four floor cannons. There were also four portable 30-gallon AFFF cannons. Two trench drains flowed to the oil-water separator located on the northeast corner of the hangar. According to the *AFFF Spill Control Conceptual Design Report* (Parson, 2000) the oil-water separator at Hangar 16 was

installed around 1998. Because the historic AFFF release at Hangar 16 was not documented and no date information could be located, there was no confirmation that the release was contained. As a result, there exist a potential for PFC contamination at this location.

3.1.19.3 Pathway and Environmental Hazard Assessment

A complete exposure pathway typically includes the following components:

- A source of contamination (an environmental medium contaminated at the source or a release mechanism by which chemicals are released from a source medium and transported),
- An exposure medium by which a receptor comes into contact, and
- A route of intake for the contaminant into the receptor's body at the exposure point.

If any of these elements are missing, the pathway is incomplete. Other release mechanisms resulting in exposure media for receptors may include the uptake of soil contaminants by plants and animals and the emission of soil contaminants into the air in association with dust particles.

3.1.19.3.1 Groundwater Pathway

The basewide geologic and hydrogeological settings are provided in Section 1.0. Groundwater flow in this area flows southwest based on the basewide groundwater elevation Isopleth Map (Baywest, 2015).

JBA and most of Prince George's County obtains its PWS from the WSSC water utility. The source of the PWS is surface water from the Potomac and Patuxent Rivers. Drinking water supply wells are not located or permitted on JBA.

The nearest PWS well from Hangar 16 is located approximately 4.5 miles southeast of JBA. The PWS well is part of the Cheltenham Boys Village system that supplies a population of 330 residents (EDR, 2015a).

The majority of the off-base population within a 4-mile radius of the hangar relies on municipal water taken from the Potomac and Patuxent Rivers. The off-base population within four miles is approximately 54,000 residents (EDR, 2015b). The closest residential area is approximately 2,000 feet southeast (EDR, 2015b).

3.1.19.3.2 Surface Water Pathway

Surface drainage originating from Hangar 16 drains southwest and discharges to Piscataway Creek. Piscataway Creek is known to be used for recreational fishing by residents or nearby communities and could provide exposure pathways to humans through dermal contact and ingestion of fish. Ingestion of surface water by aquatic or other animals is also a potential pathway for ecological receptors. The hangar and surrounding area are not located within any floodplains.

The nearest body of water is Base Lake, located approximately 7,800 feet southwest of the hangar. Base Lake drains via channels to Piscataway Creek approximately 1,300 feet downstream of the lake. There are wetlands and officially designated wildlife preserves adjacent to the surface water migration path 15 miles downstream of the hangar that would be considered ecologically sensitive environments (EDR, 2015c).

There are no identified surface water intakes or downstream fisheries adjacent to the surface water migration path 15 miles downstream (EDR, 2015c; Geo Fin, 2015).

Hangar 16 is located approximately 0.5 mile northwest of the designated sensitive species project area, discussed in Section 1.3.4.

3.1.19.3.3 Soil and Air Exposure Pathways

Hangar 16 is an active hangar located in a restricted area on the airfield. Access is limited to authorized military, civilian and contractor personnel who are on the premises daily performing work in Hangar 16. The number of workers at Hangar 16 varies. There are no residents and the nearest residential area is 2,000 feet southeast. Population details of the residential areas within a 4-mile radius are discussed in the Section 3.1.18.3.1.

There are no schools or daycare facilities within a 200-foot radius of the hangar. The nearest school is Francis T. Evans Elementary School, located adjacent to the Virginia Gate approximately 11,000 feet southwest. The nearest day care facility is the JBA CDC #3 (Building 3725), located on Fetchet Avenue approximately 4,700 feet northeast of Hangar 16.

Hangar 16 is located approximately 0.5 mile northwest of the designated sensitive species project area, discussed in Section 1.3.4 (EDR, 2014c).

3.1.20 Building 3002 (113th WG Fuel Hangar)

3.1.20.1 Description and Operational History

Building 3002 is located behind the secured Pathfinder gate in a restricted area on the central portion of the eastern side of the JBA airfield and is occupied by 113th WG (Figure 1.1). The hangar is bordered to the north by paved open lot, to the east by an unnamed road, to the west by an operational area, and to the south by a parking/storage area (Figure 3.21). The geographic coordinates of Building 3002 are 38°49’12.14” N Latitude and 76°51’29.56” W Longitude.

This building is equipped to perform repairs and maintenance on aircraft fuel systems and is equipped with an AFFF fire suppression system. The hangar mechanical room is located on the south side of the hangar and consists of one 500-gallon AST labeled as 3% AFFF. Access to the interior of the hangar was not permitted. A well maintained and clean secondary containment surrounds the AST.

According to the 11 CES/WFSM escort and the *AFFF Spill Control Conceptual Design Report* there have been no documented AFFF releases at Building 3002 (Parson, 2000). The Air Force Real Property record indicates that this building was constructed in 1982 and equipped with an AFFF fire suppression system. The AFFF fire suppression system includes overhead sprinklers and cannons to disperse the foam. Trench drains flow to an oil-water separator located in the southwest corner of the hangar (Parsons, 2000; Appendix C, Records of Communication). PFC contamination to the environment at Building 3002 is not likely because there have been no reported or documented AFFF releases.

Photo documentation is provided in Appendix A.

3.1.20.2 Waste Characteristics

Not Applicable.

3.1.20.3 Pathway and Environmental Hazard Assessment

Not Applicable.

3.1.20.3.1 Groundwater Pathway

Not Applicable.

3.1.20.3.2 Surface Water Pathway

Not Applicable.

3.1.20.3.3 Soil and Air Exposure Pathways

Not Applicable.

3.1.21 Building 2487 (Maryland State Police)

3.1.21.1 Description and Operational History

The Maryland State Police Hangar, Building 2487, is located behind the secured Pathfinder gate in a restricted area on the central portion of the eastern side of the JBA airfield and is occupied by Maryland State Police (Figure 1.2). Building 2487 is bordered to the north by a restricted airfield ramp, to the east by a parking lot, to the west by the JBA airfield, and to the south by a lightly vegetated area and Building 2488 (Figure 3.22). The geographic coordinates of Building 2487 are 38°48’9.92” N Latitude and 76°51’35.43” W Longitude.

This hangar houses the Maryland State Police helicopter and is equipped with an AFFF fire suppression system that feeds one floor cannon. The hangar mechanical room is located in the interior on the southeast side of the hangar and currently consists of one 200-gallon upright AST containing AFFF labeled as Ansul. The floor drains flow to the oil-water separator located east of the hangar.

According to the 11 CES/WFSM escort, the Maryland State Police Hangar fire suppression is not tracked or maintained by the Air Force given that the hangar is State property. There is no record of AFFF spills at this location (Appendix C, Records of Communication). There is also no record of Building 2487 on the Air Force Real Property record because the facility is owned by the State of Maryland.

PFC contamination to the environment at Building 2487 is not likely because there have been no reported or documented AFFF releases. Photo documentation is provided in Appendix A.

3.1.21.2 Waste Characteristics

Not Applicable.

3.1.21.3 Pathway and Environmental Hazard Assessment

Not Applicable.

3.1.21.3.1 Groundwater Pathway

Not Applicable.

3.1.21.3.2 Surface Water Pathway

Not Applicable.

3.1.21.3.3 Soil and Air Exposure Pathways

Not Applicable.

3.1.22 Air Sovereignty Alert Facility (Building 2489)

3.1.22.1 Description and Operational History

The ASA facility, Building 2489, is located behind the secured Pathfinder gate in a highly restricted area on the central portion of the eastern side of the JBA airfield and is occupied by 113th WG (Figure 1.2). This facility was constructed in 2008 on top of the former FT-04. Building 2489 is bordered to the north by lightly vegetated areas followed by a parking lot and an unnamed road, to the east by woodlands, to the west by lightly vegetated areas followed by the JBA airfield, and to the south by a restricted airfield ramp followed by the current FTA (Figure 3.23). The geographic coordinates of the ASA Facility are 38°47’57.67” N Latitude and 76°51’32.93” W Longitude.

Building 2489 was constructed in 2008 and is equipped with an HEF fire suppression system. The hangar mechanical room is located in the interior of the hangar and consists of one 300-gallon upright AST containing HEF. According to the 11 CES/WFSM escort, Building 2489 never used AFFF in the fire suppression system (Appendix C, Records of Communication).

As indicated above in Section 2.3, Building 2489 is located at Site FT-04. The potential exists for PFC contamination to the environment at Building 2489 as a result of Site FT-04. The pathway and environmental hazard assessment for Building 2489 would be identical to Site FT-04 and is provided in Section 2.3. Photo documentation is provided in Appendix A.

3.1.22.2 Waste Characteristics

Not Applicable.

3.1.22.3 Pathway and Environmental Hazard Assessment

Not Applicable.

3.1.22.3.1 Groundwater Pathway

Not Applicable.

3.1.22.3.2 Surface Water Pathway

Not Applicable.

3.1.22.3.3 Soil and Air Exposure Pathways

Not Applicable.

3.2 FIRE STATIONS

3.2.1 Fire Station #1

3.2.1.1 Description and Operational History

Fire Station #1, Building 1287, is an active fire station that is located on the central portion of JBA west of the airfield (Figure 1.2). Fire Station #1 has operated since 1976 (Appendix C, Records of Communication). The Fire Station is bordered to the north by Dakota Avenue, to the east by a large asphalt lot followed by the airfield, to the south by Building 1285, and to the west by Cabiglas Street (Figure 3.24). The geographic coordinates of Fire Station #1 are 38°48’15.11” N Latitude and 76°52’41.93” W Longitude.

3.2.1.2 Waste Characteristics

Fire Station #1 has trench drains that tie into an exterior containment tank. According to the Assistant Fire Chief, fire trucks were historically filled in front of fire stations. In some instances, the fire trucks were being overfilled and AFFF was released to the ground surface. Currently, fire trucks are filled using 5-gallon buckets and are only refilled in Fire Stations #1 (Appendix C, Records of Communication).

Occasional training, with an undefined duration and frequency, occurred in front of the fire station using AFFF. In December 2012, a crash truck leaked AFFF in front of the station,

though most was contained in the containment drain. The Assistant Fire Chief estimated the quantity of AFFF released to the environment at Fire Station #1 to be 100 gallons and indicated that some of it migrated to the sewers and to the low spot/depression east of Hangar 19 illustrated in Figure 3.24 (Appendix C, Records of Communication).

Table 3.1 summarizes the equipment and quantity of AFFF that exists between Fire Station #1, Fire Station #2, and Building 3066 (Base Supply). The fire trucks and trailer listed on Table 3.1 may be stationed at Fire Station #1 and/or Fire Station #2 at any given time.

Table 3.1
Fire Department AFFF Inventory
Joint Base Andrews, Maryland

Trucks and Storage	AFFF capacity (gallons)	AFFF Total (gallons)
P23 trucks (4)	500	2,000
P19 truck (1)	210	210
Rapid Intervention Vehicle (RIV) –(1)	50	50
RIV (1)	65	65
Trailer (1)	1,000	1,000
143 buckets of AFFF @ Fire Station #1	5	715
498 buckets of AFFF @ Building 3066	5	2,490
	Total	6,530

The Assistant Fire Chief indicated there is not enough AFFF maintained at Fire Station #1 to reload fire trucks due to a shortage in storage space. Fire Station #1 maintains a supply of 143 5-gallon buckets of AFFF. A bench stock supply of AFFF is stored at Base Supply (Building 3066) located on the east side of JBA (Appendix C, Records of Communication). The potential exists for PFC contamination to the environment at Fire Station #1 because of the documented AFFF releases.

3.2.1.3 Pathway and Environmental Hazard Assessment

A complete exposure pathway typically includes the following components:

- A source of contamination (an environmental medium contaminated at the source or a release mechanism by which chemicals are released from a source medium and transported),
- An exposure medium by which a receptor comes into contact, and
- A route of intake for the contaminant into the receptor's body at the exposure point.

If any of these elements are missing, the pathway is incomplete. Other release mechanisms resulting in exposure media for receptors may include the uptake of soil contaminants by plants and animals and the emission of soil contaminants into the air in association with dust particles.

3.2.1.3.1 Groundwater Pathway

The basewide geologic and hydrogeological settings are provided in Section 1.0. Groundwater flow in this area flows southeast based on the basewide groundwater elevation Isopleth Map (Baywest, 2015).

JBA and most of Prince George's County obtains its PWS from the WSSC water utility. The source of the PWS is surface water from the Potomac and Patuxent Rivers. Drinking water supply wells are not located or permitted on JBA.

The nearest PWS well from Fire Station #1 is located approximately 5.0 miles west of JBA. The PWS well is part of the Oxon Hill Recreation Club system that supplies a population of 50 residents (EDR, 2015a).

The majority of the off-base population within a 4-mile radius relies on municipal water taken from the Potomac and Patuxent Rivers. The off-base population within four miles of the building is approximately 64,000 residents (EDR, 2015b). The closest residential area is located approximately 1,600 feet west with a population of 2,973 residents (EDR, 2015b).

3.2.1.3.2 Surface Water Pathway

Surface drainage originating from Fire Station #1 drains southeast and discharges to Piscataway Creek. Piscataway Creek is known to be used for recreational fishing by residents or nearby communities and could provide exposure pathways to humans through dermal contact and ingestion of fish. Ingestion of surface water by aquatic or other animals is also a potential pathway for ecological receptors. The building and surrounding area are not located within any floodplains.

The nearest body of water is Base Lake, located approximately 5,500 feet south of the building. Base Lake drains via channels to Piscataway Creek approximately 1,300 feet downstream of the lake. There are wetlands and officially designated wildlife preserves adjacent to the surface water migration path 15 miles downstream of Fire Station #1 that would be considered ecologically sensitive environments (EDR, 2015c).

There are no identified surface water intakes or downstream fisheries adjacent to the surface water migration path 15 miles downstream (EDR, 2015c; Geo Fin, 2015).

Fire Station #1 is located approximately 1 mile west of the designated sensitive species project area, discussed in Section 1.3.4.

3.2.1.3.3 Soil and Air Exposure Pathways

Fire Station #1 is an active fire station, Building 1287, that is located in a secured area of the base. Access to the secured area is limited to authorized military, civilian and contractor personnel who are performing work in these areas. There are multiple workers at the station, though the workers are limited to firefighting personnel. According to the Assistant Fire

Chief, there are a total of 73 fire department personnel (Appendix C, Records of Communication). There are no residents with the nearest residential area being 1,600 feet west of Fire Station #1. Population details of the residential areas within a 4-mile radius are discussed in Section 3.2.1.3.1. The potential for soil exposure to burrowing animals exists.

There are no schools or daycare facilities within a 200-foot radius of Fire Station #1. The nearest school is Imagine Andrews Public Charter School, which is located approximately 0.7 miles southwest on San Antonio Boulevard (EDR, 2014b). The nearest day care facility is the JBA CDC #2 (Building 4783), located on San Antonio Blvd approximately 0.5 miles southwest.

3.2.2 Fire Station #2

3.2.2.1 Description and Operational History

Fire Station #2, Building 3464, is an active fire station located on the east side of JBA, north of the intersection of Perimeter Road and North Carolina Avenue (Figure 1.1). Fire Station #2 has operated since 1994. The Fire Station is bordered to the north by a lightly vegetated open lot, to the east by a parking lot and driveway followed by Perimeter Road, to the south by lightly vegetated areas and a driveway followed by Carolina Avenue, and to the west by an empty grassy field (Figure 3.25). The geographic coordinates of Fire Station #2 are 38°48’55.49” N Latitude and 76°51’25.65” W Longitude.

According to the Assistant Fire Chief, fire trucks are filled with AFFF at Fire Station # 1 on the west side of the base. At any given time, the fire trucks and trailer listed on Table 3.1 can be stationed at Fire Station #1 or Fire Station #2. The Assistant Fire Chief did not know of any AFFF released to the environment at Fire Station #2 (Appendix C, Records of Communication).

PFC contamination to the environment at the Fire Station #2 is not likely because there were no documented AFFF releases. Photo documentation is provided in Appendix A.

3.2.2.2 Waste Characteristics

Not Applicable.

3.2.2.3 Pathway and Environmental Hazard Assessment

Not Applicable.

3.2.2.3.1 Groundwater Pathway

Not Applicable.

3.2.2.3.2 Surface Water Pathway

Not Applicable.

3.2.2.3.3 Soil and Air Exposure Pathways

Not Applicable.

3.3 EMERGENCY RESPONSE

According to information provided by the base historian and anecdotal information provided by the Assistant Fire Chief, and other firefighters, there are no known on-base emergency response efforts that discharged AFFF (Appendix C, Records of Communication).

3.4 OTHER SPILLS AND RELEASES

3.4.1 Building 3066 (Base Supply)

3.4.1.1 Description and Operational History

Building 3066, base supply, is located on the eastern portion of JBA (Figure 1.2). The building is located off of Perimeter Road (Figure 3.26). The building is bordered to the north by a parking lot and a drive way followed by Watson Drive, to the east by wooded areas, to the south by a parking area and Buildings 3068, 3069, and 3070, and to the west by a parking lot. The geographic coordinates of Building 3066 are 38°48'20.13" N Latitude and 76°51'19.33" W Longitude. Building 3066 is the Base Supply Building that maintains an inventory of 498 five-gallon drums of AFFF (Table 3.1 [Appendix C, Records of Communication]).

PFC contamination to the environment at Building 3066 is not likely because there have been no documented spills of AFFF (Appendix C, Records of Communication). Photo documentation is provided in Appendix A.

3.4.1.2 Waste Characteristics

Not Applicable.

3.4.1.3 Pathway and Environmental Hazard Assessment

Not Applicable.

3.4.1.3.1 Groundwater Pathway

Not Applicable.

3.4.1.3.2 Surface Water Pathway

Not Applicable.

3.4.1.3.3 Soil and Air Exposure Pathways

Not Applicable.

3.4.2 Building 3444 (Warehouse)

3.4.2.1 Description and Operational History

Building 3444 is located in the northeast portion of JBA (Figure 1.2). The building is located within the Civil Engineering Compound Yard at the intersection of Pennsylvania Avenue and Carolina Avenue (Figure 3.27). The building is bordered to the north by an open storage area, to the east and west by parking/storage areas, and to the south by Building 3448. During the course of the PA visit, the 11 CES/WFSM escort noted that this building contains AFFF. Building 3444 is a Civil Engineering storage warehouse. This building contained a 275-gallon AFFF tote and cannon marked "5/2004, Buckeye AFFF." There are also six 55-gallon drums of HEF found within this building. The geographic coordinates of Building 3444 are 38°48'51.44" N Latitude and 76°51'18.48" W Longitude.

PFC contamination to the environment at Building 3444 is not likely because there have been no documented spills of AFFF (Appendix C, Records of Communication). Photo documentation is provided in Appendix A.

3.4.2.2 Waste Characteristics

Not Applicable.

3.4.2.3 Pathway and Environmental Hazard Assessment

Not Applicable.

3.4.2.3.1 Groundwater Pathway

Not Applicable.

3.4.2.3.2 Surface Water Pathway

Not Applicable.

3.4.2.3.3 Soil and Air Exposure Pathways

3.4.3 Former Hare Berry Farms

3.4.3.1 Description and Operational History

The Former Hare Berry Farm was a farm used to grow strawberry, raspberry, and blackberry crops. Hare Berry Farm is located south of JBA, adjacent to the security fence, but within the installation boundary (Figure 1.1). The area is bordered to the north and west by wooded areas, to the south by a residential area, and to the west by the JBA golf course. The geographic coordinates of Hare Berry Farm are 38°47'14.27" N Latitude and 76°51'40.24" W Longitude.

3.4.3.2 Waste Characteristics

In May 1992, during the test of an aircraft fire suppression system, approximately 500 gallons of AFFF entered into Piscataway Creek and was used for irrigation of the crops at Hare Berry Farms (Air Force, 1994). Following the incident, the property owner requested that the Air Force evaluate whether the crops were safe for human consumption. The Air Force sampled the crops in August 1992 and determined the crop was fit for consumption in accordance with the Food and Drug Administration standards. In March 1993 the Prince George's County Health Department reviewed studies and determined Piscataway Creek should not be used for crop irrigation until further studies were completed.

In 1993, an assessment was prepared to evaluate risk associated with the potential effects of contaminants from compounds such as AFFF, deicing fluids, petroleum residues, solvents, and pesticides that enter Piscataway Creek from JBA storm water runoff. The concern was the use of the stream to irrigate crops at Hare Berry Farms. The assessment concluded that the stream does not pose a threat to human health or the environment (Air Force, 1994). The Air Force purchased Hare Berry Farms following the 1993 assessment.

The potential exists for PFCs being released to the environment at Hare Berry Farm based on the release of AFFF through irrigation and its geographic location downgradient of JBA (Figure 3.28).

Details on historical investigations conducted at the Former Hare Berry Farms are provided in the Environmental Assessment (Air Force, 1994).

3.4.3.3 Pathway and Environmental Hazard Assessment

A complete exposure pathway typically includes the following components:

- A source of contamination (an environmental medium contaminated at the source or a release mechanism by which chemicals are released from a source medium and transported),
- An exposure medium by which a receptor comes into contact, and
- A route of intake for the contaminant into the receptor's body at the exposure point.

If any of these elements are missing, the pathway is incomplete. Other release mechanisms resulting in exposure media for receptors may include the uptake of soil contaminants by plants and animals and the emission of soil contaminants into the air in association with dust particles.

3.4.3.3.1 Groundwater Pathway

The basewide geologic and hydrogeological settings are provided in Section 1.0. It is assumed that groundwater flow in this area is consistent with the basewide groundwater flow within this area. Based on the basewide Isopleth Map, groundwater flow in this area is to the south (Baywest, 2015).

JBA and most of Prince George's County obtains its PWS from the WSSC water utility. The source of the PWS is surface water from the Potomac and Patuxent Rivers. Drinking water supply wells are not located or permitted on JBA.

The nearest PWS well from Hare Berry Farms is located approximately 5 miles southeast of JBA. The PWS well is part of the Cheltenham Boys Village system that supplies a population of 330 residents (EDR, 2015a).

The majority of the off-base population within a 4-mile radius of Hare Berry Farms relies on municipal water taken from the Potomac and Patuxent Rivers. The off-base population within four miles is approximately 54,000 residents (EDR, 2015b). The closest residential area is approximately 1,500 feet southeast with a population of 3,995 residents (EDR, 2015b).

3.4.3.3.2 Surface Water Pathway

A significant portion of JBA's surface water drains to the southern portion of JBA to Piscataway Creek. Piscataway Creek was used to irrigate the farm and is also known to be used for recreational fishing by residents or nearby communities and could provide exposure pathways to humans through dermal contact and ingestion of fish. Ingestion of surface water by aquatic or other animals is also a potential pathway for ecological receptors. Hare Berry Farms is not located within any floodplains.

The nearest body of water is Base Lake, located approximately 2,500 feet west and hydraulically up gradient of Hare Berry Farms. Base Lake drains via channels to Piscataway Creek approximately 1,300 feet downstream of the lake. There are wetlands and officially designated wildlife preserves adjacent to the surface water migration path 15 miles downstream of Hare Berry Farms that would be considered ecologically sensitive environments (EDR, 2015c).

There are no identified surface water intakes or downstream fisheries adjacent to the surface water migration path 15 miles downstream (EDR, 2015c; Geo Fin, 2015).

3.4.3.3.3 Soil and Air Exposure Pathways

Hare Berry Farms was purchased by the Air Force and remains green space. The farm is not secured and open to the public. The nearest residential area is 1,500 feet southeast. Population details of the residential areas within a 4-mile radius are discussed in Section 3.4.2.3.1. The well vegetated area would preclude any fugitive dust emissions and potential exposures. The potential exists for soil exposure to burrowing animals.

There are no schools or daycare facilities within a 200-foot radius of Hare Berry Farm. The nearest school is Francis T. Evans Elementary School, which is located approximately 1.2 miles west of Hare Berry Farms adjacent to the Virginia Gate (EDR, 2014b). The nearest day care facility is the JBA CDC #1 (Building 4575), located on Virginia Avenue approximately 1.1 miles west (EDR, 2014b).

3.4.4 LF-05

3.4.4.1 Description and Operational History

LF-05 is an active ERP site located on the southeast portion of JBA (Figure 1.1). It is surrounded by forest to the north, off-base property to the east, former reclaimed sand and gravel operations to the south, and the western portion of the JBA landfill to the west (Figure 3.29). LF-05 received various waste streams from throughout the base between the 1960s and the 1980s (Air Force, 2013). Between the 1960s through the 1970s, a 2- to 3-acre pit located in the southeast portion of LF-05 was used for disposal of liquid waste, dilute process waste and waste oils (Earth Tech, 2006). Generally one 2,000-gallon tank truck was delivered to the property each week. The Environmental Chief noted that there were fires at LF-05. LF-05 was identified as a potential area of interest due to the fires that occurred at this location. LF-05 was evaluated as part of this assessment. The Assistant Fire Chief did not recall the use of AFFF to extinguish fires in this pit (Appendix C, Records of Communication).

According to the LF-05 fact sheet, the groundwater Interim Remedial Action Completion Report and the Soil Interim Remedial Action Completion Report were completed in 2012. In 2011 a Performance Based Contract was awarded to continue Remedial Action Operations at LF-05 (Air Force, 2013).

PFC contamination to the environment at LF-05 is not likely based on the lack of evidence of AFFF use and the use of the property as a landfill. Details on historical investigations conducted at LF-05 are provided in the Remedial Investigation (Air Force, 2006). Photo documentation is provided in Appendix A.

3.4.4.2 Waste Characteristics

Not Applicable.

3.4.4.3 Pathway and Environmental Hazard Assessment

Not Applicable.

3.4.4.3.1 Groundwater Pathway

Not Applicable.

3.4.4.3.2 Surface Water Pathway

Not Applicable.

3.4.4.3.3 Soil and Air Exposure Pathways

Not Applicable.

3.4.5 Brandywine DRMO Yard

3.4.5.1 Description and Operational History

The Brandywine DRMO Yard is a geographically isolated inactive facility administratively managed by JBA (Figure 1.1). The 8-acre facility is approximately eight miles south-southeast of JBA in the town of Brandywine, Maryland (Figure 3.30). The Brandywine DRMO Yard is bordered to the north, east, and west by forest and to the south by an active CSX Rail Road. The area consists of level, partially vegetated, fenced property that has a former groundwater pump and treatment system located on the property. The geographic coordinates are 38°42'0.10" N Latitude and 76°50'43.32" W Longitude.

While in operation from 1943 to 1987, the Brandywine DRMO Yard was used for temporary storage of scrap materials and hazardous waste generated from various Department of Defense facilities in the region. The EPA has requested that JBA investigate potential releases of PFOS and PFOA at the Brandywine DRMO Yard (Air Force, 2015).

According to the SS-01 fact sheet, the Interim Record of Decision was completed in 2006, followed by the remedial design (2008), groundwater pump and treat system operations (2008) and multiple phases of bioremediation activities to actively treat a 20+ acre groundwater plume. In 2012 a Performance Based Contract was awarded to attain a final Record of Decision and remedy at Brandywine DRMO (Air Force, 2013).

In 1987, a fire at DRMO Yard burned a warehouse to the ground and resulted in the cessation of operations at this facility. According to the 1995 removal report, there were burn pits at the DRMO Yard (Halliburton NUS Corp, 1995). The Assistant Fire Chief is unaware of the use of AFFF at this location (Appendix C, Records of Communication). PFC contamination to the environment at Brandywine DRMO is not likely because there are no documented AFFF releases. Details on historical investigations conducted at the Brandywine DRMO Yard are provided in the *Interim Record of Decision, Site SS-01* (Air Force, 2006).

3.4.5.2 Waste Characteristics

Not Applicable.

3.4.5.3 Pathway and Environmental Hazard Assessment

Not Applicable.

3.4.5.3.1 Groundwater Pathway

Not Applicable.

3.4.5.3.2 Surface Water Pathway

Not Applicable.

3.4.5.3.3 Soil and Air Exposure Pathways

Not Applicable.

3.4.6 Building 1539 (Communications)

3.4.6.1 Description and Operational History

Building 1539 is a communications building located at the intersection of D Street and Alabama Avenue on the west side of JBA (Figure 3.31). The building is bordered to the north by lightly vegetated areas and walkways followed by D Street, to the east by a parking lot, to the south by a driveway/parking area, and to the west by a driveway followed by Alabama Avenue. The geographic coordinates are 38°48'44.84" N Latitude and 76°53'17.24" W Longitude.

This building is listed on the Air Force Real Property record as having an AFFF fire suppression system. This is a secure building that houses communication equipment. The 11 CES/WFSM escort indicated that this building is not equipped with an AFFF fire suppression system (Appendix C, Records of Communication). A visit occurred at this location and it was determined that the fire suppression system is charged with HFC-227, a fire extinguishing agent. There is no AFFF at this location. PFC contamination to the environment at Building 1539 is not likely because there have been no documented AFFF releases. Photo documentation is provided in Appendix A.

3.4.6.2 Waste Characteristics

Not Applicable.

3.4.6.3 Pathway and Environmental Hazard Assessment

Not Applicable.

3.4.6.3.1 Groundwater Pathway

Not Applicable.

3.4.6.3.2 Surface Water Pathway

Not Applicable.

3.4.6.3.3 Soil and Air Exposure Pathways

Not Applicable.

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FIGURES

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Figure 3.1
West Side Fuel Cell
(Building 1915)
Joint Base Andrews
Prince George's County, MD

Legend

- Well
- 1915 — Building Number
- Inferred Location Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(3-01)WestSideFuelCell.mxd
5/12/2015 ARW
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

Figure 3.2
Hangar 1
(Building 1914)
Joint Base Andrews
Prince George's County, MD

Legend

1914 Building Number

Inferred Location Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(3-02)Hangar01.mxd
5/12/2015 ARW
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

Figure 3.3
Hangar 2
(Building 1794)
Joint Base Andrews
Prince George's County, MD

Legend

1794 Building Number

Inferred Location Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(3-03)Hangar02.mxd
5/12/2015 ARW
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

Figure 3.4
Hangar 3
(Building 1754)
Joint Base Andrews
Prince George's County, MD

Legend

1754 Building Number

Inferred Location Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(3-04)Hangar03.mxd
5/12/2015 ARW
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

Figure 3.5
Hangar 4
(Building 1734)
Joint Base Andrews
Prince George's County, MD

Legend

1734 Building Number

Inferred Location Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(3-05)Hangar04.mxd
5/12/2015 ARW
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

Figure 3.6
Hangar 5
(Building 1714)
Joint Base Andrews
Prince George's County, MD

Legend

- Well
- 1714 — Building Number
- Inferred Location Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(3-06)Hangar05.mxd
5/12/2015 ARW
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

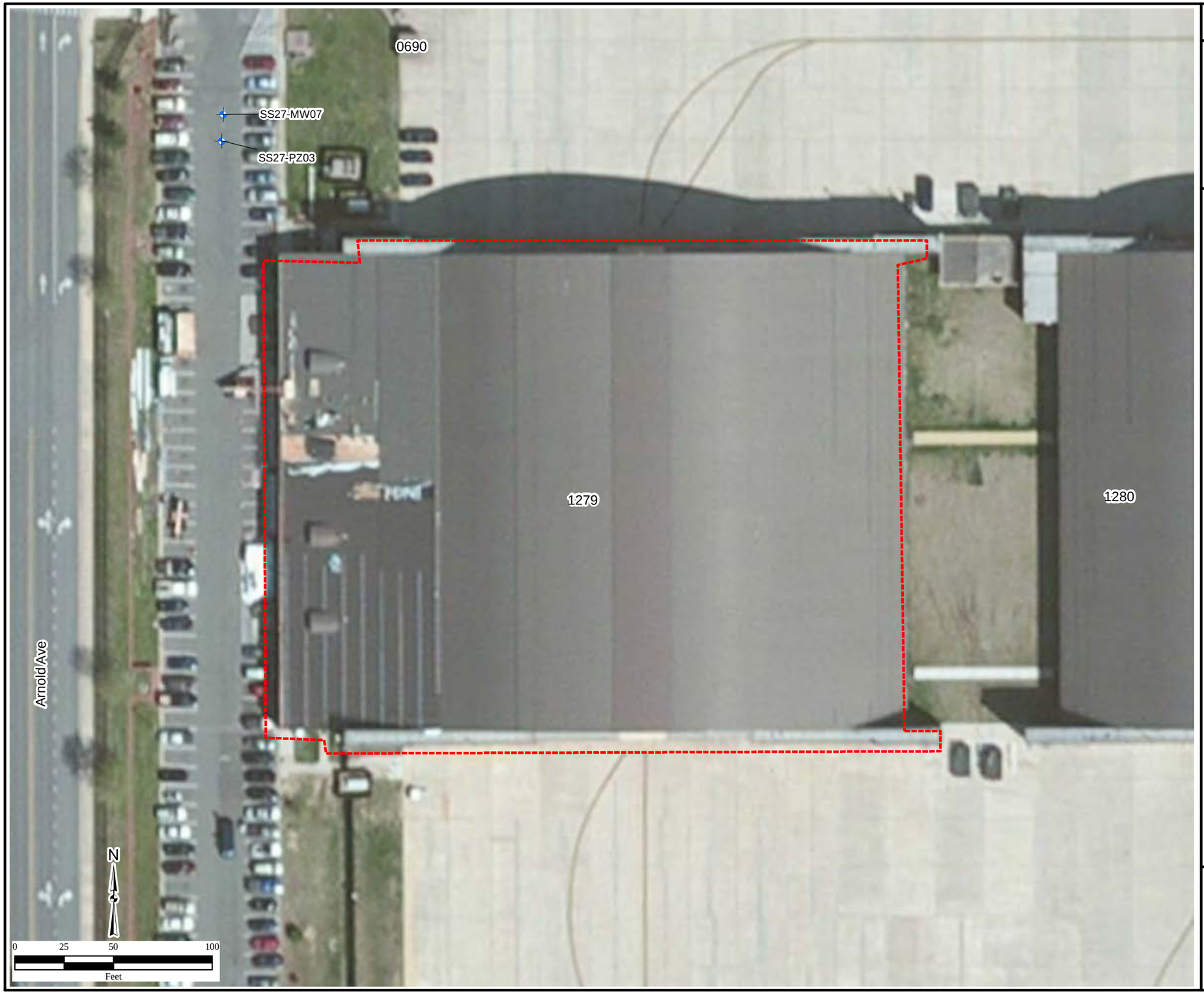


Figure 3.7
Hangar 6
(Building 1279)
Joint Base Andrews
Prince George's County, MD

Legend

- Well
- 1279 — Building Number
- Inferred Location Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(3-07)Hangar06.mxd
5/12/2015 ARW
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

Figure 3.8
Hangar 7
(Building 1280)
Joint Base Andrews
Prince George's County, MD

Legend

1280 Building Number

Inferred Location Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(3-08)Hangar07.mxd
5/12/2015 ARW
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

Figure 3.9
Hangar 8
(Building 1225)
Joint Base Andrews
Prince George's County, MD

Legend

1225 Building Number

Inferred Location Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(3-09)Hangar08.mxd
5/12/2015 ARW
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

Figure 3.10
Hangar 9
(Building 1228)
Joint Base Andrews
Prince George's County, MD

Legend

1228 Building Number

Inferred Location Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(3-10)Hangar09.mxd
5/12/2015 ARW
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

Figure 3.11
Hangar 18
(Building 1288)
Joint Base Andrews
Prince George's County, MD

Legend

- Well
- 1288 — Building Number
- Inferred Location Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(3-11)Hangar18.mxd
5/12/2015 ARW
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

Figure 3.12
Hangar 19
(Building 5016)
Joint Base Andrews
Prince George's County, MD

Legend

- Well
- 5016 — Building Number
- Inferred Location Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(3-12)Hangar19.mxd
5/12/2015 ARW
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

Figure 3.13
Hangar 20
(Building 5032)
Joint Base Andrews
Prince George's County, MD

Legend

5032 Building Number

Inferred Location Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(3-13)Hangar20.mxd
5/12/2015 ARW
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

Figure 3.14
Hangar 10
(Building 3640)
Joint Base Andrews
Prince George's County, MD

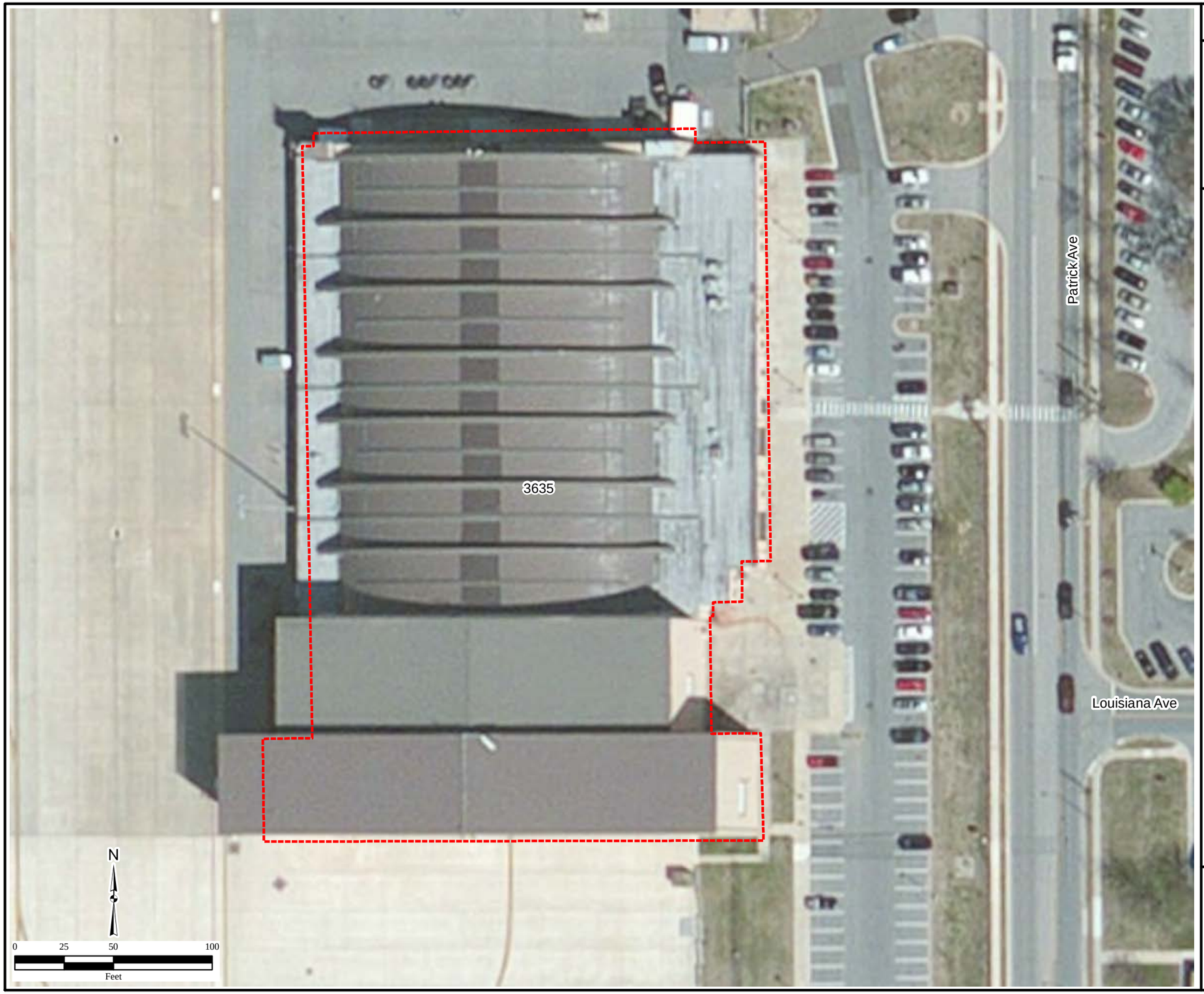
Legend

3640	Building Number
	Inferred Location Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(3-14)Hangar10.mxd
5/12/2015 ARW
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

Figure 3.15
Hangar 11
(Building 3635)
Joint Base Andrews
Prince George's County, MD



Legend

3635 Building Number

Inferred Location Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(3-15)Hangar11.mxd
5/12/2015 ARW
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

Figure 3.16
East Side Fuel Cell
(Building 3629)
Joint Base Andrews
Prince George's County, MD

Legend

3629 Building Number

Inferred Location Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(3-16)EastSideFuelCell.mxd
5/12/2015 ARW
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

Figure 3.17
Hangar 12
(Building 3188)
Joint Base Andrews
Prince George's County, MD

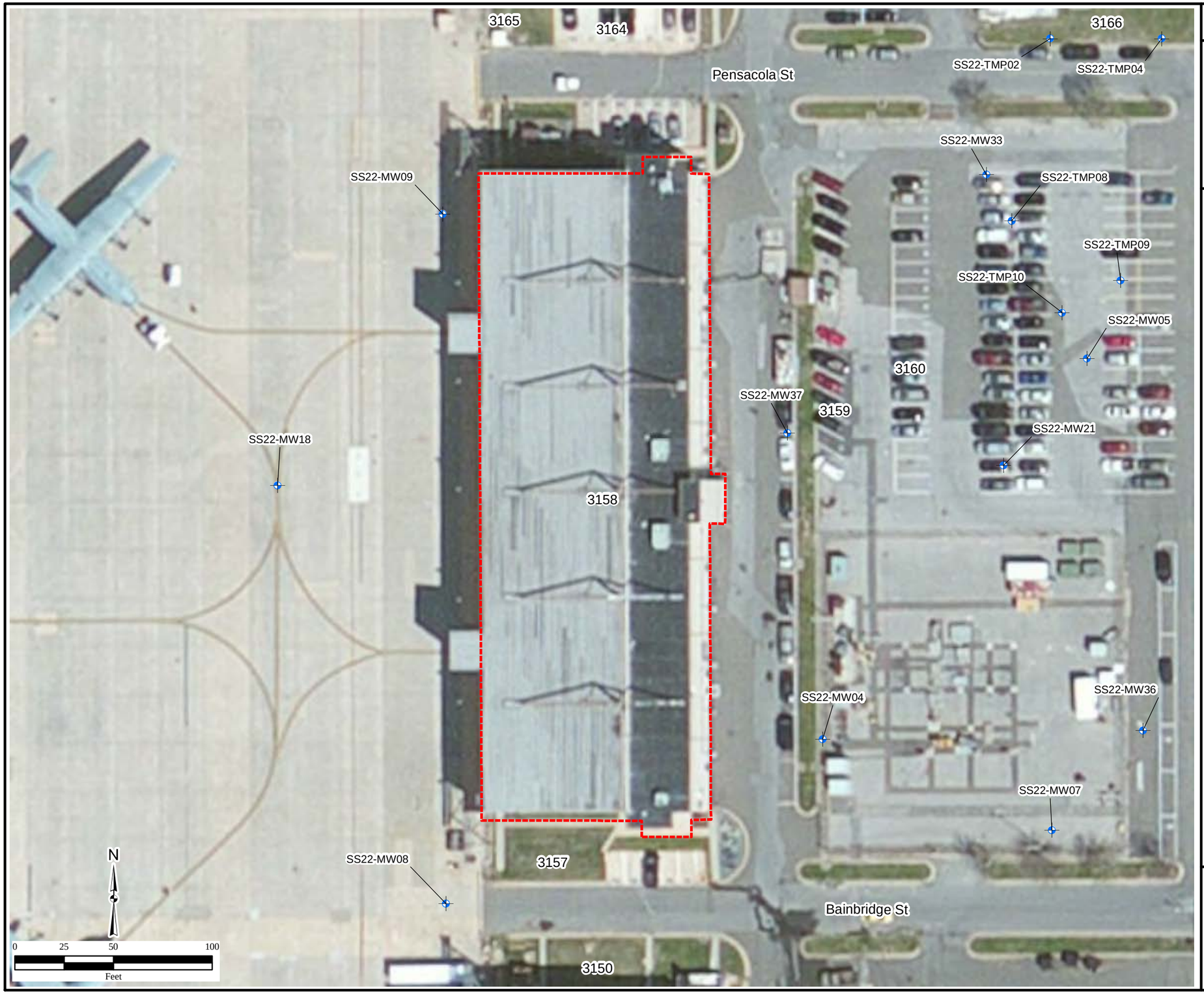
Legend

- Well
- 3188 — Building Number
- Inferred Location Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(3-17)Hangar12.mxd
5/12/2015 ARW
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

Figure 3.18
Hangar 13
(Building 3158)
Joint Base Andrews
Prince George's County, MD



Legend

- Well
- 3158 — Building Number
- Inferred Location Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(3-18)Hangar13.mxd
5/12/2015 ARW
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

Figure 3.19
Hangar 14
(Building 3148)
Joint Base Andrews
Prince George's County, MD

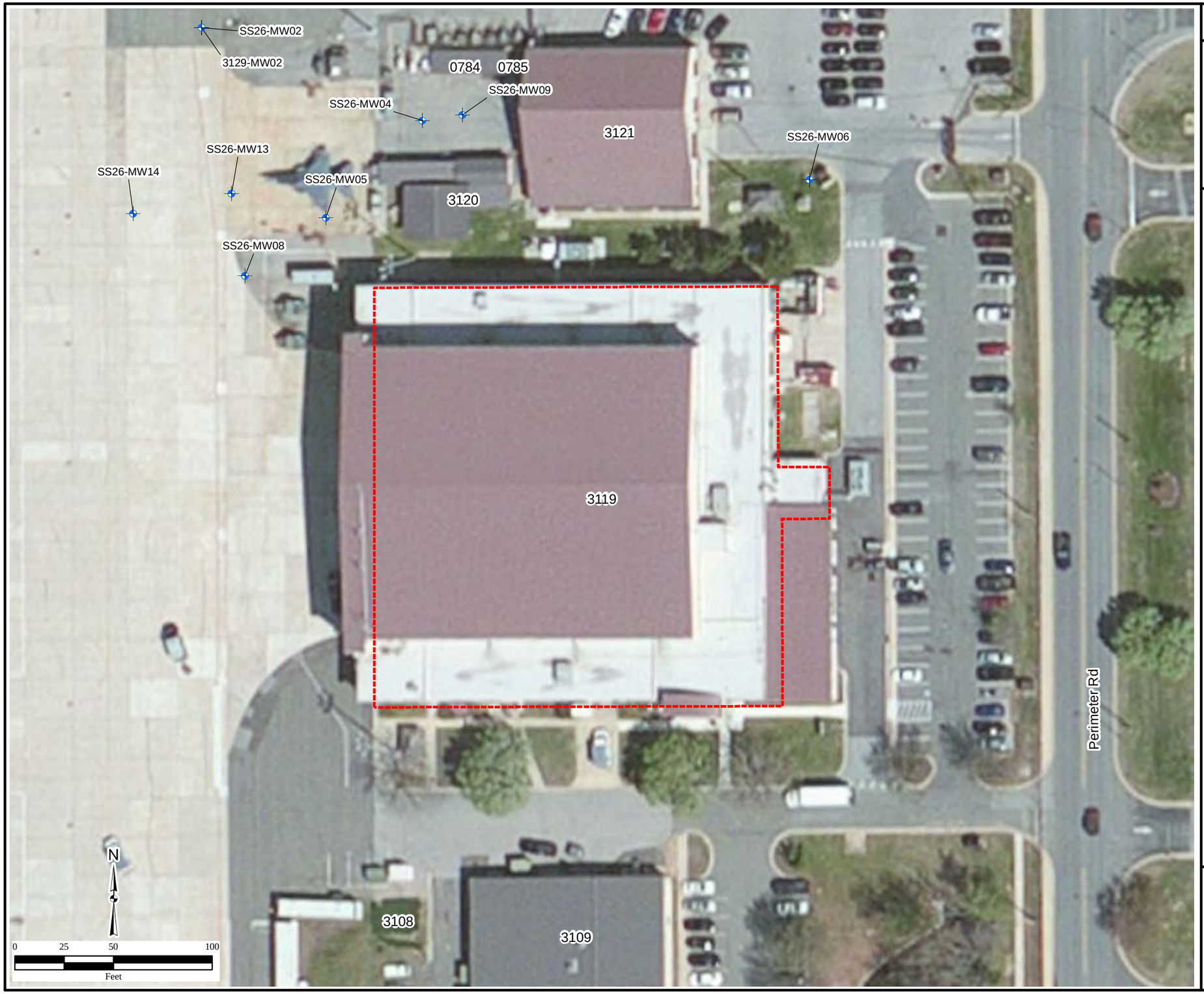
Legend

- Well
- 3148 — Building Number
- Inferred Location Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(3-19)Hangar14.mxd
5/12/2015 ARW
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

Figure 3.20
Hangar 16
(Building 3119)
Joint Base Andrews
Prince George's County, MD



Legend

- Well
- 3119 — Building Number
- Inferred Location Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(3-20)Hangar16.mxd
5/12/2015 ARW
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

Figure 3.21
Building 3002
(113th WG Fuel Hangar)
Joint Base Andrews
Prince George's County, MD

Legend

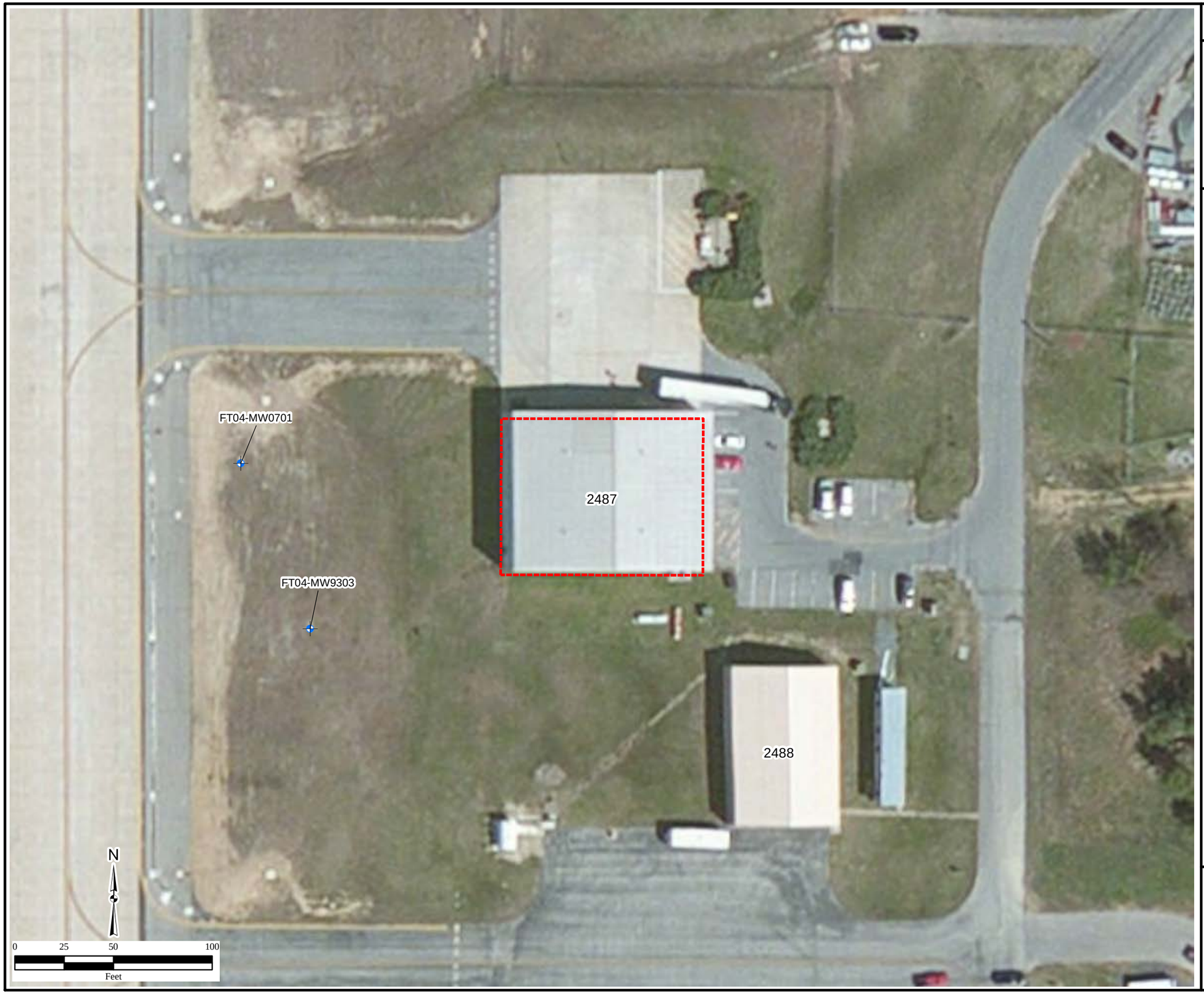
3002 Building Number

Inferred Location Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(3-21)FuelHangar.mxd
5/12/2015 ARW
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

Figure 3.22
Building 2487
(MD State Police)
Joint Base Andrews
Prince George's County, MD



Legend

- Well
- 2487 — Building Number
- Inferred Location Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(3-22)MD_StatePolice.mxd
5/12/2015 ARW
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

Figure 3.23
Air Sovereignty Alert (ASA) (Building 2489)
Joint Base Andrews
Prince George's County, MD

Legend

- Well
- 2489 — Building Number
- Inferred Location Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report\(3-23)ASA.mxd
5/12/2015 ARW
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

Figure 3.24
Fire Station #1
(Building 1287)
Joint Base Andrews
Prince George's County, MD

Legend

⌖	Well
1287	Building Number
(red dashed box)	Inferred Location Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report\(3-24)FS_1.mxd
5/12/2015 ARW
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

Figure 3.25
Fire Station #2
(Building 3464)
Joint Base Andrews
Prince George's County, MD

Legend

- Well
- 3464 — Building Number
- Inferred Location Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(3-25)FS_2.mxd
5/12/2015 ARW
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

Figure 3.26
Building 3066
(Base Supply)
Joint Base Andrews
Prince George's County, MD

Legend

- Well
- 3066 — Building Number
- Inferred Location Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(3-26)BaseSupply.mxd
5/12/2015 ARW
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

Figure 3.27
Building 3444
(Warehouse)
Joint Base Andrews
Prince George's County, MD

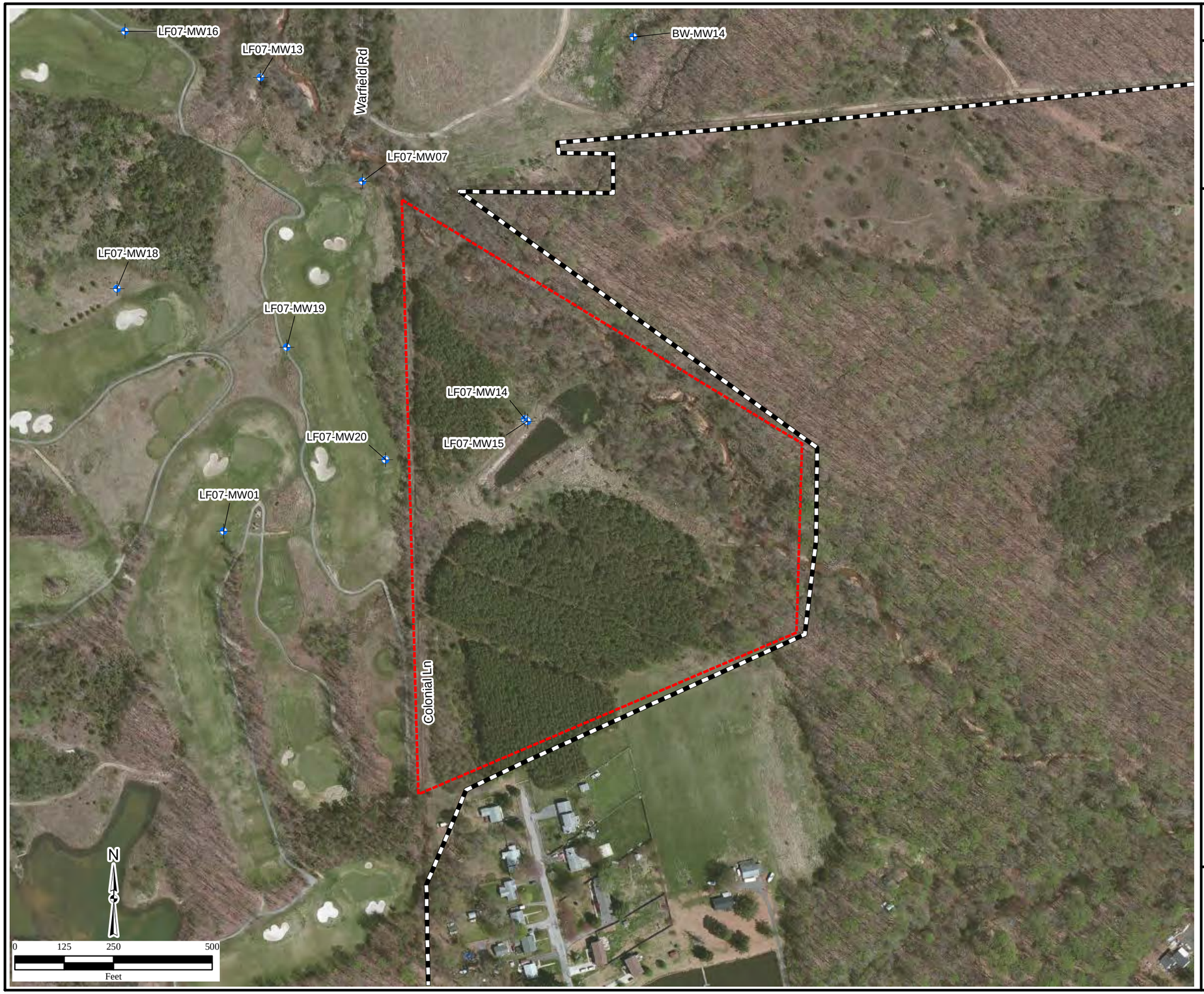
Legend

- Well
- 3444 Building Number
- Inferred Location Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(3-27)Warehouse.mxd
5/12/2015 ARW
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

Figure 3.28
Hare Berry Farms
Joint Base Andrews
Prince George's County, MD



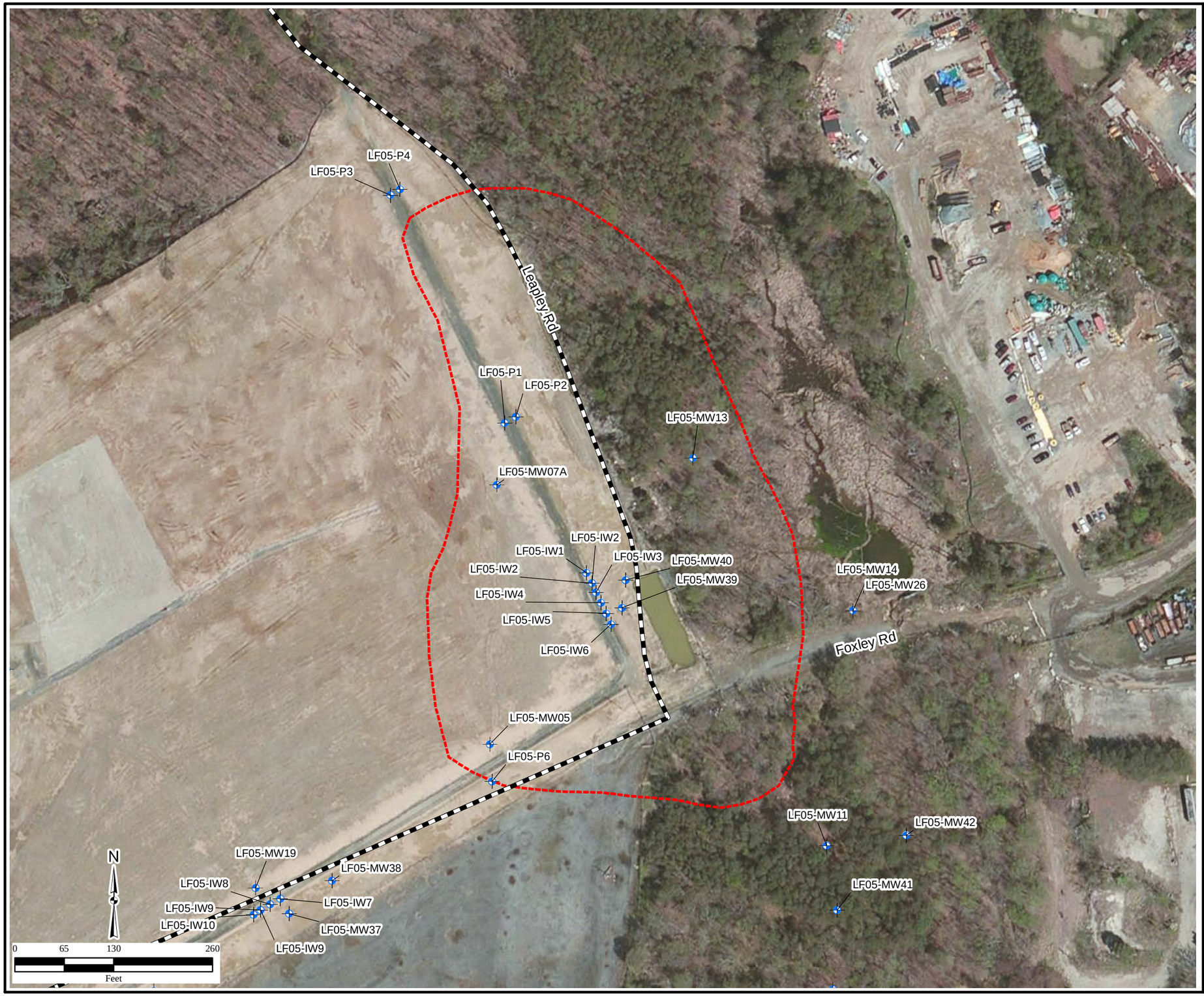
Legend

- Well
- Inferred Location Boundary
- Installation Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(3-28)HareBerryFarms.mxd
5/12/2015 ARW
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

Figure 3.29
LF-05
Joint Base Andrews
Prince George's County, MD



Legend

- Well
- Inferred Location Boundary
- Installation Boundary

Notes:
LF=land fill

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(3-29)LF-05.mxd
5/12/2015 JG
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

Figure 3.30
Brandywine DRMO Yard
Prince George's County, MD

Legend

Inferred Location Boundary

Note:
DRMO=defense reutilization and marketing office

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(3-30)SS01.mxd
5/12/2015 ARW
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

Figure 3.31
Building 1539
Communications
Joint Base Andrews
Prince George's County, MD

Legend

- Well
- 1539 — Building Number
- Inferred Location Boundary

\\Gst-srv-01\HGLGIS\PA_Sites\JBA\PA_Report
(3-31)CommSquadron.mxd
5/12/2015 ARW
Source: HGL, JBA
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

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4.0 SUMMARY AND CONCLUSIONS

4.1 SUMMARY

4.1.1 Fire Training Areas

4.1.1.1 Fire Training Areas Closed Prior to 1970

FTAs that were closed prior to 1970 did not utilize AFFF fire training activities and are not considered to have been impacted by PFOA or PFOS from AFFF use. FT-02 was closed in the 1950s, and, therefore, is not anticipated to have been impacted by PFCs.

4.1.1.2 Fire Training Areas Operational After 1970

FT-03 operated from 1959 to 1972. Although this FTA was operational subsequent to 1970, a 2007 Earth Tech report confirms that only protein foams, carbon tetrachloride, and chlorobromomethane were used to extinguish fires. FT-04 operated from 1973 to 1990 and historical records indicated that fires at the site were extinguished with AFFF (Air Force, 2005). In addition, excess fluids flowed into an oil-water separator and eventually discharge to a gravel bottom leaching pond. The leaching pond often became plugged and fluids discharged to the ground surface. AT069 operated in the 1960s to the 1970s. Fires at the site were reportedly extinguished with protein foams and there is no documentation that AFFF has been released at the site.

4.1.1.3 Current Fire Training Areas

JBA currently has one operating FTA (Building 2491 FTA) with a lined burn pit that contains a mock aircraft. The current FTA is adjacent to FT-04. The FTA also contains a lined recirculating pond. The current FTA uses propane as a fuel source. AFFF has been used monthly for the last 11 months at this location to test the equipment of all six fire department vehicles by spraying AFFF into the lined burn pit. Additionally, time and distance testing of AFFF is performed at the burn pit several times a year to test the fire truck settings to ensure proper equipment operation. The amount of AFFF released is unknown. It is believed that all AFFF released at the current FTA was discharged into the lined burn pit and was contained.

4.1.2 Non-Fire Training Areas

4.1.2.1 Hangars

There are currently 23 hangars at JBA. Ten hangars are equipped with HEF fire suppression systems and have no documented releases of AFFF. Four hangars are equipped with AFFF fire suppression systems and have not had any documented releases of AFFF. Nine hangars are equipped or have been equipped with an AFFF fire suppression system with documented releases of AFFF.

As documented in the 1995 *Fire Fighting Foam Disposal Compliance Plan*, following AFFF foam discharge events, the practice was to wash the foam with water into the hangar drainage systems. Final drainage system destinations vary from hangar to hangar, transferring the effluent to either a surface stream or to the WSSC (EA, 1995).

According to the surface water pathways for the hangars that have had releases of AFFF, the potential exists for PFC contamination to Piscataway Creek, Cabin Branch Creek, Henson Creek, and Meetinghouse Branch.

4.1.2.2 Fire Stations

JBA has two active fire stations on base. Both active fire stations have multiple pieces of equipment that hold AFFF. The AFFF used to refill the fire trucks is stored in the AFFF base supply located in Building 3066 and in Fire Station #1. Currently, fire trucks are only refilled at Fire Station #1. Fire Station #1 houses the most fire trucks and the AFFF trailer. It was reported that the potential existed for the workers to use AFFF occasionally at Fire Station #1 for testing of nozzles in front of the fire station. A crash truck leaked an estimated 100 gallons of AFFF in front of Fire Station #1. It was reported that most of that spill was captured in the drain and secondary containment. The areas where AFFF was flushed out is paved with concrete with sealed joints at the current fire stations. The potential for runoff exists. No AFFF releases are documented to have occurred at Fire Station #2.

4.1.2.3 Emergency Response

According to information provided by the base historian and anecdotal information provided by the Assistant Fire Chief, and other firefighters, there are no known on-base emergency response efforts that discharged AFFF (Appendix C, Records of Communication).

4.1.2.4 Other

LF-05 and the Brandywine DRMO Yard both had burn areas that were evaluated as part of this assessment. There was no evidence of AFFF used at either area. Building 1539 was identified as being equipped with an AFFF fire suppression system in the Air Force Real Property records. The non-water fire suppression system in that building is charged with HFC-227 and according to base personnel, the building did not ever contain an AFFF system (Appendix C, Records of Communication). AFFF is not documented as having been used at any of these locations. As a result, it is unlikely that the environmental media at these locations are impacted by PFCs.

Building 3066, Base Supply, maintains the JBA AFFF supply, and Building 3444 has a 275-gallon AFFF tote in storage. Neither of these buildings has documented releases of AFFF.

The former Hare Berry Farms irrigated the property using water from Piscataway Creek that contained AFFF. It is possible this area is impacted by PFCs.

4.2 CONCLUSIONS

Table 4.1 summarizes the findings from the PA report and represents possible future management decisions on the identified locations. These locations are identified as areas of possible PFC contamination as a result of AFFF release to the environment. The identified locations are categorized by "group" in Table 4.1 as follows:

- Group 1 – High mass of AFFF released and probability of groundwater contamination.
- Group 2 – Unknown Mass or medium of AFFF released.
- Group 3 – Low mass of AFFF released.
- Group 4 – No AFFF released.

Based on the "group" designation and rationale for each identified location, recommendations are provided in Table 4.1. In accordance with the EPA CERCLA Preliminary Assessment and Site Inspections Guidance documents, each of the identified locations is either recommended for: implement removal action due to imminent threat; close out of the identified location due to no release; initiate a Remedial Investigation; or initiate a Site Inspection.

- Removal action, as defined in CERCLA Section 104, are actions taken to eliminate, control, or otherwise mitigate a threat posed to public health or the environment due to a release or threatened release of hazardous substances (EPA, 1991).
- Close out or no further remedial action planned is defined as a site disposition decision that further response under the Federal Superfund is not necessary (EPA, 1991).
- Remedial Investigation is defined as a field investigation to characterize the nature and extent of contamination at a site. The Remedial Investigation supports development, evaluation, and selection of the appropriate response alternative (EPA, 1991).
- Site Inspection is defined as an investigation to collect and analyze waste and environmental samples to support a site evaluation (EPA, 1992).

Table 4.1
Preliminary Assessment Report Summary and Findings
Joint Base Andrews, Maryland

Locations	Group	Rationale	Recommendations
FT-04	Group 2	• Operational Period: 1973 to 1990. • Documented use of AFFF during fire training activities. • Unknown amount of AFFF released. • Drainage discharges to Piscataway Creek.	Initiate a Site Inspection.
East Side Fuel Cell (Building 3629)	Group 2	• Hangar Operational Period: 1969 to present. • AFFF system in place. No record of AFFF installation date. • Five large AFFF releases documented. • Three AFFF releases were full system releases of approximately 2,000 gallons of AFFF each. • Two documented releases of AFFF had an unknown amount released. • AFFF drains into hangar drainage system into oil-water separator.	Initiate a Site Inspection.
Hangar 11 (Building 3635)	Group 2	• Hangar Operational Period : 1944 to present • AFFF system in place. No record of AFFF installation date. • Multiple releases of AFFF at hangar. • A large AFFF releases documented. Unknown amount of AFFF released. • An AFFF release of 750 gallons in July 2005. • An AFFF release of 15 gallons in March 2007. • AFFF drains into hangar drainage system. Containment system installed after multiple AFFF releases. Historical drainage destination varied between surface stream and WSSC. • Drainage discharges to Cabin Branch Creek.	Initiate a Site Inspection.
Hangar 16 (Building 3119)	Group 2	• Hangar Operational period: 1955 to present. • Equipped with an HEF fire suppression system. • Equipped with an AFFF fire suppression system prior to HEF system. • One documented AFFF release. • Unknown amount of AFFF released. • AFFF drains into hangar drainage system. Containment system installed after multiple AFFF releases. Historical drainage destination varied between surface stream and WSSC. • Drainage discharges to Piscataway Creek.	Initiate a Site Inspection.

Table 4.1 (Continued)
Preliminary Assessment Report Summary and Findings
Joint Base Andrews, Maryland

Locations	Group	Rationale	Recommendations
ASA Facility (Building 2489)	Group 2	• Equipped with an HEF fire suppression system. • Built over the Former FTA FT-04. • AFFF has never been used at the ASA facility. • Documented use of AFFF during fire training activities at FT-04 • Unknown amount of AFFF released.	Initiate a Site Inspection.
Hangar 7 (Building 1280)	Group 2	• Hangar operational period: 1960 to present. • Hangar equipped with an HEF system. • According to the Air Force Real Property record, the hangar was equipped with an AFFF fire suppression system prior to the HEF system. • Operational period of AFFF system unknown. • Assistant Fire Chief indicated that AFFF releases have occurred at the hangar. • Unknown amount of AFFF released. • Drainage discharges to Meetinghouse Branch.	Initiate a Site Inspection.
Hangar 6 (Building 1279)	Group 2	• Operational period: 1960 to present. • Equipped with HEF Fire suppression system. • Air Force Real Property record did not indicate that an AFFF fire suppression system was equipped prior to the HEF system. • The JBA Fire Chief indicated that the hangar was equipped with an AFFF system prior to the HEF system and there were releases of AFFF. • Unknown amount of AFFF released. • AFFF drains into hangar drainage system. Containment system installed after multiple AFFF releases. Historical drainage destination varied between surface stream and WSSC. • Drainage discharges to Meetinghouse Branch.	Initiate a Site Inspection.

Table 4.1 (Continued)
Preliminary Assessment Report Summary and Findings
Joint Base Andrews, Maryland

Locations	Group	Rationale	Recommendations
Fire Station #1	Group 3	• Operational Period: 1976 to present. • Workers on at the fire station. Training occasionally in front of station using AFFF. • Accidental spills documented during equipment refilling. • AFFF used during fire training activities. • 100-gallon AFFF spill during leaking of crash truck in front of the station. • Unknown amount of AFFF released during refilling operations. • Drainage discharges to Piscataway Creek. • 143 buckets of AFFF stored at fire station. • Fire trucks and trailer stationed at fire station occasionally.	Initiate a Site Inspection.
Former Hare Berry Farms	Group 3	• 500 gallons of AFFF released into Piscataway Creek and used for irrigation of the crops of Hare Berry Farms. • Release occurred during test of an aircraft fire suppression system at an unknown hangar.	Initiate a Site Inspection.
Brandywine DRMO Yard	Group 4	• Operation period: 1943 to 1987. • No documented releases of AFFF.	Initiate a Site Inspection.
Building 2491 FTA with recirculating pond	Group 2	• Operational Period: 1995 to present. • AFFF historically used while performing time and distance testing. • Time and distance performed on a lined pit. • Unknown amount of AFFF released. • Drainage discharges to Piscataway Creek.	Close out with no additional investigation.
FT-03	Group 2	• Operational Period: 1959 to 1972. • Protein foams, carbon tetrachloride, and chlorobromomethane were then used to extinguish fires. • No known release of AFFF.	Close out with no additional investigation.
Hangar 1 (Building 1914)	Group 4	• Operational period: 1961 to present. • Equipped with a HEF fire suppression system. • Fire Chief indicated that AFFF fire suppression system was equipped prior to the HEF system. • According to the Air Force Real Property record, the hangar was never equipped with an AFFF fire suppression system. • No documented releases of AFFF.	Close out with no additional investigation.

Table 4.1 (Continued)
Preliminary Assessment Report Summary and Findings
Joint Base Andrews, Maryland

Locations	Group	Rationale	Recommendations
Hangar 2 (Building 1794)	Group 4	• Operational period: 1961 to present. • Equipped with an HEF fire suppression system. • According to the Air Force Real Property record the hangar was equipped with an AFFF fire suppression system prior to the HEF system. • Operation period of AFFF sire suppression system unknown. • No documented releases of AFFF.	Close out with no additional investigation.
Hangar 4 (Building 1734)	Group 4	• Operational Period: 1960 to present. • Equipped with an HEF fire suppression system. • According to the Air Force Real Property record the hangar was equipped with an AFFF fire suppression system prior to the HEF system. • Operation period of AFFF sire suppression system unknown. • No documented releases of AFFF.	Close out with no additional investigation.
Hangar 8 (Building 1225)	Group 4	• Hangar Operational Period : 1953 to present • AFFF system in place. No record of AFFF installation date. • According to the 113th Deputy Base Civil Engineer there are no documented releases of AFFF.	Close out with no additional investigation
Hangar 9 (Building 1228)	Group 4	• Hangar Operational Period: 1954 to present. • AFFF system in place. No record of AFFF installation date. • According to the 113th Deputy Base Civil Engineer there are no documented releases of AFFF.	Close out with no additional investigation
Building 3002 (113th WG Fuel Hangar)	Group 4	• Hangar operational period: 1982 to present. • Equipped with and AFFF fire suppression system. • No AFFF releases documented.	Close out with no additional investigation
Building 2487 (MD State Police)	Group 4	• Hangar operational period: unknown to present. • AFFF fire suppression system in place. • No AFFF releases documented.	Close out with no additional investigation
Hangar 12	Group 4	• Operational period: 1961 – present. • HEF system currently being installed. • No AFFF used.	Close out with no additional investigation
Hangar 13	Group 4	• Operational period: 1961 – present. • Equipped with an HEF fire suppression system. • No AFFF used.	Close out with no additional investigation

Table 4.1 (Continued)
Preliminary Assessment Report Summary and Findings
Joint Base Andrews, Maryland

Locations	Group	Rationale	Recommendations
Hangar 14	Group 4	• Operation period: 1961 – present. • Equipped with and HEF system. • No AFFF used.	Close out with no additional investigation
Hangar 20	Group 4	• Operational period: 2009 to present. • Equipped with an HEF fire suppression system. • No AFFF used.	Close out with no additional investigation
Building 1539	Group 4	• Equipped with an HFC-227 fire suppression system • No AFFF used.	Close out with no additional investigation
Fire Station #2	Group 4	• Operational Period: 1995 to present. • No AFFF releases documented. • Fire trucks and trailer stationed at fire station on occasion.	Close out with no additional investigation
Building 3066 (Base Supply)	Group 4	• Base supply maintains 498 five-gallon buckets of AFFF in inventory. • No AFFF releases documented.	Close out with no additional investigation
Building 3444 (Warehouse)	Group 4	• Warehouse contains 250-gallon AFFF tote with cannon. • No AFFF releases documented.	Close out with no additional investigation
LF-05	Group 4	• Occasional fires at this location. • Assistant fire chief did not recall the use of AFFF to extinguish the fires. • No AFFF releases documented.	Close out with no additional investigation
AT069	Group 4	• Operational Period: 1960s to 1970s. • Reported fire training activities performed at this location. • Fires were reportedly extinguished with protein foams. • No documented release of AFFF.	Close out with no additional investigation
FT-02	Group 4	• Operational Period: 1948 to 1958 • The operational history of FT-02 pre-dates the use of AFFF by the Air Force for fire training operations.	Close out with no additional investigation
West Side Fuel Cell (Building 1915)	Group 4	• Equipped with HEF fire suppression system. • Equipped with AFFF fire suppression system prior to HEF. • AFFF operational Period: 1969 to 2005-2010 timeframe. • Documented release of AFFF. • Unknown amount of AFFF released. • AFFF drains into oil-water separator that releases to sanitary.	Close out with no additional investigation.

Table 4.1 (Continued)
Preliminary Assessment Report Summary and Findings
Joint Base Andrews, Maryland

Locations	Group	Rationale	Recommendations
Hangar 5 (Building 1714)	Group 4	• Operational period: 1958 to present. • Equipped with an HEF fire suppression system. • Equipped with an AFFF fire suppression system prior to the HEF system. • AFFF operational period unknown. • Three AFFF releases documented. • Unknown amount of AFFF released. • AFFF drains into hangar drainage system. Containment system installed after multiple AFFF releases at JBA.	Close out with no additional investigation.
Hangar 10 (Building 3640)	Group 4	• Hangar Operational Period: 1944 to present. • AFFF system in place. No record of AFFF installation date. • Two large AFFF releases documented. • Unknown amount of AFFF released. • AFFF drains into hangar drainage system. Containment system installed after multiple AFFF releases.	Close out with no additional investigation.
Hangar 18 (Building 1288)	Group 4	• Hangar Operational Period: 1987 to present. • AFFF system in place. No record of AFFF installation date. • One AFFF release documented. • Unknown amount of AFFF released. • AFFF drains into hangar drainage system. Containment system installed after multiple AFFF releases at JBA.	Close out with no additional investigation.
Hangar 19 (Building 5016)	Group 4	• Hangar Operational Period: 1989 to present. • HEF fire suppression system previously equipped and retrofitted to an AFFF fire suppression system. • AFFF system in place. No record of AFFF installation date. • One AFFF release documented. • Unknown amount of AFFF released. • AFFF drains into hangar drainage system. Containment system installed after multiple AFFF releases.	Close out with no additional investigation.

Notes:
AFFF – aqueous film forming foam
JBA – Joint Base Andrews
PWS – public water supply

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5.0 REFERENCES

AMEC, 2014. EPCRA Section 311 and 312 Report Documentation for JBA- 2013. February 2014.

Baywest, 2015. Draft Final Remedial Investigation at SWMU 69, January 2015.

Baywest, 2014. Final 2013 Updated Basewide Conceptual Site Model, February 2014.

Chang, E.T., et al. 2014. A Critical Review of Perfluoroocanoate and Perfluorooctanesulfonate Exposure and Cancer Risk in Humans, Crit Rev Toxicol, 44(S1): 1-81.

Coates, C.Y. (Center Historian). 1977. A History of USAF Fire Protection Training at Chanute Air Force Base 1964-1976. Chanute Technical Training Center, Chanute AFB, Illinois. February.

EA, 1995, Final Fire Fighting Foam Disposal Compliance Plan Andrews Air Force Base. April 1995.

Earth Tech, 2007. Remedial Investigation FT-03, October 2007.

Earth Tech, 2006. Remedial Investigation LF-05, December 2006.

EDR, 2015a. EDR Data Map Well Search Report 4206871.4w, February 2015.

EDR, 2015b. EDR Off-Site Receptor Report 4206871.3s, February 2015.

EDR, 2015c. EDR NEPACheck 4206871.2s, February 2015.

Fire Fighting Foam Coalition, n.d. Fact Sheet on AFFF Fire Fighting Agents.

GeoFin, 2015. U.S. Fish and Wildlife Service. Geospatial Fisheries Information System. Retrieved from http://ecos.fws.gov/geofin/.

Halliburton NUS Corporation, 1995. Remedial Action Report Soil and Tank Removal-Brandywine DRMO. July 1995.

Jackson, Donna (Real Estate Chief for the USAF). 2015. Personal communication. January 27.

Parsons, 2000. Aqueous Film Forming Foam (AFFF) Spill Control Conceptual Design Report. November 2000.

Porter, R., 2011. AFCEE/TDV Emerging Issues. Perfluorinated Compounds. Air Force Restoration and Technology Transfer Workshop, March.

Rak, Andrew and Catherine M. Vogel. 2009. Increasing Regulation of Perfluorinated Compounds and the Potential Impacts at Air Force Installations. Prepared for the U.S. Air Force. March.

URS, 2005. Final Remedial Investigation Report Site St-04- Fire Training Area 4, July 2005

U. S. Air Force, 1994. Environmental Assessment, Hare Berry Farm, March 1994.

U. S. Air Force, 2005. Remedial Investigation FT-04, Fire Training Area 4, July 2005.

U. S. Air Force, 2005. Record of Decision FT-04, Fire Training Area 4, November 2005.

U. S. Air Force, 2006. Interim Record of Decision Site SS-01 Brandywine DRMO, September 2006.

U. S. Air Force, 2008. Record of Decision FT-03, Fire Training Area 2, September 2008.

U. S. Air Force, 2009. Record of Decision FT-02, Fire Training Area 1, September 2009.

U. S. Air Force, 2011. Legal Review of the Final Site FT-04 Interim Remedial Action Completion Report, July 2011.

U.S. Air Force. 2012. Interim Air Force Guidance on Sampling and Response Actions for Perfluorinated Compounds at Active and BRAC Installations. August.

U.S. Air Force, 2013.Website LF-05 fact sheet - http://www.andrews.af.mil/shared/media/document/AFD-130514-016.pdf. Accessed February 18, 2015.

U. S. Air Force, 2013.Website SS-01 fact sheet - http://www.andrews.af.mil/shared/media/document/AFD-130514-021.pdf. Accessed February 18, 2015.

U.S. Air Force, 2015. Perflorinated Compound Strategy for Joint Base Andres and the Brandywine Defense and Reutilization Office. Letter, January 2015.

APPENDIX A

PHOTO DOCUMENTATION

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PHOTOGRAPH LOG

Team: Mike Rooney	Date: 1/26/2015 - 1/28/2015
Project Number: JBA	Observation Period: Start: _____ Stop: _____
Weather: RAIN/SNOW	

Photo No.	Time	View Direction	Location/Description
2	2:12	west	West Side Fuel Cell
1		North	West side Fuel Cell
1		MEC	MANGAR 1 - MEC Room
1	1:58	North	Hangar 2 - Front
2	2:00	-	Hangar 2 - MEC Room
1	1:59	-	Mangar 3 - Fire Suppression
2	2:04	-	Mangar 3 - trench drains
1	1:48	-	MANGAR 4 - MEC Room
2	1:49	-	Mangar 4 - MEC entrance
1	1:53	-	Mangar 5 - Fire suppression
2	2:09	-	Mangar 5 - trench drains
1	1:43	-	Mangar 6 - Mec Room
2	1:48	EAST	Mangar 6 - Isolation valve
1	1:30	-	Mangar 7 - MEC Room
2	1:27	-	Mangar 7 - Fire Suppression
1	3:00	EAST	Mangar 8 - containment system
2	2:50	-	Mangar 8 - cannon
1	3:08	South	Mangar 9 - exterior
2	3:15	-	Mangar 9 - MEC
1	1:16	North	Mangar 18 - Isolation valve / MEC
2	1:13	-	Mangar 18 - CANNONS
1	9:59	North	MANGAR 10 - Front BAY Door
2	10:06	-	MANGAR 10 - CANNON
3	10:00	-	" 10 - AFFF tank
4	10:40	North	" 10 - Secondary Containment
1	1050	-	Mangar 11 - MEC Room
2	10:48	-	Mangar 11 - cannon
1	-	-	Bldg 3629 - JBA provided
2	-	-	Bldg 3629 - JBA provide
1	3:33	West	MANGAR 12 - Back
2	3:35	-	Mangar 12 - Fire suppression system
1	3:40	-	MANgar 13 - mec Room - MEF
2	3:37	South	MAngar 13 - Fire Suppression
1	3:43	South	HAngar 14 - Fire suppression / foreabdeen
2	3:49	West	" 14 - Rear Hanger
1	10:42	West	Manger 16 - Isolation / containment
2	10:58	-	Manger 16 - Fire Suppression System
1	1405	North	Bldg 3002 - MEC Room
2	11:02	-	" - AFFF tank
1	11:30	West	Bldg 2487 - MDST Police
2	11:09		Bldg 2487 - cannon
1	11:25	South	ASA - Former FT-04
2	11:25	West	ASA - Former FT-04
1	3:00	EAST	Active FTA - recirculation pad
2	3:00	South	" - plane
1	9:32	West	FS #1 - AFFF tanker
2	925	-	FS #1 - AFFF buckets inside
1	10:00	-	FS #2 - Floor drain
2	1:48	-	FS #2 - Empty 5 gallon AFFF bucket

HGL

PHOTOGRAPH LOG

Team: M Ray	Date: 1/27/2015 - 1/28/2015
Project Number: JBA	Observation Period: Start: 7.00 Stop:
Weather: Sunny/snow	

Photo No.	Time	View Direction	Location/Description
1	8:09	East	LF-05 - LUC Sign
2	8:12	Northeast	LF-05 - Landfill w/ well
1	7:22	North	SW MU-69 -
2	7:23	West	SW MU-69 -
1	9:40	North	FT-02 - LUC Sign
2	9:40	North	FT-02 -
1	11:29	South	FT-04 - LUC Sign
2	3:01	SouthEAST	FT-04 # current FTA boundary
1	4:19	-	Bldg 1539 - Sign
2	4:20	-	Bldg 1539 - MFC-227 container
1	8:44	Northwest	Bldg 3444 - Front of Bldg
2	8:47	-	Bldg 3444 - 250 gallon AFFF tank
1	8:04	-	Bldg 3464 - BULK AFFF storage
2	8:03	-	Bldg 3464 - AFFF container

HGL

Photo 1: View of active FTA facing east with recirculating pond.

Photo 2: View of active FTA facing south.

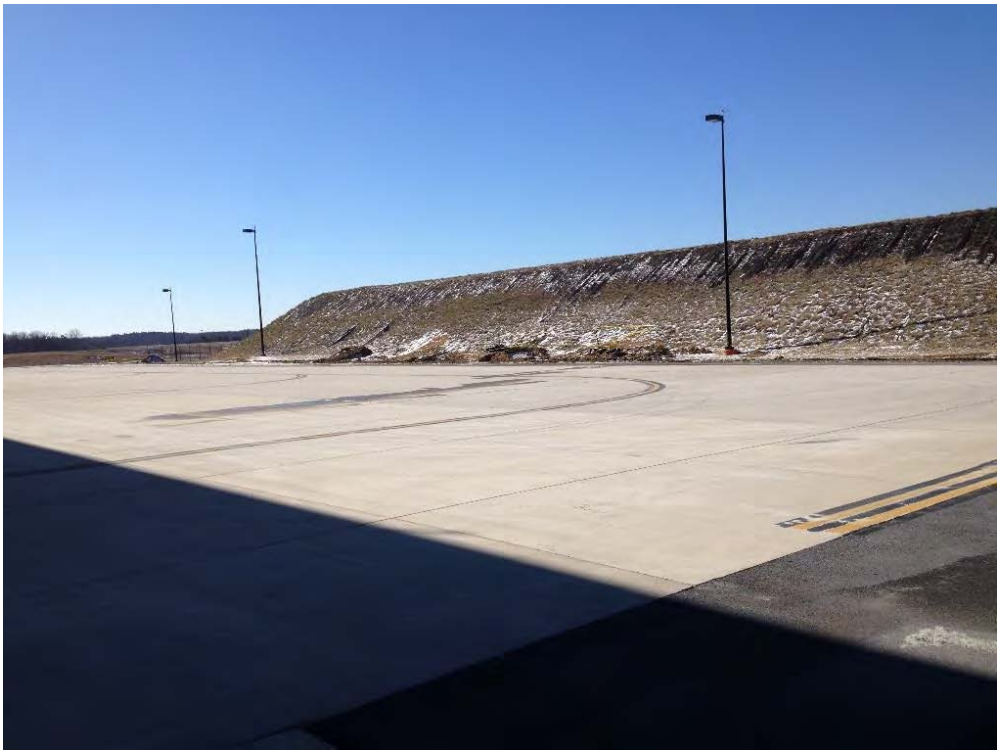

Photo 1: View of ASA apron, former FT-04 location, photo faces south toward the current FTA.

Photo 2: View of ASA grass area adjacent to apron, Former FT-04 located photo faces west toward runway.

Photo 1: View of BLDG 1539 fire suppression signage.

Photo 2: View of BLDG 1539. HFC-227 container.

Photo 1: View of Maryland State Police Hangar. BLDG 2487 facing west. OWS captures in the forefront.

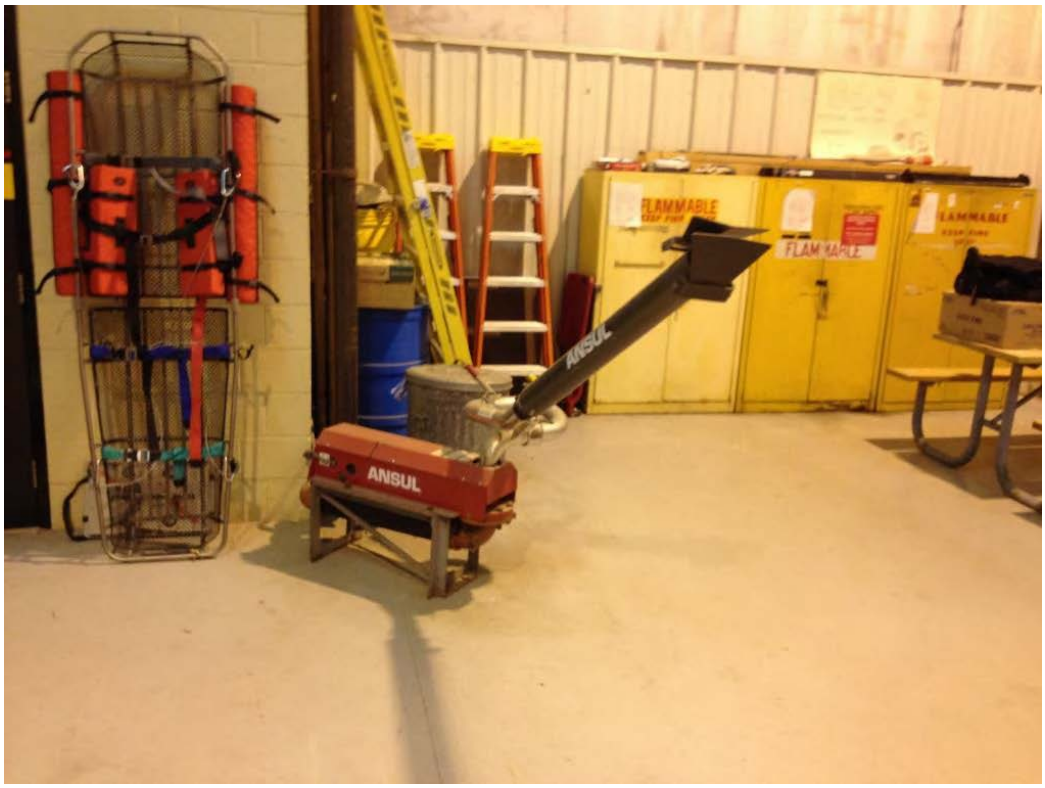

Photo 2: View of Maryland State Police Hangar. BLDG 2487 AFFF floor cannon.

Photo 1: View of BLDG 3302 exterior photo of MEC room facing north.

Photo 2: View of BLDG 3302 MEC room with AFFF tank.

Photo 1: View of BLDG 3444 facing northwest.

Photo 2: View of BLDG 3444 interior with AFFF 250 gallon foam cannon.

Photo 1: View of BLDG 3464 bulk storage of 498 five gallon buckets of AFFF.

Photo 2: View of AFFF container close up in BLDG 3464.

Photo 1: View of Fire Station #2. Floor Drain.

Photo 2: View of Fire Station #2. Empty 5 gallon AFFF buckets.

Photo 1: View of Firestation #1 facing west with AFFF tanker.

Photo 2: View of Firestation #1. 5 gallon buckets of AFFF.

Photo 1: View of FT-02 LUC boundary sign.

Photo 2: View of FT-02 area photo facing northeast.

Photo 1: View of FT-04 LUC facing south.

Photo 2: View of current FTA/FT-04 facing southeast towards active FTA.

Photo 1: View of FT-03 LUC sign facing west.


Photo 2: View of FT-03 facing northwest. Current golf course.

Photo 1: View of Hanger 1 HEF MEC Room.

Photo 1: View of Hangar 2 facing north.

Photo 2: View of Hangar 2 MEC room- HEF.

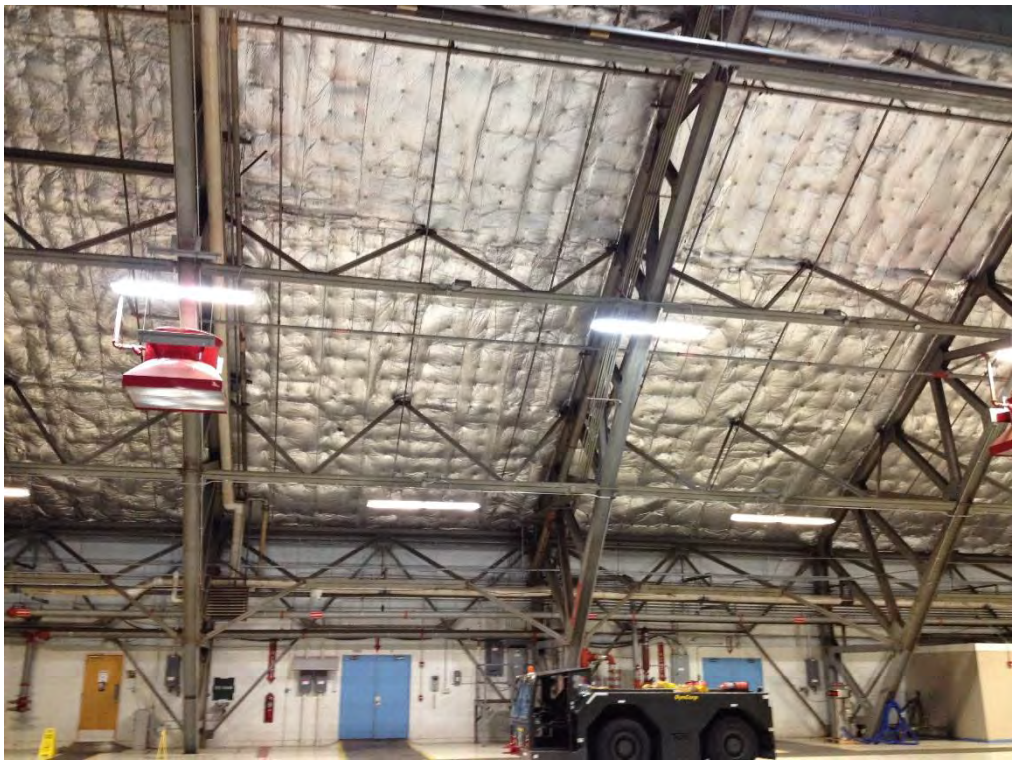

Photo 1: View of Fire Suppression system in Hangar 3.

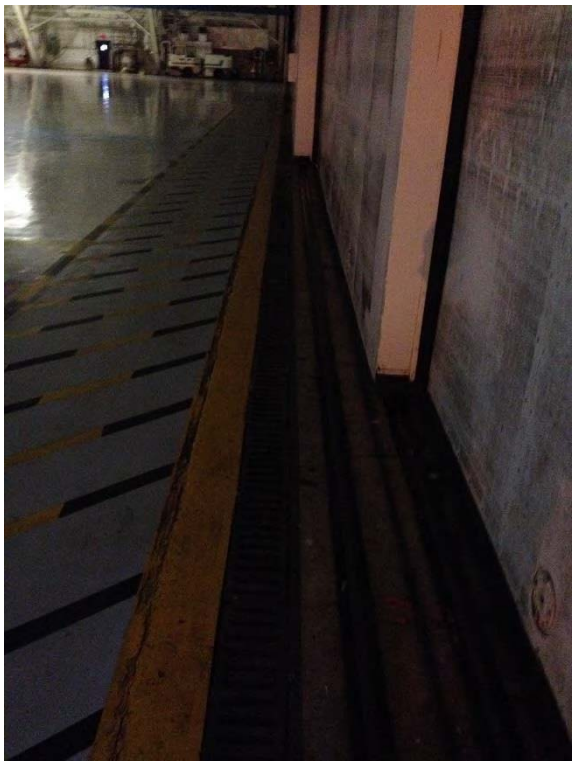

Photo 2: View of trench drain in Hangar 3.

Photo 1: View of Hangar 4 MEC room.

Photo 2: View of Hangar 4 MEC room entrance on east side of Hangar.

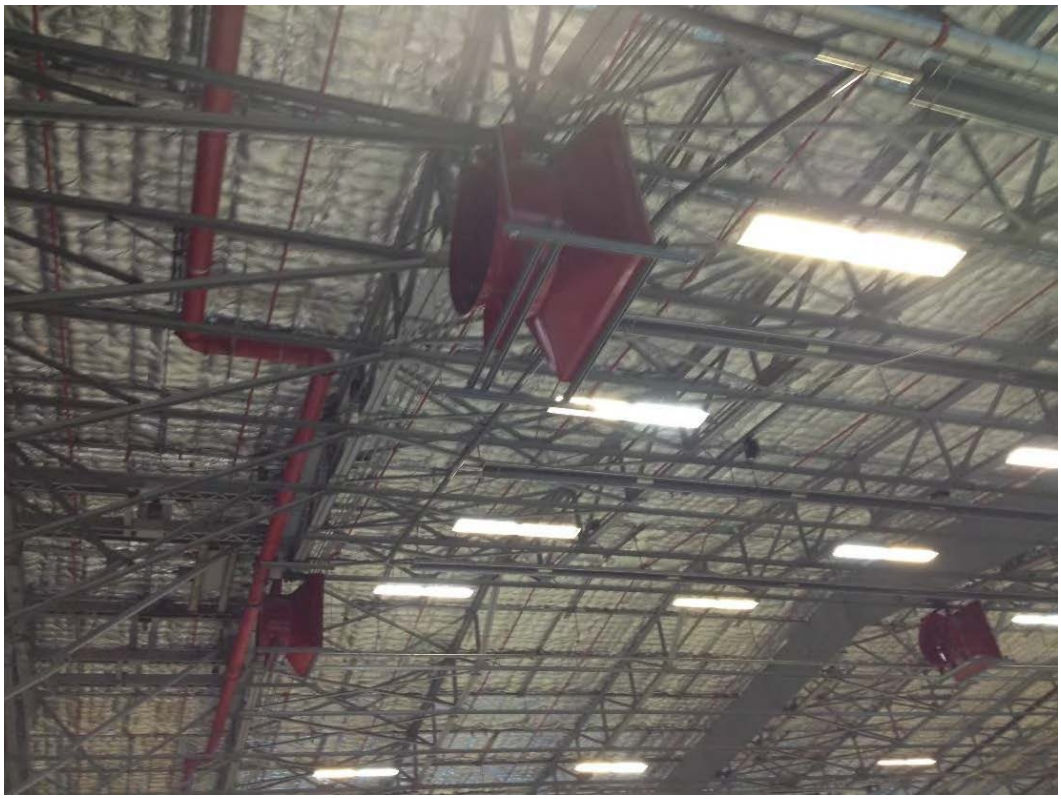

Photo 1: View of fire suppression system in Hangar 5.

Photo 2: View of trench drain in Hangar 5.

Photo 1: View of Hangar 6 MEC room.

Photo 2: View of Hangar 6 – Automatic isolocation valve. Frozen in the open position. Located on east side of Hangar.

Photo 1: View of Hangar 7 MEC room - HEF.

Photo 2: View of fire suppression system in Hangar 7.

Photo 1: View of northeast corner of Hangar 8. Location of containment system.

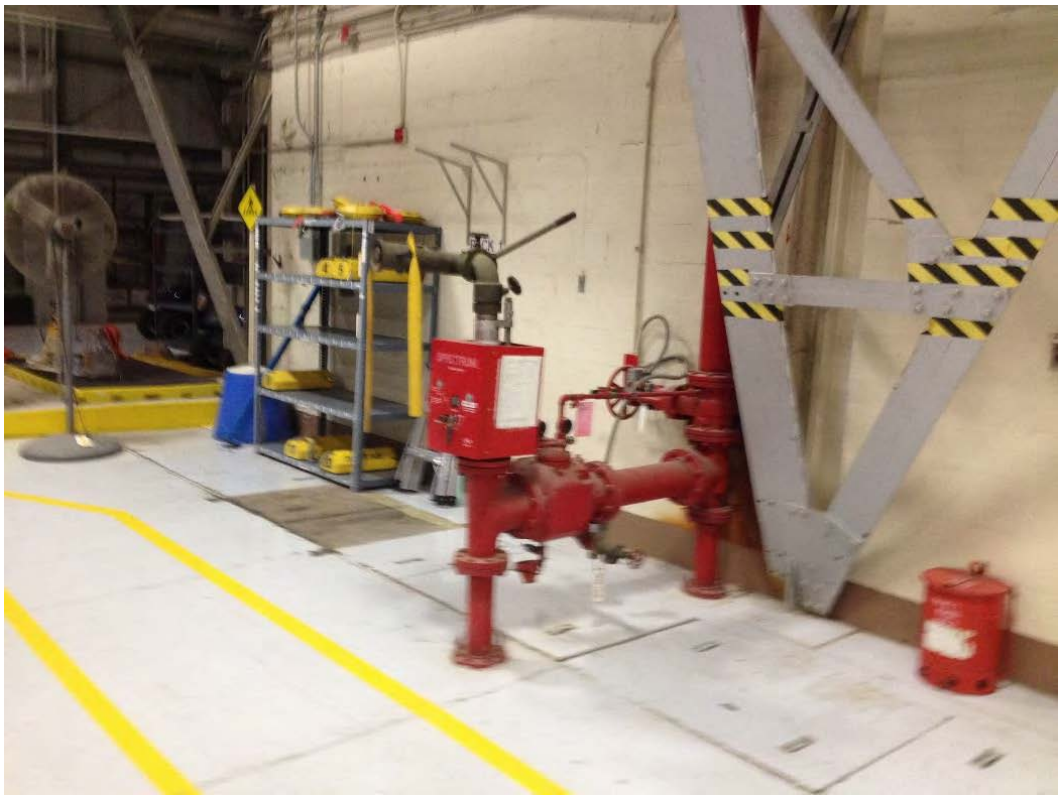

Photo 2: View of Hangar 8 AFFF foam cannon.

Photo 1: View of Hangar 9 exterior.

Photo 2: View of Hangar 9 MEC room with twin 1,100 gallon AFFF tanks.

Photo 1: View of Hangar 10 facing north.

Photo 2: View of Hangar 10 floor cannon.

Photo 3: View of Hangar 10 AFFF tank and trench drain.

Photo 4: View of Hangar 10 exterior AFFF secondary containment located on east side of Hangar.

Photo 1: View of Hangar 11 MEC room with twin AFFF tanks.

Photo 2: View of Hangar 11 AFFF foam cannon.

Photo 1: View of Hangar 12 facing west.

Photo 2: View of fire suppression system in Hangar 12.

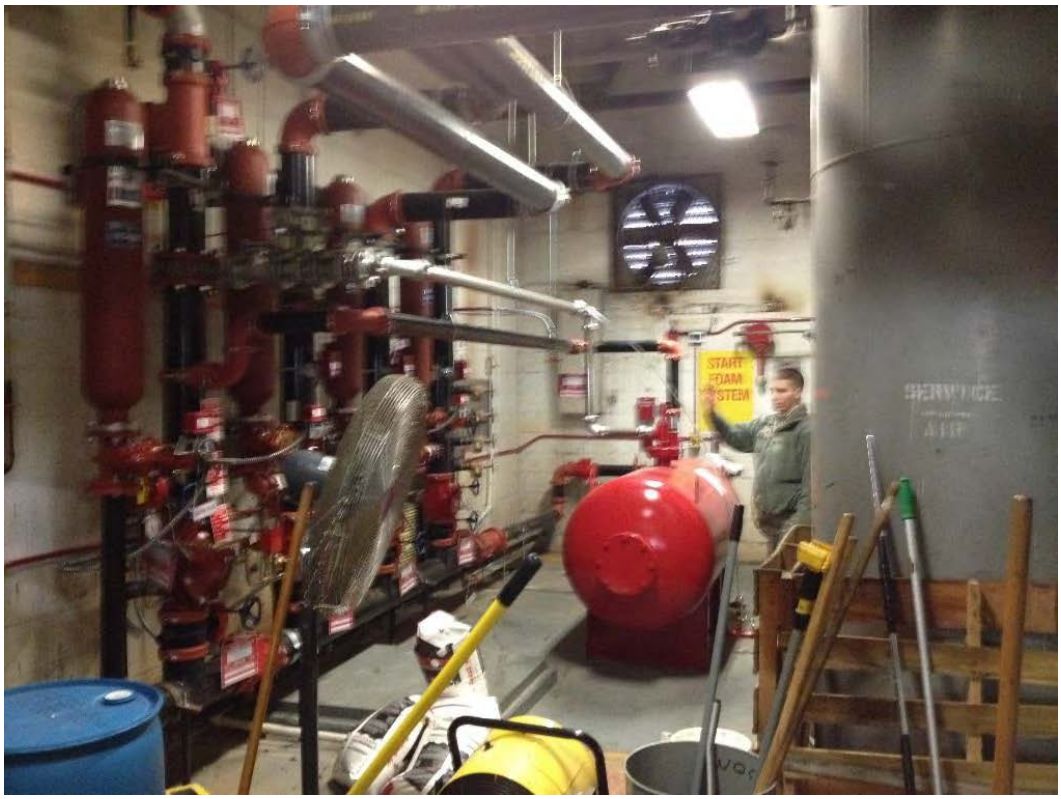

Photo 1: View of Hangar 13 MEC room. HEF system.

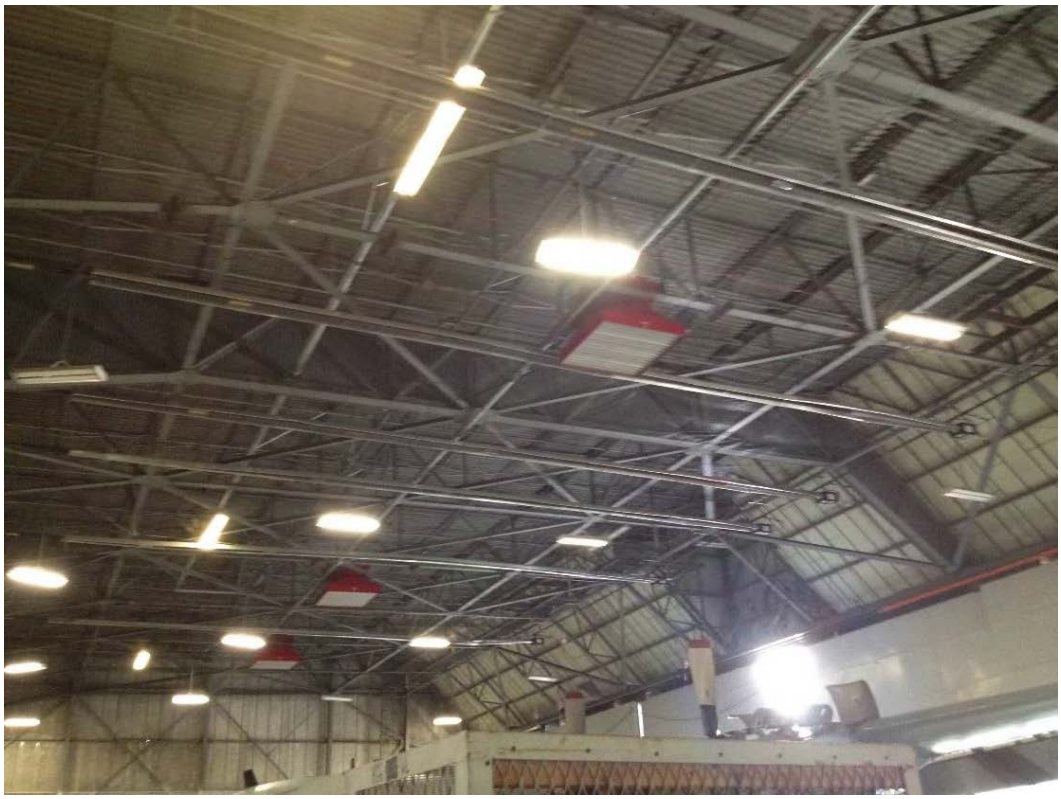

Photo 2: View of fire suppression system in Hangar 13 facing south.

Photo 1: View of fire suppression system in Hangar 14 and trench drain.

Photo 2: View of back of Hangar 14 facing west.

Photo 1: View of Hangar 16 facing west with isolation containment captured in photo.

Photo 2: View of fire suppression system in Hangar 16.

Photo 1: View of southwest corner of Hangar 18. Isolation valve and containment are with MEC room in background.

Photo 2: View of Hangar 18. AFFF floor cannon.

JBA provided photo of 29 July 2013 AFFF release at Building 3629 in OWS

JBA provided photo of 29 July 2013 AFFF release at building 3629 in Trench drain

JBA provided photo of circa 2000-2001 timeframe AFFF release at building 3629 on Apron

JBA provided photo of circa 2000-2001 timeframe AFFF release from building 3629 in nearby stream

Photo 1: LF-05. View of LUC sign facing east.

Photo 2: View of LF-05 facing northwest.

Photo 1: View of SWMU 69 facing north.

Photo 2: View of SWMU 69 facing west.

Photo 1: View of north side West Fuel Cell facing west.

Photo 2: View of West Fuel Cell, front of BLDG facing west.

Photo 3: View of interior door to MEC room of West Fuel Cell.

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APPENDIX B

FIELD DOCUMENTATION

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Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °47'22.12"	Longitude: 76 °52'17.89"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name: AT069, aka SWMU-69

Site Description: Site AT069 is a former fire training area that is currently an open ERP site located in the western portion of JBA. Fire training operations atAT069 occurred between the 1960s-1970s. The site consisted of a 100-foot diameterburn area.Fire training activities consisted of the daily release of approximately 300 gallons of clean fuel to the water-soaked pit followed by ignition. Fires were reportedly extinguished with protein foams . Potential AFFF release based on operational timeframe.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:
Type of Ownership: ☐ Private ☑ Federal Agency Name: DOD ☐ State ☐ Indian ☐ County ☑ Municipal ☐ Not Specified ☐ Other_____			Type of Ownership: ☐ Private ☐ Federal Agency Name: _____ ☐ State ☐ Indian ☐ County ☐ Municipal ☐ Not Specified ☐ Other_____		

3. Site Evaluator Information

Name of Evaluator: Michael Roooney		Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/24/15
Street Address:11107 Sunset Hills Road, Suite 400		City:Reston		State: Virginia
Name of EPA or State Agency Contact:NA		Street Address:		
City:	State:		Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year 1960s

Ending Year 1970s

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type: (check all that apply)	Source Waste Quantity: (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

- ☐ Yes
- ☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles (check all that apply):

- ☐ Municipal
- ☐ Private
- ☑ None

Is There a Suspected Release to Ground Water[1]:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Wells Been Identified:

- ☐ Yes
- ☑ No

If Yes, Enter Primary Target Population:

___ People[3]

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

- ☐ Yes
- ☑ No

Nearest Designated Wellhead Protection Area[6]:

- ☐ Underlies Site
- ☐ >0-4 Miles
- ☑ None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile	_____
>1/4 - 1/2 Mile	_____
>1/2 - 1 Mile	_____
>1 - 2 Mile	_____
>2 - 3 Mile	_____
>3 - 4 Mile	_____
Total Within 4 Miles[4]	_____

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

- ☑ Stream
- ☑ River
- ☐ Pond
- ☐ Lake
- ☐ Bay
- ☐ Ocean
- ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

__1300_ Feet

_____ Miles

Is There a Suspected Release to Surface Water[1]:

- ☑ Yes
- ☐ No

Site is Located in:

- ☐ Annual - 10 yr Floodplain
- ☐ >10yr - 100yr Floodplain
- ☐ >100yr - 500yr Floodplain
- ☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Intakes Been Identified:

- ☐ Yes
- ☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery: _____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☑ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: __1,300___ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☑ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Piscataaway Creek	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

60,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____
Total Within 4 Miles [3-5]	_____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: Dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____ _____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °48'19.69"	Longitude: 76 °52'58.03"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name:Building 1225: Hangar 8

Site Description: BLDG 1225 is located behind the secured pathfinder gate, in a restricted area, on the central side of the west portion of the JBA airfield and is currently occupied by the 113th WG/201st AS . This Hangar is currently configured with an AFFF fire suppressant system (FSS) and a secondary containment system. No documented AFFF releases at this location. Based on the operational history, there is potential for PFCs being released into the environment at this location.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:
Type of Ownership: ☐ Private ☐ County ☑ Federal Agency ☑ Municipal Name: DOD ☐ Not Specified ☐ State ☐ Other_____ ☐ Indian			Type of Ownership: ☐ Private ☐ County ☐ Federal Agency ☐ Municipal Name: _____ ☐ Not Specified ☐ State ☐ Other_____ ☐ Indian		

3. Site Evaluator Information

Name of Evaluator: Michael Roooney	Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/25/15
Street Address:11107 Sunset Hills Road, Suite 400	City:Reston		State: Virginia
Name of EPA or State Agency Contact:NA	Street Address:		
City:	State:	Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year 1953

Ending Year present

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type: (check all that apply)	Source Waste Quantity: (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

- ☐ Yes
- ☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles (check all that apply):

- ☐ Municipal
- ☐ Private
- ☑ None

Is There a Suspected Release to Ground Water[1]:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Wells Been Identified:

- ☐ Yes
- ☑ No

If Yes, Enter Primary Target Population:

___ People[3]

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile _____

>1/4 - 1/2 Mile _____

>1/2 - 1 Mile _____

>1 - 2 Mile _____

>2 - 3 Mile _____

>3 - 4 Mile _____

Total Within 4 Miles[4] _____

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

- ☐ Yes
- ☑ No

Nearest Designated Wellhead Protection Area[6]:

- ☐ Underlies Site
- ☐ >0-4 Miles
- ☑ None Within 4 Miles

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

- ☑ Stream
- ☑ River
- ☐ Pond
- ☐ Lake
- ☐ Bay
- ☐ Ocean
- ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

__1300_ Feet

_____ Miles

Is There a Suspected Release to Surface Water[1]:

- ☑ Yes
- ☐ No

Site is Located in:

- ☐ Annual - 10 yr Floodplain
- ☐ >10yr - 100yr Floodplain
- ☐ >100yr - 500yr Floodplain
- ☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Intakes Been Identified:

- ☐ Yes
- ☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery: _____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☑ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: __1,100___ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☑ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Piscataway Creek___	_____	
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

60,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____
Total Within 4 Miles [3-5]	_____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: Dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °48'19.69"	Longitude: 76 °52'58.03"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name:Building 1228: Hangar 9

Site Description: BLDG 1228 is located behind the secured pathfinder gate, in a restricted area, on the central side of the west portion of the JBA airfield and is currently occupied by the 113th WG/201st AS . This Hangar is currently configured with an AFFF fire suppressant system (FSS) and a secondary containment system. No documented AFFF releases at this location. Based on the operational history, there is potential for PFCs being released into the environment at this location.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:

Type of Ownership:

☐ Private ☐ County
☑ Federal Agency ☑ Municipal
Name: DOD ☐ Not Specified
☐ State ☐ Other_____
☐ Indian

Type of Ownership:

☐ Private ☐ County
☐ Federal Agency ☐ Municipal
Name: _____ ☐ Not Specified
☐ State ☐ Other_____
☐ Indian

3. Site Evaluator Information

Name of Evaluator: Michael Roooney	Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/25/15
Street Address:11107 Sunset Hills Road, Suite 400		City:Reston	State: Virginia
Name of EPA or State Agency Contact:NA		Street Address:	
City:	State:	Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year 1954

Ending Year present

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type (check all that apply)	Source Waste Quantity (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

- ☐ Yes
- ☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles (check all that apply):

- ☐ Municipal
- ☐ Private
- ☑ None

Is There a Suspected Release to Ground Water[1]:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Wells Been Identified:

- ☐ Yes
- ☑ No

If Yes, Enter Primary Target Population:

___ People[3]

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile _____

>1/4 - 1/2 Mile _____

>1/2 - 1 Mile _____

>1 - 2 Mile _____

>2 - 3 Mile _____

>3 - 4 Mile _____

Total Within 4 Miles[4] _____

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

- ☐ Yes
- ☑ No

Nearest Designated Wellhead Protection Area[6]:

- ☐ Underlies Site
- ☐ >0-4 Miles
- ☑ None Within 4 Miles

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

- ☑ Stream
- ☑ River
- ☐ Pond
- ☐ Lake
- ☐ Bay
- ☐ Ocean
- ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

__1300_ Feet

_____ Miles

Is There a Suspected Release to Surface Water[1]:

- ☑ Yes
- ☐ No

Site is Located in:

- ☐ Annual - 10 yr Floodplain
- ☐ >10yr - 100yr Floodplain
- ☐ >100yr - 500yr Floodplain
- ☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Intakes Been Identified:

- ☐ Yes
- ☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery: _____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☑ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: __1,100___ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☑ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Piscataway Creek___	_____	
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

60,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____
Total Within 4 Miles [3-5]	_____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: Dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °48'31.94"	Longitude: 76 °52'43.76"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name:Building 1279: Hangar 6

Site Description: BLDG 1279 is located behind the secured pathfinder gate, in a restricted area, on the central side of the west portion of the JBA airfield and is currently occupied by the 89th WG with operations managed by Dyncorp . This Hangar is currently configured with a HEF fire suppressant system (FSS) and a secondary containment system, but had AFFF charging the FSS historically. AFFF releases occured at this location. Based on the operational history, there is potential for PFCs being released into the environment at this location.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:
Type of Ownership: ☐ Private ☑ Federal Agency Name: DOD ☐ State ☐ Indian ☐ County ☑ Municipal ☐ Not Specified ☐ Other_____			Type of Ownership: ☐ Private ☐ Federal Agency Name: _____ ☐ State ☐ Indian ☐ County ☐ Municipal ☐ Not Specified ☐ Other_____		

3. Site Evaluator Information

Name of Evaluator: Michael Roooney		Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/24/15
Street Address:11107 Sunset Hills Road, Suite 400		City:Reston		State: Virginia
Name of EPA or State Agency Contact:NA		Street Address:		
City:	State:		Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year 1960

Ending Year present

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type (check all that apply)	Source Waste Quantity (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

- ☐ Yes
- ☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles (check all that apply):

- ☐ Municipal
- ☐ Private
- ☑ None

Is There a Suspected Release to Ground Water[1]:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Wells Been Identified:

- ☐ Yes
- ☑ No

If Yes, Enter Primary Target Population:

___ People[3]

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile _____

>1/4 - 1/2 Mile _____

>1/2 - 1 Mile _____

>1 - 2 Mile _____

>2 - 3 Mile _____

>3 - 4 Mile _____

Total Within 4 Miles[4] _____

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

- ☐ Yes
- ☑ No

Nearest Designated Wellhead Protection Area[6]:

- ☐ Underlies Site
- ☐ >0-4 Miles
- ☑ None Within 4 Miles

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

- ☑ Stream
- ☑ River
- ☐ Pond
- ☐ Lake
- ☐ Bay
- ☐ Ocean
- ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

__1300_ Feet

_____ Miles

Is There a Suspected Release to Surface Water[1]:

- ☑ Yes
- ☐ No

Site is Located in:

- ☐ Annual - 10 yr Floodplain
- ☐ >10yr - 100yr Floodplain
- ☐ >100yr - 500yr Floodplain
- ☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Intakes Been Identified:

- ☐ Yes
- ☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery: _____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☑ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: __1,100___ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☑ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Piscataway Creek___	_____	
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

60,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____
Total Within 4 Miles [3-5]	_____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: Dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °48'32.07"	Longitude: 76 °52'48.42"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name:Building 1280: Hangar 7

Site Description: BLDG 1280 is located behind the secured pathfinder gate, in a restricted area, on the central side of the west portion of the JBA airfield and is currently occupied by the 89th WG with operations managed by Dyncorp . This Hangar is currently configured with a HEF fire suppressant system (FSS) and a secondary containment system, but had AFFF charging the FSS historically. AFFF releases occured at this location. Based on the operational history, there is potential for PFCs being released into the environment at this location.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:
Type of Ownership: ☐ Private ☑ Federal Agency Name: DOD ☐ State ☐ Indian ☐ County ☑ Municipal ☐ Not Specified ☐ Other_____			Type of Ownership: ☐ Private ☐ Federal Agency Name: _____ ☐ State ☐ Indian ☐ County ☐ Municipal ☐ Not Specified ☐ Other_____		

3. Site Evaluator Information

Name of Evaluator: Michael Roooney	Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/24/15
Street Address:11107 Sunset Hills Road, Suite 400	City:Reston		State: Virginia
Name of EPA or State Agency Contact:NA	Street Address:		
City:	State:	Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year 1960

Ending Year present

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type (check all that apply)	Source Waste Quantity (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

- ☐ Yes
- ☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles (check all that apply):

- ☐ Municipal
- ☐ Private
- ☑ None

Is There a Suspected Release to Ground Water[1]:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Wells Been Identified:

- ☐ Yes
- ☑ No

If Yes, Enter Primary Target Population:

___ People[3]

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile _____

>1/4 - 1/2 Mile _____

>1/2 - 1 Mile _____

>1 - 2 Mile _____

>2 - 3 Mile _____

>3 - 4 Mile _____

Total Within 4 Miles[4] _____

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

- ☐ Yes
- ☑ No

Nearest Designated Wellhead Protection Area[6]:

- ☐ Underlies Site
- ☐ >0-4 Miles
- ☑ None Within 4 Miles

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

- ☑ Stream
- ☑ River
- ☐ Pond
- ☐ Lake
- ☐ Bay
- ☐ Ocean
- ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

__1300_ Feet

_____ Miles

Is There a Suspected Release to Surface Water[1]:

- ☑ Yes
- ☐ No

Site is Located in:

- ☐ Annual - 10 yr Floodplain
- ☐ >10yr - 100yr Floodplain
- ☐ >100yr - 500yr Floodplain
- ☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Intakes Been Identified:

- ☐ Yes
- ☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery: _____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☑ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: __1,100___ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☑ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Meetinghouse Branch___	_____	
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

60,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____
Total Within 4 Miles [3-5]	_____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: Dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °48'13.33"	Longitude: 76 °52'50.82"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name:Building 1288: Hangar 18

Site Description: BLDG 1288 is located behind the secured pathfinder gate, in a restricted area, on the central side of the west portion of the JBA airfield and is currently occupied by the 89th . This Hangar is currently configured with an AFFF fire suppressant system (FSS) and a secondary containment system. AFFF releases occured at this location. Based on the operational history, there is potential for PFCs being released into the environment at this location.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:
Type of Ownership: ☐ Private ☑ Federal Agency Name: DOD ☐ State ☐ Indian ☐ County ☑ Municipal ☐ Not Specified ☐ Other_____			Type of Ownership: ☐ Private ☐ Federal Agency Name: _____ ☐ State ☐ Indian ☐ County ☐ Municipal ☐ Not Specified ☐ Other_____		

3. Site Evaluator Information

Name of Evaluator: Michael Roooney	Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/25/15
Street Address:11107 Sunset Hills Road, Suite 400	City:Reston		State: Virginia
Name of EPA or State Agency Contact:NA	Street Address:		
City:	State:	Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year 1987

Ending Year present

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type: (check all that apply)	Source Waste Quantity: (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

☐ Yes
☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles
(check all that apply):

☐ Municipal
☐ Private
☑ None

Is There a Suspected Release to Ground Water[1]:

☐ Yes
☑ No

Have Primary Target Drinking Water Wells Been Identified:

☐ Yes
☑ No

If Yes, Enter Primary Target Population:

___ People[3]

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

☐ Yes
☑ No

Nearest Designated Wellhead Protection Area[6]:

☐ Underlies Site
☐ >0-4 Miles
☑ None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile _____

>1/4 - 1/2 Mile _____

>1/2 - 1 Mile _____

>1 - 2 Mile _____

>2 - 3 Mile _____

>3 - 4 Mile _____

Total Within 4 Miles[4] _____

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

☑ Stream ☑ River ☐ Pond ☐ Lake
☐ Bay ☐ Ocean ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

__4800_ Feet
_____ Miles

Is There a Suspected Release to Surface Water[1]:

☑ Yes
☐ No

Site is Located in:

☐ Annual - 10 yr Floodplain
☐ >10yr - 100yr Floodplain
☐ >100yr - 500yr Floodplain
☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Drinking Water Intakes Been Identified:

☐ Yes
☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery:
_____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☐ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: ____ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☐ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Piscataway Creek___	_____	
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

60,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____

Total Within 4 Miles [3-5] _____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: Dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °48'44.84"	Longitude: 76 °53'17.24"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name: BLDG 1539- Communications BLDG

Building 1539 is a communications building located at the intersection of D Street and Alabama Ave on the west side of JBA. This building is listed on the Real Property record as having an AFFF fire suppression system. This is a secure Bldg that house communication equipment. The fire suppression system is charged with HFC-227. There is no AFFF at this location. Based on the operational history, there is limited oppertunitiy for PFCs being released into the environment at this location.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:
Type of Ownership: ☐ Private ☑ Federal Agency Name: DOD ☐ State ☐ Indian ☐ County ☑ Municipal ☐ Not Specified ☐ Other_____			Type of Ownership: ☐ Private ☐ Federal Agency Name: _____ ☐ State ☐ Indian ☐ County ☐ Municipal ☐ Not Specified ☐ Other_____		

3. Site Evaluator Information

Name of Evaluator: Michael Roooney	Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/25/15
Street Address:11107 Sunset Hills Road, Suite 400	City:Reston		State: Virginia
Name of EPA or State Agency Contact:NA	Street Address:		
City:	State:	Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year _unknown
Ending Year present

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type: (check all that apply)	Source Waste Quantity: (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

- ☐ Yes
- ☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles (check all that apply):

- ☐ Municipal
- ☐ Private
- ☑ None

Is There a Suspected Release to Ground Water[1]:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Wells Been Identified:

- ☐ Yes
- ☑ No

If Yes, Enter Primary Target Population:

___ People[3]

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

- ☐ Yes
- ☑ No

Nearest Designated Wellhead Protection Area[6]:

- ☐ Underlies Site
- ☐ >0-4 Miles
- ☑ None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile	_____
>1/4 - 1/2 Mile	_____
>1/2 - 1 Mile	_____
>1 - 2 Mile	_____
>2 - 3 Mile	_____
>3 - 4 Mile	_____
Total Within 4 Miles[4]	_____

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

- ☑ Stream
- ☑ River
- ☐ Pond
- ☐ Lake
- ☐ Bay
- ☐ Ocean
- ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

__ Feet

___1.9_____ Miles

Is There a Suspected Release to Surface Water[1]:

- ☑ Yes
- ☐ No

Site is Located in:

- ☐ Annual - 10 yr Floodplain
- ☐ >10yr - 100yr Floodplain
- ☐ >100yr - 500yr Floodplain
- ☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Intakes Been Identified:

- ☐ Yes
- ☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery:

_____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):
_____	_____
_____	_____
_____	_____
_____	_____

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☐ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: ____ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☐ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Meetinghouse Branch___		_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

64,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____
Total Within 4 Miles [3-5]	_____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: Dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °48'37.74"	Longitude: 76 °52'43.10"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name:Building 1714: Hangar 5

Site Description: BLDG 1714 is located behind the secured pathfinder gate, in a restricted area, on the central side of the west portion of the JBA airfield and is currently occupied by the 375th AW and DIA with operations managed by Dyncorp . This Hangar is currently configured with a HEF fire suppressant system (FSS) and a secondary containment system, but had AFFF charging the FSS historically. Multiple AFFF releases occured at this location. Based on the operational history, there is potential for PFCs being released into the environment at this location.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:
Type of Ownership: ☐ Private ☑ Federal Agency Name: DOD ☐ State ☐ Indian ☐ County ☑ Municipal ☐ Not Specified ☐ Other_____			Type of Ownership: ☐ Private ☐ Federal Agency Name: _____ ☐ State ☐ Indian ☐ County ☐ Municipal ☐ Not Specified ☐ Other_____		

3. Site Evaluator Information

Name of Evaluator: Michael Roooney		Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/24/15
Street Address:11107 Sunset Hills Road, Suite 400		City:Reston		State: Virginia
Name of EPA or State Agency Contact:NA		Street Address:		
City:	State:		Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year 1958

Ending Year present

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type (check all that apply)	Source Waste Quantity (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

- ☐ Yes
- ☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles (check all that apply):

- ☐ Municipal
- ☐ Private
- ☑ None

Is There a Suspected Release to Ground Water[1]:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Wells Been Identified:

- ☐ Yes
- ☑ No

If Yes, Enter Primary Target Population:

___ People[3]

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile _____

>1/4 - 1/2 Mile _____

>1/2 - 1 Mile _____

>1 - 2 Mile _____

>2 - 3 Mile _____

>3 - 4 Mile _____

Total Within 4 Miles[4] _____

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

- ☐ Yes
- ☑ No

Nearest Designated Wellhead Protection Area[6]:

- ☐ Underlies Site
- ☐ >0-4 Miles
- ☑ None Within 4 Miles

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

- ☑ Stream
- ☑ River
- ☐ Pond
- ☐ Lake
- ☐ Bay
- ☐ Ocean
- ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

__1300_ Feet

_____ Miles

Is There a Suspected Release to Surface Water[1]:

- ☑ Yes
- ☐ No

Site is Located in:

- ☐ Annual - 10 yr Floodplain
- ☐ >10yr - 100yr Floodplain
- ☐ >100yr - 500yr Floodplain
- ☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Intakes Been Identified:

- ☐ Yes
- ☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery: _____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☑ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: __1,100___ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☑ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Meetinghouse Branch_____		_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

60,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____
Total Within 4 Miles [3-5]	_____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: Dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification	
State:	CERCLIS #:
CERCLIS Discovery Date:	

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °48'43.55"	Longitude: 76 °52'43.84"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name:Building 1734: Hangar 4

Site Description: BLDG 1734 is located behind the secured pathfinder gate, in a restricted area, on the north side of the west portion of the JBA airfield and is currently occupied by the 89th WG with operations managed by Dyncorp . This Hangar is currently configured with a HEF fire suppressant system (FSS) and a secondary containment system, but had AFFF charging the FSS historically. No documented AFFF at this location. Based on the operational history, there is potential for PFCs being released into the environment at this location.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:
Type of Ownership: ☐ Private ☑ Federal Agency Name: DOD ☐ State ☐ Indian ☐ County ☑ Municipal ☐ Not Specified ☐ Other_____			Type of Ownership: ☐ Private ☐ Federal Agency Name: _____ ☐ State ☐ Indian ☐ County ☐ Municipal ☐ Not Specified ☐ Other_____		

3. Site Evaluator Information

Name of Evaluator: Michael Roooney			Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/24/15
Street Address:11107 Sunset Hills Road, Suite 400			City:Reston		State: Virginia
Name of EPA or State Agency Contact:NA			Street Address:		
City:		State:		Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year 1960

Ending Year present

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type (check all that apply)	Source Waste Quantity (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

- ☐ Yes
- ☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles (check all that apply):

- ☐ Municipal
- ☐ Private
- ☑ None

Is There a Suspected Release to Ground Water[1]:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Wells Been Identified:

- ☐ Yes
- ☑ No

If Yes, Enter Primary Target Population:

___ People[3]

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile _____

>1/4 - 1/2 Mile _____

>1/2 - 1 Mile _____

>1 - 2 Mile _____

>2 - 3 Mile _____

>3 - 4 Mile _____

Total Within 4 Miles[4] _____

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

- ☐ Yes
- ☑ No

Nearest Designated Wellhead Protection Area[6]:

- ☐ Underlies Site
- ☐ >0-4 Miles
- ☑ None Within 4 Miles

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

- ☑ Stream
- ☑ River
- ☐ Pond
- ☐ Lake
- ☐ Bay
- ☐ Ocean
- ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

__1300_ Feet

_____ Miles

Is There a Suspected Release to Surface Water[1]:

- ☑ Yes
- ☐ No

Site is Located in:

- ☐ Annual - 10 yr Floodplain
- ☐ >10yr - 100yr Floodplain
- ☐ >100yr - 500yr Floodplain
- ☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Intakes Been Identified:

- ☐ Yes
- ☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery: _____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☑ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: __1,100___ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☑ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Henson Creek _____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

60,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____
Total Within 4 Miles [3-5]	_____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: Dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °48'49.19"	Longitude: 76 °52'44.05"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name:Building 1754: Hangar 3

Site Description: BLDG 1754 is located behind the secured pathfinder gate, in a restricted area, on the north side of the west portion of the JBA airfield and is currently occupied by the 89th WG with operations managed by Dyncorp . This Hangar is currently configured with a HEF fire suppressant system (FSS) and a secondary containment system, but had AFFF charging the FSS historically. No documented AFFF at this location. Based on the operational history, there is potential for PFCs being released into the environment at this location.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:

Type of Ownership:

☐ Private ☐ County
☑ Federal Agency ☑ Municipal
Name: DOD ☐ Not Specified
☐ State ☐ Other_____
☐ Indian

Type of Ownership:

☐ Private ☐ County
☐ Federal Agency ☐ Municipal
Name: _____ ☐ Not Specified
☐ State ☐ Other_____
☐ Indian

3. Site Evaluator Information

Name of Evaluator: Michael Roooney	Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/24/15
Street Address:11107 Sunset Hills Road, Suite 400	City:Reston		State: Virginia
Name of EPA or State Agency Contact:NA	Street Address:		
City:	State:	Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year 1961

Ending Year present

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type: (check all that apply)	Source Waste Quantity: (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

- ☐ Yes
- ☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles (check all that apply):

- ☐ Municipal
- ☐ Private
- ☑ None

Is There a Suspected Release to Ground Water[1]:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Wells Been Identified:

- ☐ Yes
- ☑ No

If Yes, Enter Primary Target Population:

___ People[3]

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile _____

>1/4 - 1/2 Mile _____

>1/2 - 1 Mile _____

>1 - 2 Mile _____

>2 - 3 Mile _____

>3 - 4 Mile _____

Total Within 4 Miles[4] _____

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

- ☐ Yes
- ☑ No

Nearest Designated Wellhead Protection Area[6]:

- ☐ Underlies Site
- ☐ >0-4 Miles
- ☑ None Within 4 Miles

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

- ☑ Stream
- ☑ River
- ☐ Pond
- ☐ Lake
- ☐ Bay
- ☐ Ocean
- ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

__1300_ Feet

_____ Miles

Is There a Suspected Release to Surface Water[1]:

- ☑ Yes
- ☐ No

Site is Located in:

- ☐ Annual - 10 yr Floodplain
- ☐ >10yr - 100yr Floodplain
- ☐ >100yr - 500yr Floodplain
- ☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Intakes Been Identified:

- ☐ Yes
- ☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery: _____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☑ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: __1,100___ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☑ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Henson Creek _____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

60,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____
Total Within 4 Miles [3-5]	_____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: Dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °49'0.46"	Longitude: 76 °52'43.98"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name:Building 1794: Hangar 2

Site Description: BLDG 1794 is located behind the secured pathfinder gate, in a restricted area, on the north side of the west portion of the JBA airfield and is currently occupied by the DOE and Army with operations managed by Dyncorp . This Hangar is currently configured with a HEF fire suppressant system (FSS) and a secondary containment system, but has had AFFF charging the FSS historically. No documented AFFF at this location. Based on the operational history, there is potential for PFCs being released into the environment at this location.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:

Type of Ownership:

☐ Private ☐ County
☑ Federal Agency ☑ Municipal
Name: DOD ☐ Not Specified
☐ State ☐ Other_____
☐ Indian

Type of Ownership:

☐ Private ☐ County
☐ Federal Agency ☐ Municipal
Name: _____ ☐ Not Specified
☐ State ☐ Other_____
☐ Indian

3. Site Evaluator Information

Name of Evaluator: Michael Roooney	Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/24/15
Street Address:11107 Sunset Hills Road, Suite 400		City:Reston	State: Virginia
Name of EPA or State Agency Contact:NA		Street Address:	
City:	State:	Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year 1969

Ending Year present

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type (check all that apply)	Source Waste Quantity (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

- ☐ Yes
- ☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles (check all that apply):

- ☐ Municipal
- ☐ Private
- ☑ None

Is There a Suspected Release to Ground Water[1]:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Wells Been Identified:

- ☐ Yes
- ☑ No

If Yes, Enter Primary Target Population:

___ People[3]

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile _____

>1/4 - 1/2 Mile _____

>1/2 - 1 Mile _____

>1 - 2 Mile _____

>2 - 3 Mile _____

>3 - 4 Mile _____

Total Within 4 Miles[4] _____

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

- ☐ Yes
- ☑ No

Nearest Designated Wellhead Protection Area[6]:

- ☐ Underlies Site
- ☐ >0-4 Miles
- ☑ None Within 4 Miles

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

- ☑ Stream
- ☑ River
- ☐ Pond
- ☐ Lake
- ☐ Bay
- ☐ Ocean
- ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

__1300_ Feet

_____ Miles

Is There a Suspected Release to Surface Water[1]:

- ☑ Yes
- ☐ No

Site is Located in:

- ☐ Annual - 10 yr Floodplain
- ☐ >10yr - 100yr Floodplain
- ☐ >100yr - 500yr Floodplain
- ☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Intakes Been Identified:

- ☐ Yes
- ☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery: _____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☑ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: __1,100___ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☑ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Henson Creek _____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

60,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____
Total Within 4 Miles [3-5]	_____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: _Dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °49'5.96"	Longitude: 76 °52'43.99"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name:Building 1914: Hangar 1

Site Description: BLDG 1914 is located behind the secured pathfinder gate, in a restricted area, on the north side of the west portion of the JBA airfield and is currently occupied by 89th Air Wing with operations managed by Dyncorp . This Hangar is currently configured with a HEF fire suppressant system(FSS) and a secondary containment system, but is belived to have AFFF charging the FSS historically. There are no documented AFFF releases at this location. Based on the operational history, there is potential for PFCs being released into the environment at this location.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:

Type of Ownership:

☐ Private ☐ County
☑ Federal Agency ☑ Municipal
Name: DOD ☐ Not Specified
☐ State ☐ Other_____
☐ Indian

Type of Ownership:

☐ Private ☐ County
☐ Federal Agency ☐ Municipal
Name: _____ ☐ Not Specified
☐ State ☐ Other_____
☐ Indian

3. Site Evaluator Information

Name of Evaluator: Michael Roooney	Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/24/15
Street Address:11107 Sunset Hills Road, Suite 400	City:Reston		State: Virginia
Name of EPA or State Agency Contact:NA	Street Address:		
City:	State:	Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year 1961

Ending Year present

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type: (check all that apply)	Source Waste Quantity: (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

- ☐ Yes
- ☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles (check all that apply):

- ☐ Municipal
- ☐ Private
- ☑ None

Is There a Suspected Release to Ground Water[1]:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Wells Been Identified:

- ☐ Yes
- ☑ No

If Yes, Enter Primary Target Population:

___ People[3]

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile _____

>1/4 - 1/2 Mile _____

>1/2 - 1 Mile _____

>1 - 2 Mile _____

>2 - 3 Mile _____

>3 - 4 Mile _____

Total Within 4 Miles[4] _____

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

- ☐ Yes
- ☑ No

Nearest Designated Wellhead Protection Area[6]:

- ☐ Underlies Site
- ☐ >0-4 Miles
- ☑ None Within 4 Miles

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

- ☑ Stream
- ☑ River
- ☐ Pond
- ☐ Lake
- ☐ Bay
- ☐ Ocean
- ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

__1300_ Feet

_____ Miles

Is There a Suspected Release to Surface Water[1]:

- ☑ Yes
- ☐ No

Site is Located in:

- ☐ Annual - 10 yr Floodplain
- ☐ >10yr - 100yr Floodplain
- ☐ >100yr - 500yr Floodplain
- ☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Intakes Been Identified:

- ☐ Yes
- ☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery: _____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☑ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: __1,100___ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☑ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Henson Creek _____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

60,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____
Total Within 4 Miles [3-5]	_____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: Dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °49'11.60"	Longitude: 76 °52'42.40"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name:Building 1915: West Side Fuel Cell

Site Description: BLDG 1915 is located behind the secured pathfinder gate, in a restricted area, on the north side of the west portion of the JBA airfield and is currently occupied by 89th Air Wing with operations managed by Dyncorp . This Hangar is currently configured with a HEF fire suppressant system and a secondary containment system, but has had AFFF charging the suppression system historically. There is a historical AFFF release at this location. Based on the operational history, there is potential for PFCs being released into the environment at this location.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:
Type of Ownership: ☐ Private ☑ Federal Agency Name: DOD ☐ State ☐ Indian ☐ County ☑ Municipal ☐ Not Specified ☐ Other_____			Type of Ownership: ☐ Private ☐ Federal Agency Name: _____ ☐ State ☐ Indian ☐ County ☐ Municipal ☐ Not Specified ☐ Other_____		

3. Site Evaluator Information

Name of Evaluator: Michael Roooney		Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/24/15
Street Address:11107 Sunset Hills Road, Suite 400		City:Reston		State: Virginia
Name of EPA or State Agency Contact:NA		Street Address:		
City:	State:	Telephone:		

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year 1969

Ending Year present

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type (check all that apply)	Source Waste Quantity (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

- ☐ Yes
- ☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles (check all that apply):

- ☐ Municipal
- ☐ Private
- ☑ None

Is There a Suspected Release to Ground Water[1]:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Wells Been Identified:

- ☐ Yes
- ☑ No

If Yes, Enter Primary Target Population:

___ People[3]

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile _____

>1/4 - 1/2 Mile _____

>1/2 - 1 Mile _____

>1 - 2 Mile _____

>2 - 3 Mile _____

>3 - 4 Mile _____

Total Within 4 Miles[4] _____

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

- ☐ Yes
- ☑ No

Nearest Designated Wellhead Protection Area[6]:

- ☐ Underlies Site
- ☐ >0-4 Miles
- ☑ None Within 4 Miles

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

- ☑ Stream
- ☑ River
- ☐ Pond
- ☐ Lake
- ☐ Bay
- ☐ Ocean
- ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

__1300_ Feet

_____ Miles

Is There a Suspected Release to Surface Water[1]:

- ☑ Yes
- ☐ No

Site is Located in:

- ☐ Annual - 10 yr Floodplain
- ☐ >10yr - 100yr Floodplain
- ☐ >100yr - 500yr Floodplain
- ☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Intakes Been Identified:

- ☐ Yes
- ☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery: _____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☑ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: __1,100___ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☑ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Henson Creek _____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

60,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____
Total Within 4 Miles [3-5]	_____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: Dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °48'9.92"	Longitude: 76 °51'35.43"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name:Building 2487: MD State Police

Site Description: BLDG 2487 is located behind the secured pathfinder gate, in a restricted area, on the central portion of the eastern side of the JBA airfield and is currently occupied by the Maryland Satte Police . This Hangar is currently configured with an AFFF fire suppressant system (FSS). Equipped with an OWS containment system. No odcumneted AFFF releases at this location. Based on the operational history, there is potential for PFCs being released into the environment at this location.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:
Type of Ownership: ☐ Private ☑ Federal Agency Name: DOD ☐ State ☐ Indian ☐ County ☑ Municipal ☐ Not Specified ☐ Other_____			Type of Ownership: ☐ Private ☐ Federal Agency Name: _____ ☐ State ☐ Indian ☐ County ☐ Municipal ☐ Not Specified ☐ Other_____		

3. Site Evaluator Information

Name of Evaluator: Michael Roooney	Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/25/15
Street Address:11107 Sunset Hills Road, Suite 400	City:Reston		State: Virginia
Name of EPA or State Agency Contact:NA	Street Address:		
City:	State:	Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year _unknown
Ending Year present

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type: (check all that apply)	Source Waste Quantity: (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

- ☐ Yes
- ☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles (check all that apply):

- ☐ Municipal
- ☐ Private
- ☑ None

Is There a Suspected Release to Ground Water[1]:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Wells Been Identified:

- ☐ Yes
- ☑ No

If Yes, Enter Primary Target Population:

___ People[3]

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

- ☐ Yes
- ☑ No

Nearest Designated Wellhead Protection Area[6]:

- ☐ Underlies Site
- ☐ >0-4 Miles
- ☑ None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile	_____
>1/4 - 1/2 Mile	_____
>1/2 - 1 Mile	_____
>1 - 2 Mile	_____
>2 - 3 Mile	_____
>3 - 4 Mile	_____
Total Within 4 Miles[4]	_____

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

- ☑ Stream
- ☑ River
- ☐ Pond
- ☐ Lake
- ☐ Bay
- ☐ Ocean
- ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

_6200__ Feet

_____ Miles

Is There a Suspected Release to Surface Water[1]:

- ☑ Yes
- ☐ No

Site is Located in:

- ☐ Annual - 10 yr Floodplain
- ☐ >10yr - 100yr Floodplain
- ☐ >100yr - 500yr Floodplain
- ☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Intakes Been Identified:

- ☐ Yes
- ☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery: _____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☐ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: ____ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☐ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Piscataway Creek___	_____	
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

54,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____
Total Within 4 Miles [3-5]	_____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: Dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °47'57.67"	Longitude: 76 °51'32.93"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name:Building 2489: ASA

Site Description: BLDG 2489 is located behind the secured pathfinder gate, in a restricted area, on the central portion of the eastern side of the JBA airfield and is currently occupied by the 113th . This Hangar is configured with a HEF fire suppressant system (FSS) and never had an AFFF FSS. Equipped with a containment system. No documneted AFFF releases at this location. Based on the operational history, there is a low probability for PFCs being released into the environment at this location as a result oof the Hnager operations. However, this site is home of previous FTA FT-04.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:

Type of Ownership:

☐ Private ☐ County
☑ Federal Agency ☑ Municipal
Name: DOD ☐ Not Specified
☐ State ☐ Other_____
☐ Indian

Type of Ownership:

☐ Private ☐ County
☐ Federal Agency ☐ Municipal
Name: _____ ☐ Not Specified
☐ State ☐ Other_____
☐ Indian

3. Site Evaluator Information

Name of Evaluator: Michael Roooney	Agency/Organization: HydroGeoLogic, Inc.	Date Prepared:2/25/15
Street Address:11107 Sunset Hills Road, Suite 400	City:Reston	State: Virginia
Name of EPA or State Agency Contact:NA	Street Address:	
City:	State:	Telephone:

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year _2008
Ending Year present

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type: (check all that apply)	Source Waste Quantity: (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

- ☐ Yes
- ☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles (check all that apply):

- ☐ Municipal
- ☐ Private
- ☑ None

Is There a Suspected Release to Ground Water[1]:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Wells Been Identified:

- ☐ Yes
- ☑ No

If Yes, Enter Primary Target Population:

___ People[3]

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

- ☐ Yes
- ☑ No

Nearest Designated Wellhead Protection Area[6]:

- ☐ Underlies Site
- ☐ >0-4 Miles
- ☑ None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile	_____
>1/4 - 1/2 Mile	_____
>1/2 - 1 Mile	_____
>1 - 2 Mile	_____
>2 - 3 Mile	_____
>3 - 4 Mile	_____
Total Within 4 Miles[4]	_____

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

- ☑ Stream
- ☑ River
- ☐ Pond
- ☐ Lake
- ☐ Bay
- ☐ Ocean
- ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

_6000__ Feet

_____ Miles

Is There a Suspected Release to Surface Water[1]:

- ☑ Yes
- ☐ No

Site is Located in:

- ☐ Annual - 10 yr Floodplain
- ☐ >10yr - 100yr Floodplain
- ☐ >100yr - 500yr Floodplain
- ☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Intakes Been Identified:

- ☐ Yes
- ☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery: _____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☐ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: ____ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☐ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Piscataway Creek___	_____	
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

54,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____
Total Within 4 Miles [3-5]	_____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: Dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °47'52.96"	Longitude: 76 °51'32.18"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name:Building 2491 FTA

Site Description: Building 2491 FTA is an active fire training area that is located in the eastern portion of JBA. Fire training operations occurred between the 1995- present.The site consists of Building 2491, a mock aircraft on a lined burn pit, a lined recirculating pond that is approximately 5,625 square feet, and a burn building.Fire training activities vary but include time and distance trinaing that includes use of AFFF, the fire equipment failed a test which now requires monthly equipment tests that discharges AFFF on all equipment to ensure it is working properly.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:
Type of Ownership: ☐ Private ☑ Federal Agency Name: DOD ☐ State ☐ Indian ☐ County ☑ Municipal ☐ Not Specified ☐ Other_____			Type of Ownership: ☐ Private ☐ Federal Agency Name: _____ ☐ State ☐ Indian ☐ County ☐ Municipal ☐ Not Specified ☐ Other_____		

3. Site Evaluator Information

Name of Evaluator: Michael Roooney		Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/24/15
Street Address:11107 Sunset Hills Road, Suite 400		City:Reston		State: Virginia
Name of EPA or State Agency Contact:NA		Street Address:		
City:	State:		Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year 1995

Ending Year present

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type: (check all that apply)	Source Waste Quantity: (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

- ☐ Yes
- ☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles (check all that apply):

- ☐ Municipal
- ☐ Private
- ☑ None

Is There a Suspected Release to Ground Water[1]:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Wells Been Identified:

- ☐ Yes
- ☑ No

If Yes, Enter Primary Target Population:

___ People[3]

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile _____

>1/4 - 1/2 Mile _____

>1/2 - 1 Mile _____

>1 - 2 Mile _____

>2 - 3 Mile _____

>3 - 4 Mile _____

Total Within 4 Miles[4] _____

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

- ☐ Yes
- ☑ No

Nearest Designated Wellhead Protection Area[6]:

- ☐ Underlies Site
- ☐ >0-4 Miles
- ☑ None Within 4 Miles

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

- ☑ Stream
- ☑ River
- ☐ Pond
- ☐ Lake
- ☐ Bay
- ☐ Ocean
- ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

__1300_ Feet

_____ Miles

Is There a Suspected Release to Surface Water[1]:

- ☑ Yes
- ☐ No

Site is Located in:

- ☐ Annual - 10 yr Floodplain
- ☐ >10yr - 100yr Floodplain
- ☐ >100yr - 500yr Floodplain
- ☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Intakes Been Identified:

- ☐ Yes
- ☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery: _____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☑ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: __1,300___ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☑ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Piscataaway Creek	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

60,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____
Total Within 4 Miles [3-5]	_____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: Dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °49'12.14"	Longitude: 76 °51'29.56"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name:Building 3002: 113th Fuel Cell

Site Description: BLDG 3002 is located behind the secured pathfinder gate, in a restricted area, on the central portion of the eastern side of the JBA airfield and is currently occupied by the 113th . This Hangar is currently configured with an AFFF fire suppressant system (FSS). Equipped with an OWS containment system. AFFF releases occured at this location. Based on the operational history, there is potential for PFCs being released into the environment at this location.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:
Type of Ownership: ☐ Private ☑ Federal Agency Name: DOD ☐ State ☐ Indian ☐ County ☑ Municipal ☐ Not Specified ☐ Other_____			Type of Ownership: ☐ Private ☐ Federal Agency Name: _____ ☐ State ☐ Indian ☐ County ☐ Municipal ☐ Not Specified ☐ Other_____		

3. Site Evaluator Information

Name of Evaluator: Michael Roooney	Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/25/15
Street Address:11107 Sunset Hills Road, Suite 400	City:Reston		State: Virginia
Name of EPA or State Agency Contact:NA	Street Address:		
City:	State:	Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year 1982

Ending Year present

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type: (check all that apply)	Source Waste Quantity: (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

- ☐ Yes
- ☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles (check all that apply):

- ☐ Municipal
- ☐ Private
- ☑ None

Is There a Suspected Release to Ground Water[1]:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Wells Been Identified:

- ☐ Yes
- ☑ No

If Yes, Enter Primary Target Population:

___ People[3]

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

- ☐ Yes
- ☑ No

Nearest Designated Wellhead Protection Area[6]:

- ☐ Underlies Site
- ☐ >0-4 Miles
- ☑ None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile	_____
>1/4 - 1/2 Mile	_____
>1/2 - 1 Mile	_____
>1 - 2 Mile	_____
>2 - 3 Mile	_____
>3 - 4 Mile	_____
Total Within 4 Miles[4]	_____

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

- ☑ Stream
- ☑ River
- ☐ Pond
- ☐ Lake
- ☐ Bay
- ☐ Ocean
- ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

_6200__ Feet

_____ Miles

Is There a Suspected Release to Surface Water[1]:

- ☑ Yes
- ☐ No

Site is Located in:

- ☐ Annual - 10 yr Floodplain
- ☐ >10yr - 100yr Floodplain
- ☐ >100yr - 500yr Floodplain
- ☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Intakes Been Identified:

- ☐ Yes
- ☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery: _____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☐ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: ____ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☐ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Piscataway Creek___	_____	
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

54,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____
Total Within 4 Miles [3-5]	_____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: Dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °48'55.49"	Longitude: 76 °51'25.65"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name: BLDG 3066 Base Supply

Site Description: BLDG 3066 is a warehouse located on the east side of JBA, off of East Perimeter Road. Building 3066 is the Base Supply Building that maintains 498 five gallon drums of AFFF within JBA's inventory . Large qunaitity of AFFF stored at this location. No documented AFFF spills at this location. Based on the operational history, there is an oppertunitiy for PFCs being released into the environment at this location.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:

Type of Ownership:

☐ Private ☐ County
☑ Federal Agency ☑ Municipal
Name: DOD ☐ Not Specified
☐ State ☐ Other_____
☐ Indian

Type of Ownership:

☐ Private ☐ County
☐ Federal Agency ☐ Municipal
Name: _____ ☐ Not Specified
☐ State ☐ Other_____
☐ Indian

3. Site Evaluator Information

Name of Evaluator: Michael Roooney	Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/25/15
Street Address:11107 Sunset Hills Road, Suite 400		City:Reston	State: Virginia
Name of EPA or State Agency Contact:NA		Street Address:	
City:	State:	Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year _unknown
Ending Year present

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type: (check all that apply)	Source Waste Quantity: (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

- ☐ Yes
- ☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles (check all that apply):

- ☐ Municipal
- ☐ Private
- ☑ None

Is There a Suspected Release to Ground Water[1]:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Wells Been Identified:

- ☐ Yes
- ☑ No

If Yes, Enter Primary Target Population:

___ People[3]

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

- ☐ Yes
- ☑ No

Nearest Designated Wellhead Protection Area[6]:

- ☐ Underlies Site
- ☐ >0-4 Miles
- ☑ None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile	_____
>1/4 - 1/2 Mile	_____
>1/2 - 1 Mile	_____
>1 - 2 Mile	_____
>2 - 3 Mile	_____
>3 - 4 Mile	_____
Total Within 4 Miles[4]	_____

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

- ☑ Stream
- ☑ River
- ☐ Pond
- ☐ Lake
- ☐ Bay
- ☐ Ocean
- ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

_11000__ Feet

_____ Miles

Is There a Suspected Release to Surface Water[1]:

- ☑ Yes
- ☐ No

Site is Located in:

- ☐ Annual - 10 yr Floodplain
- ☐ >10yr - 100yr Floodplain
- ☐ >100yr - 500yr Floodplain
- ☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Intakes Been Identified:

- ☐ Yes
- ☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery: _____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☐ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: ____ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☐ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Charles Branch___	_____	
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

54,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____
Total Within 4 Miles [3-5]	_____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: Dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °48'24.25"	Longitude: 76 °51'26.25"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name:Building 3119 Hangar 16

Site Description: BLDG 3119 is located behind the secured pathfinder gate, in a restricted area, on the central portion of the eastern side of the JBA airfield and is currently occupied by the 113th . This Hangar is currently configured with a HEF fire suppressant system (FSS), but had an AFFF FSS historically. Equipped with an AFFF containment system. AFFF releases occured at this location. Based on the operational history, there is potential for PFCs being released into the environment at this location.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:

Type of Ownership:

☐ Private ☐ County
☑ Federal Agency ☑ Municipal
Name: DOD ☐ Not Specified
☐ State ☐ Other_____
☐ Indian

Type of Ownership:

☐ Private ☐ County
☐ Federal Agency ☐ Municipal
Name: _____ ☐ Not Specified
☐ State ☐ Other_____
☐ Indian

3. Site Evaluator Information

Name of Evaluator: Michael Roooney	Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/25/15
Street Address:11107 Sunset Hills Road, Suite 400	City:Reston		State: Virginia
Name of EPA or State Agency Contact:NA	Street Address:		
City:	State:	Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year 1955

Ending Year present

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type: (check all that apply)	Source Waste Quantity: (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

☐ Yes
☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles
(check all that apply):

☐ Municipal
☐ Private
☑ None

Is There a Suspected Release to Ground Water[1]:

☐ Yes
☑ No

Have Primary Target Drinking Water Wells Been Identified:

☐ Yes
☑ No

If Yes, Enter Primary Target Population:

___ People[3]

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

☐ Yes
☑ No

Nearest Designated Wellhead Protection Area[6]:

☐ Underlies Site
☐ >0-4 Miles
☑ None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile _____

>1/4 - 1/2 Mile _____

>1/2 - 1 Mile _____

>1 - 2 Mile _____

>2 - 3 Mile _____

>3 - 4 Mile _____

Total Within 4 Miles[4] _____

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

☑ Stream ☑ River ☐ Pond ☐ Lake
☐ Bay ☐ Ocean ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

_7,800__ Feet
_____ Miles

Is There a Suspected Release to Surface Water[1]:

☑ Yes
☐ No

Site is Located in:

☐ Annual - 10 yr Floodplain
☐ >10yr - 100yr Floodplain
☐ >100yr - 500yr Floodplain
☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Drinking Water Intakes Been Identified:

☐ Yes
☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery:
_____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☐ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: ____ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☐ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Piscataway Creek___	_____	
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

54,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____
Total Within 4 Miles [3-5]	_____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: Dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °48'38.45"	Longitude: 76 °51'27.72"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name:Building 3148: Hangar 14

Site Description: BLDG 3148 is located behind the secured pathfinder gate, in a restricted area, on the central side of the eastern portion of the JBA airfield and is currently occupied by the Navy . This Hangar is configured with HEF fire suppressant system (FSS) and a secondary containment system. This Hanager was never equiped with an AFFF FSS. No AFFF releases occured at this location. Based on the operational history, there is a low potential for PFCs being released into the environment at this location.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:
Type of Ownership: ☐ Private ☑ Federal Agency Name: DOD ☐ State ☐ Indian ☐ County ☑ Municipal ☐ Not Specified ☐ Other_____			Type of Ownership: ☐ Private ☐ Federal Agency Name: _____ ☐ State ☐ Indian ☐ County ☐ Municipal ☐ Not Specified ☐ Other_____		

3. Site Evaluator Information

Name of Evaluator: Michael Roooney		Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/25/15
Street Address:11107 Sunset Hills Road, Suite 400		City:Reston		State: Virginia
Name of EPA or State Agency Contact:NA		Street Address:		
City:	State:		Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year _1961

Ending Year present_

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type: (check all that apply)	Source Waste Quantity: (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

- ☐ Yes
- ☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles (check all that apply):

- ☐ Municipal
- ☐ Private
- ☑ None

Is There a Suspected Release to Ground Water[1]:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Wells Been Identified:

- ☐ Yes
- ☑ No

If Yes, Enter Primary Target Population:

___ People[3]

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

- ☐ Yes
- ☑ No

Nearest Designated Wellhead Protection Area[6]:

- ☐ Underlies Site
- ☐ >0-4 Miles
- ☑ None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile	_____
>1/4 - 1/2 Mile	_____
>1/2 - 1 Mile	_____
>1 - 2 Mile	_____
>2 - 3 Mile	_____
>3 - 4 Mile	_____
Total Within 4 Miles[4]	_____

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

- ☑ Stream
- ☑ River
- ☐ Pond
- ☐ Lake
- ☐ Bay
- ☐ Ocean
- ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

___ Feet

____1.6____ Miles

Is There a Suspected Release to Surface Water[1]:

- ☑ Yes
- ☐ No

Site is Located in:

- ☐ Annual - 10 yr Floodplain
- ☐ >10yr - 100yr Floodplain
- ☐ >100yr - 500yr Floodplain
- ☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Intakes Been Identified:

- ☐ Yes
- ☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery: _____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):
_____	_____
_____	_____
_____	_____
_____	_____

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☐ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: ____ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☐ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Piscataway Creek___	_____	
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

60,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____

Total Within 4 Miles [3-5] _____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: Dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °48'38.45"	Longitude: 76 °51'27.72"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name:Building 3168: Hangar 13

Site Description: BLDG 3168 is located behind the secured pathfinder gate, in a restricted area, on the central side of the eastern portion of the JBA airfield and is currently occupied by the Navy . This Hangar is configured with HEF fire suppressant system (FSS) and a secondary containment system. This Hanager was never equiped with an AFFF FSS. No AFFF releases occured at this location. Based on the operational history, there is a low potential for PFCs being released into the environment at this location.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:

Type of Ownership:

☐ Private ☐ County
☑ Federal Agency ☑ Municipal
Name: DOD ☐ Not Specified
☐ State ☐ Other_____
☐ Indian

Type of Ownership:

☐ Private ☐ County
☐ Federal Agency ☐ Municipal
Name: _____ ☐ Not Specified
☐ State ☐ Other_____
☐ Indian

3. Site Evaluator Information

Name of Evaluator: Michael Roooney	Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/25/15
Street Address:11107 Sunset Hills Road, Suite 400		City:Reston	State: Virginia
Name of EPA or State Agency Contact:NA		Street Address:	
City:	State:	Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year _1961

Ending Year present_

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type: (check all that apply)	Source Waste Quantity: (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

- ☐ Yes
- ☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles (check all that apply):

- ☐ Municipal
- ☐ Private
- ☑ None

Is There a Suspected Release to Ground Water[1]:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Wells Been Identified:

- ☐ Yes
- ☑ No

If Yes, Enter Primary Target Population:

___ People[3]

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

- ☐ Yes
- ☑ No

Nearest Designated Wellhead Protection Area[6]:

- ☐ Underlies Site
- ☐ >0-4 Miles
- ☑ None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile	_____
>1/4 - 1/2 Mile	_____
>1/2 - 1 Mile	_____
>1 - 2 Mile	_____
>2 - 3 Mile	_____
>3 - 4 Mile	_____
Total Within 4 Miles[4]	_____

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

- ☑ Stream
- ☑ River
- ☐ Pond
- ☐ Lake
- ☐ Bay
- ☐ Ocean
- ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

___ Feet

____1.8____ Miles

Is There a Suspected Release to Surface Water[1]:

- ☑ Yes
- ☐ No

Site is Located in:

- ☐ Annual - 10 yr Floodplain
- ☐ >10yr - 100yr Floodplain
- ☐ >100yr - 500yr Floodplain
- ☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Intakes Been Identified:

- ☐ Yes
- ☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery:

_____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):
_____	_____
_____	_____
_____	_____
_____	_____

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☐ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: ____ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☐ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Piscataway Creek___	_____	
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

60,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____

Total Within 4 Miles [3-5] _____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: Dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °48'44.16"	Longitude: 76 °51'27.71"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name:Building 3188: Hangar 12

Site Description: BLDG 3188 is located behind the secured pathfinder gate, in a restricted area, on the central side of the eastern portion of the JBA airfield and is currently occupied by the Navy . This Hangar is configured with HEF fire suppressant system (FSS) and a secondary containment system. This Hanager was never equiped with an AFFF FSS. No AFFF releases occured at this location. Based on the operational history, there is a low potential for PFCs being released into the environment at this location.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:
Type of Ownership: ☐ Private ☑ Federal Agency Name: DOD ☐ State ☐ Indian ☐ County ☑ Municipal ☐ Not Specified ☐ Other_____			Type of Ownership: ☐ Private ☐ Federal Agency Name: _____ ☐ State ☐ Indian ☐ County ☐ Municipal ☐ Not Specified ☐ Other_____		

3. Site Evaluator Information

Name of Evaluator: Michael Roooney	Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/25/15
Street Address:11107 Sunset Hills Road, Suite 400	City:Reston		State: Virginia
Name of EPA or State Agency Contact:NA	Street Address:		
City:	State:	Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year _1961

Ending Year present_

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type: (check all that apply)	Source Waste Quantity: (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

- ☐ Yes
- ☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles (check all that apply):

- ☐ Municipal
- ☐ Private
- ☑ None

Is There a Suspected Release to Ground Water[1]:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Wells Been Identified:

- ☐ Yes
- ☑ No

If Yes, Enter Primary Target Population:

___ People[3]

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

- ☐ Yes
- ☑ No

Nearest Designated Wellhead Protection Area[6]:

- ☐ Underlies Site
- ☐ >0-4 Miles
- ☑ None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile	_____
>1/4 - 1/2 Mile	_____
>1/2 - 1 Mile	_____
>1 - 2 Mile	_____
>2 - 3 Mile	_____
>3 - 4 Mile	_____
Total Within 4 Miles[4]	_____

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

- ☑ Stream
- ☑ River
- ☐ Pond
- ☐ Lake
- ☐ Bay
- ☐ Ocean
- ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

___ Feet

____1.8____ Miles

Is There a Suspected Release to Surface Water[1]:

- ☑ Yes
- ☐ No

Site is Located in:

- ☐ Annual - 10 yr Floodplain
- ☐ >10yr - 100yr Floodplain
- ☐ >100yr - 500yr Floodplain
- ☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Intakes Been Identified:

- ☐ Yes
- ☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery:

_____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):
_____	_____
_____	_____
_____	_____
_____	_____

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☐ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: ____ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☐ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Piscataway Creek___	_____	
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

60,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____

Total Within 4 Miles [3-5] _____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: Dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °48'55.49"	Longitude: 76 °51'25.65"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name: BLDG 3444 CE Compound Warehouse

Site Description: BLDG 3444 is a warehouse located on the east side of JBA, within the CE compound Yard at the intersection of Pennsylvania Avenue and North Carolina Avenue. Building contained a 275 gallon AFFF tote and cannon dated 5/2004, Buckeye AFFF. There were also six-55 gallon drums of HEF colocated with the cannon. Large qunaitity of AFFF stored at this location. No documented AFFF spills at this location. Based on the operational history, there is an oppertunitiy for PFCs being released into the environment at this location.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:
Type of Ownership: ☐ Private ☑ Federal Agency Name: DOD ☐ State ☐ Indian ☐ County ☑ Municipal ☐ Not Specified ☐ Other_____			Type of Ownership: ☐ Private ☐ Federal Agency Name: _____ ☐ State ☐ Indian ☐ County ☐ Municipal ☐ Not Specified ☐ Other_____		

3. Site Evaluator Information

Name of Evaluator: Michael Roooney		Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/25/15
Street Address:11107 Sunset Hills Road, Suite 400		City:Reston		State: Virginia
Name of EPA or State Agency Contact:NA		Street Address:		
City:	State:		Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year _unknown
Ending Year present

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type: (check all that apply)	Source Waste Quantity: (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

☐ Yes
☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles
(check all that apply):

☐ Municipal
☐ Private
☑ None

Is There a Suspected Release to Ground Water[1]:

☐ Yes
☑ No

Have Primary Target Drinking Water Wells Been Identified:

☐ Yes
☑ No

If Yes, Enter Primary Target Population:

___ People[3]

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

☐ Yes
☑ No

Nearest Designated Wellhead Protection Area[6]:

☐ Underlies Site
☐ >0-4 Miles
☑ None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile _____

>1/4 - 1/2 Mile _____

>1/2 - 1 Mile _____

>1 - 2 Mile _____

>2 - 3 Mile _____

>3 - 4 Mile _____

Total Within 4 Miles[4] _____

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

☑ Stream ☑ River ☐ Pond ☐ Lake
☐ Bay ☐ Ocean ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

_16000__ Feet
_____ Miles

Is There a Suspected Release to Surface Water[1]:

☑ Yes
☐ No

Site is Located in:

☐ Annual - 10 yr Floodplain
☐ >10yr - 100yr Floodplain
☐ >100yr - 500yr Floodplain
☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Drinking Water Intakes Been Identified:

☐ Yes
☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery:
_____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☐ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: ____ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☐ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Charles Branch___	_____	
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

54,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____
Total Within 4 Miles [3-5]	_____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: Dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °49'6.65"	Longitude: 76 °51'34.21"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name:Building 3629 East Fuel Cell

Site Description: BLDG 3629 is located behind the secured pathfinder gate, in a restricted area, on the north side of the eastern portion of the JBA airfield and is currently occupied by the 459th . This Hangar is currently configured with an AFFF fire suppressant system (FSS) and an OWS. Multiple AFFF releases occured at this location. Based on the operational history, there is potential for PFCs being released into the environment at this location.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:
Type of Ownership: ☐ Private ☑ Federal Agency Name: DOD ☐ State ☐ Indian ☐ County ☑ Municipal ☐ Not Specified ☐ Other_____			Type of Ownership: ☐ Private ☐ Federal Agency Name: _____ ☐ State ☐ Indian ☐ County ☐ Municipal ☐ Not Specified ☐ Other_____		

3. Site Evaluator Information

Name of Evaluator: Michael Roooney	Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/25/15
Street Address:11107 Sunset Hills Road, Suite 400	City:Reston		State: Virginia
Name of EPA or State Agency Contact:NA	Street Address:		
City:	State:	Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year 1969

Ending Year present

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type (check all that apply)	Source Waste Quantity (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

- ☐ Yes
- ☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles (check all that apply):

- ☐ Municipal
- ☐ Private
- ☑ None

Is There a Suspected Release to Ground Water[1]:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Wells Been Identified:

- ☐ Yes
- ☑ No

If Yes, Enter Primary Target Population:

___ People[3]

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile _____

>1/4 - 1/2 Mile _____

>1/2 - 1 Mile _____

>1 - 2 Mile _____

>2 - 3 Mile _____

>3 - 4 Mile _____

Total Within 4 Miles[4] _____

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

- ☐ Yes
- ☑ No

Nearest Designated Wellhead Protection Area[6]:

- ☐ Underlies Site
- ☐ >0-4 Miles
- ☑ None Within 4 Miles

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

- ☑ Stream
- ☑ River
- ☐ Pond
- ☐ Lake
- ☐ Bay
- ☐ Ocean
- ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

_11,000__ Feet

_____ Miles

Is There a Suspected Release to Surface Water[1]:

- ☑ Yes
- ☐ No

Site is Located in:

- ☐ Annual - 10 yr Floodplain
- ☐ >10yr - 100yr Floodplain
- ☐ >100yr - 500yr Floodplain
- ☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Intakes Been Identified:

- ☐ Yes
- ☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery: _____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☐ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: ____ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☐ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Cabin Branch___		_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

60,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____
Total Within 4 Miles [3-5]	_____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: Dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °49'11.91"	Longitude: 76 °51'34.19"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name:Building 3635: Hangar 11

Site Description: BLDG 3635 is located behind the secured pathfinder gate, in a restricted area, on the north side of the eastern portion of the JBA airfield and is currently occupied by the 459th . This Hangar is currently configured with an AFFF fire suppressant system (FSS) and a secondary containment system. AFFF releases occured at this location. Based on the operational history, there is potential for PFCs being released into the environment at this location.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:
Type of Ownership: ☐ Private ☑ Federal Agency Name: DOD ☐ State ☐ Indian ☐ County ☑ Municipal ☐ Not Specified ☐ Other_____			Type of Ownership: ☐ Private ☐ Federal Agency Name: _____ ☐ State ☐ Indian ☐ County ☐ Municipal ☐ Not Specified ☐ Other_____		

3. Site Evaluator Information

Name of Evaluator: Michael Roooney		Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/25/15
Street Address:11107 Sunset Hills Road, Suite 400		City:Reston		State: Virginia
Name of EPA or State Agency Contact:NA		Street Address:		
City:	State:		Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year 1944

Ending Year present

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type (check all that apply)	Source Waste Quantity (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

- ☐ Yes
- ☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles (check all that apply):

- ☐ Municipal
- ☐ Private
- ☑ None

Is There a Suspected Release to Ground Water[1]:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Wells Been Identified:

- ☐ Yes
- ☑ No

If Yes, Enter Primary Target Population:

___ People[3]

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

- ☐ Yes
- ☑ No

Nearest Designated Wellhead Protection Area[6]:

- ☐ Underlies Site
- ☐ >0-4 Miles
- ☑ None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile	_____
>1/4 - 1/2 Mile	_____
>1/2 - 1 Mile	_____
>1 - 2 Mile	_____
>2 - 3 Mile	_____
>3 - 4 Mile	_____
Total Within 4 Miles[4]	_____

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

- ☑ Stream
- ☑ River
- ☐ Pond
- ☐ Lake
- ☐ Bay
- ☐ Ocean
- ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

___ Feet

___1.8_____ Miles

Is There a Suspected Release to Surface Water[1]:

- ☑ Yes
- ☐ No

Site is Located in:

- ☐ Annual - 10 yr Floodplain
- ☐ >10yr - 100yr Floodplain
- ☐ >100yr - 500yr Floodplain
- ☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Intakes Been Identified:

- ☐ Yes
- ☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery: _____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☐ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: ____ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☐ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Cabin Branch___		_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

60,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____
Total Within 4 Miles [3-5]	_____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: Dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °49'17.69"	Longitude: 76 °51'34.25"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name:Building 3640: Hangar 10

Site Description: BLDG 3640 is located behind the secured pathfinder gate, in a restricted area, on the north side of the eastern portion of the JBA airfield and is currently occupied by the 459th . This Hangar is currently configured with an AFFF fire suppressant system (FSS) and a secondary containment system. Multiple AFFF releases occured at this location. Based on the operational history, there is potential for PFCs being released into the environment at this location.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:

Type of Ownership:

☐ Private ☐ County
☑ Federal Agency ☑ Municipal
Name: DOD ☐ Not Specified
☐ State ☐ Other_____
☐ Indian

Type of Ownership:

☐ Private ☐ County
☐ Federal Agency ☐ Municipal
Name: _____ ☐ Not Specified
☐ State ☐ Other_____
☐ Indian

3. Site Evaluator Information

Name of Evaluator: Michael Roooney	Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/25/15
Street Address:11107 Sunset Hills Road, Suite 400	City:Reston		State: Virginia
Name of EPA or State Agency Contact:NA	Street Address:		
City:	State:	Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year 1944

Ending Year present

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type (check all that apply)	Source Waste Quantity (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

- ☐ Yes
- ☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles (check all that apply):

- ☐ Municipal
- ☐ Private
- ☑ None

Is There a Suspected Release to Ground Water[1]:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Wells Been Identified:

- ☐ Yes
- ☑ No

If Yes, Enter Primary Target Population:

___ People[3]

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

- ☐ Yes
- ☑ No

Nearest Designated Wellhead Protection Area[6]:

- ☐ Underlies Site
- ☐ >0-4 Miles
- ☑ None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile	_____
>1/4 - 1/2 Mile	_____
>1/2 - 1 Mile	_____
>1 - 2 Mile	_____
>2 - 3 Mile	_____
>3 - 4 Mile	_____
Total Within 4 Miles[4]	_____

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

- ☑ Stream
- ☑ River
- ☐ Pond
- ☐ Lake
- ☐ Bay
- ☐ Ocean
- ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

__12,500_ Feet

_____ Miles

Is There a Suspected Release to Surface Water[1]:

- ☑ Yes
- ☐ No

Site is Located in:

- ☐ Annual - 10 yr Floodplain
- ☐ >10yr - 100yr Floodplain
- ☐ >100yr - 500yr Floodplain
- ☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Intakes Been Identified:

- ☐ Yes
- ☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery: _____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):
_____	_____
_____	_____
_____	_____
_____	_____

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☐ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: ____ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☐ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Cabin Branch___		_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

60,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____
Total Within 4 Miles [3-5]	_____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: Dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °48'2.98"	Longitude: 76 °52'45.59"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name:Building 5016: Hangar 19

Site Description: BLDG 5016 is located behind the secured pathfinder gate, in a restricted area, on the central side of the west portion of the JBA airfield and is currently occupied by the PAG . This Hangar is currently configured with HEF (primary) and an AFFF fire suppressant system (FSS) (secondary) and a secondary containment system. AFFF releases occured at this location. Based on the operational history, there is potential for PFCs being released into the environment at this location.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:
Type of Ownership: ☐ Private ☑ Federal Agency Name: DOD ☐ State ☐ Indian ☐ County ☑ Municipal ☐ Not Specified ☐ Other_____			Type of Ownership: ☐ Private ☐ Federal Agency Name: _____ ☐ State ☐ Indian ☐ County ☐ Municipal ☐ Not Specified ☐ Other_____		

3. Site Evaluator Information

Name of Evaluator: Michael Roooney	Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/25/15
Street Address:11107 Sunset Hills Road, Suite 400	City:Reston		State: Virginia
Name of EPA or State Agency Contact:NA	Street Address:		
City:	State:	Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year 1989

Ending Year present

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type: (check all that apply)	Source Waste Quantity: (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

☐ Yes
☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles
(check all that apply):

☐ Municipal
☐ Private
☑ None

Is There a Suspected Release to Ground Water[1]:

☐ Yes
☑ No

Have Primary Target Drinking Water Wells Been Identified:

☐ Yes
☑ No

If Yes, Enter Primary Target Population:

___ People[3]

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

☐ Yes
☑ No

Nearest Designated Wellhead Protection Area[6]:

☐ Underlies Site
☐ >0-4 Miles
☑ None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile _____

>1/4 - 1/2 Mile _____

>1/2 - 1 Mile _____

>1 - 2 Mile _____

>2 - 3 Mile _____

>3 - 4 Mile _____

Total Within 4 Miles[4] _____

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

☑ Stream ☑ River ☐ Pond ☐ Lake
☐ Bay ☐ Ocean ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

__4800_ Feet
_____ Miles

Is There a Suspected Release to Surface Water[1]:

☑ Yes
☐ No

Site is Located in:

☐ Annual - 10 yr Floodplain
☐ >10yr - 100yr Floodplain
☐ >100yr - 500yr Floodplain
☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Drinking Water Intakes Been Identified:

☐ Yes
☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery:
_____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☐ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: ____ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☐ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Piscataway Creek___	_____	
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

60,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____

Total Within 4 Miles [3-5] _____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: Dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °47'54.43"	Longitude: 76 °52'46.29"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name:Building 5032: Hangar 20

Site Description: BLDG 5032 is located behind the secured pathfinder gate, in a restricted area, on the central side of the west portion of the JBA airfield and is currently occupied by the PAG . This Hangar is configured with HEF fire suppressant system (FSS) and a secondary containment system. No AFFF releases occured at this location. Based on the operational history, there is a low potential for PFCs being released into the environment at this location.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:
Type of Ownership: ☐ Private ☑ Federal Agency Name: DOD ☐ State ☐ Indian ☐ County ☑ Municipal ☐ Not Specified ☐ Other_____			Type of Ownership: ☐ Private ☐ Federal Agency Name: _____ ☐ State ☐ Indian ☐ County ☐ Municipal ☐ Not Specified ☐ Other_____		

3. Site Evaluator Information

Name of Evaluator: Michael Roooney		Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/25/15
Street Address:11107 Sunset Hills Road, Suite 400		City:Reston		State: Virginia
Name of EPA or State Agency Contact:NA		Street Address:		
City:	State:		Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year _2009

Ending Year present_

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type (check all that apply)	Source Waste Quantity (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

☐ Yes
☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles
(check all that apply):

☐ Municipal
☐ Private
☑ None

Is There a Suspected Release to Ground Water[1]:

☐ Yes
☑ No

Have Primary Target Drinking Water Wells Been Identified:

☐ Yes
☑ No

If Yes, Enter Primary Target Population:

___ People[3]

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

☐ Yes
☑ No

Nearest Designated Wellhead Protection Area[6]:

☐ Underlies Site
☐ >0-4 Miles
☑ None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile _____

>1/4 - 1/2 Mile _____

>1/2 - 1 Mile _____

>1 - 2 Mile _____

>2 - 3 Mile _____

>3 - 4 Mile _____

Total Within 4 Miles[4] _____

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

☑ Stream ☑ River ☐ Pond ☐ Lake
☐ Bay ☐ Ocean ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

__4800_ Feet
_____ Miles

Is There a Suspected Release to Surface Water[1]:

☑ Yes
☐ No

Site is Located in:

☐ Annual - 10 yr Floodplain
☐ >10yr - 100yr Floodplain
☐ >100yr - 500yr Floodplain
☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Drinking Water Intakes Been Identified:

☐ Yes
☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery:
_____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☐ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: ____ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☐ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Piscataway Creek___	_____	
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

60,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____

Total Within 4 Miles [3-5] _____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: Dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °47'57.67"	Longitude: 76 °51'32.93"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name: Fire Station #1

Site Description: Fire Stattion #1 (BLDG 1287) is an active fire station located behind the secured pathfinder gate, in a restricted area, located on the central portion of JBA west of the airfield near the intersection of South Dakota Ave and Cabiglas Street . Fire station in operation since 1976. Occassional training using AFFF and AFFF spills at this location. Based on the operational history, there is an oppertunitiy for PFCs being released into the environment at this location.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:
Type of Ownership: ☐ Private ☑ Federal Agency Name: DOD ☐ State ☐ Indian ☐ County ☑ Municipal ☐ Not Specified ☐ Other_____			Type of Ownership: ☐ Private ☐ Federal Agency Name: _____ ☐ State ☐ Indian ☐ County ☐ Municipal ☐ Not Specified ☐ Other_____		

3. Site Evaluator Information

Name of Evaluator: Michael Roooney			Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/25/15
Street Address:11107 Sunset Hills Road, Suite 400			City:Reston		State: Virginia
Name of EPA or State Agency Contact:NA			Street Address:		
City:		State:		Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year _1976
Ending Year present

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type (check all that apply)	Source Waste Quantity (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

- ☐ Yes
- ☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles (check all that apply):

- ☐ Municipal
- ☐ Private
- ☑ None

Is There a Suspected Release to Ground Water[1]:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Wells Been Identified:

- ☐ Yes
- ☑ No

If Yes, Enter Primary Target Population:

___ People[3]

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

- ☐ Yes
- ☑ No

Nearest Designated Wellhead Protection Area[6]:

- ☐ Underlies Site
- ☐ >0-4 Miles
- ☑ None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile	_____
>1/4 - 1/2 Mile	_____
>1/2 - 1 Mile	_____
>1 - 2 Mile	_____
>2 - 3 Mile	_____
>3 - 4 Mile	_____
Total Within 4 Miles[4]	_____

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

- ☑ Stream
- ☑ River
- ☐ Pond
- ☐ Lake
- ☐ Bay
- ☐ Ocean
- ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

_5500__ Feet

_____ Miles

Is There a Suspected Release to Surface Water[1]:

- ☑ Yes
- ☐ No

Site is Located in:

- ☐ Annual - 10 yr Floodplain
- ☐ >10yr - 100yr Floodplain
- ☐ >100yr - 500yr Floodplain
- ☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Intakes Been Identified:

- ☐ Yes
- ☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery: _____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☐ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: ____ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☐ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Piscataway Creek___	_____	
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

64,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____
Total Within 4 Miles [3-5]	_____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: Dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °48'55.49"	Longitude: 76 °51'25.65"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name: Fire Station #2

Site Description: Fire Stattion #1 (BLDG 3464) is an active fire station located on the east side of JBA, north of the intersection of East Perimeter Road and North Carolina Avenue . Fire station in operation since 1976. Multiple vehicles equipped with AFFF. No documented AFFF spills at this location. Based on the operational history, there is an oppertunitiy for PFCs being released into the environment at this location.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:
Type of Ownership: ☐ Private ☑ Federal Agency Name: DOD ☐ State ☐ Indian ☐ County ☑ Municipal ☐ Not Specified ☐ Other_____			Type of Ownership: ☐ Private ☐ Federal Agency Name: _____ ☐ State ☐ Indian ☐ County ☐ Municipal ☐ Not Specified ☐ Other_____		

3. Site Evaluator Information

Name of Evaluator: Michael Roooney	Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/25/15
Street Address:11107 Sunset Hills Road, Suite 400	City:Reston		State: Virginia
Name of EPA or State Agency Contact:NA	Street Address:		
City:	State:	Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year _1995
Ending Year present

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type: (check all that apply)	Source Waste Quantity: (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

☐ Yes
☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles
(check all that apply):

☐ Municipal
☐ Private
☑ None

Is There a Suspected Release to Ground Water[1]:

☐ Yes
☑ No

Have Primary Target Drinking Water Wells Been Identified:

☐ Yes
☑ No

If Yes, Enter Primary Target Population:

__ People[3]

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

☐ Yes
☑ No

Nearest Designated Wellhead Protection Area[6]:

☐ Underlies Site
☐ >0-4 Miles
☑ None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile _____

>1/4 - 1/2 Mile _____

>1/2 - 1 Mile _____

>1 - 2 Mile _____

>2 - 3 Mile _____

>3 - 4 Mile _____

Total Within 4 Miles[4] _____

*Use population #s for PA Table 2
*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

☑ Stream ☑ River ☐ Pond ☐ Lake
☐ Bay ☐ Ocean ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

_11000__ Feet
_____ Miles

Is There a Suspected Release to Surface Water[1]:

☑ Yes
☐ No

Site is Located in:

☐ Annual - 10 yr Floodplain
☐ >10yr - 100yr Floodplain
☐ >100yr - 500yr Floodplain
☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Drinking Water Intakes Been Identified:

☐ Yes
☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery:
_____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☐ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: ____ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☐ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Piscataway Creek___	_____	
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

54,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____
Total Within 4 Miles [3-5]	_____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: Dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °48'17.70"	Longitude: 76 °52'40.21"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☐ Active ☐ Not Specified ☑ Inactive ☐ NA (GW plume, etc.)	

Site Name: FT-02

Site Description: Site FT-02 is a former fire training area that is currently an open ERP site located in the western portion of JBA. The site was in operation from 1948 through 1958s. The operational history of the site is prior to the use of AFFF in FTAs by the Air Force. The potential for releasing PFCs into the environment is low.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:
Type of Ownership: ☐ Private ☑ Federal Agency Name: DOD ☐ State ☐ Indian ☐ County ☑ Municipal ☐ Not Specified ☐ Other_____			Type of Ownership: ☐ Private ☐ Federal Agency Name: _____ ☐ State ☐ Indian ☐ County ☐ Municipal ☐ Not Specified ☐ Other_____		

3. Site Evaluator Information

Name of Evaluator: Michael Roooney	Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/24/15
Street Address:11107 Sunset Hills Road, Suite 400		City:Reston	State: Virginia
Name of EPA or State Agency Contact:NA		Street Address:	
City:	State:	Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year 1948

Ending Year 1958

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☑ No

Distance to Nearest Dwelling, School, or Workplace:

___2,900__ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type: (check all that apply)	Source Waste Quantity: (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

☐ Yes
☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles
(check all that apply):

☐ Municipal
☐ Private
☑ None

Is There a Suspected Release to Ground Water[1]:

☐ Yes
☑ No

Have Primary Target Drinking Water Wells Been Identified:

☐ Yes
☑ No

If Yes, Enter Primary Target Population:

___ People[3]

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

☐ Yes
☑ No

Nearest Designated Wellhead Protection Area[6]:

☐ Underlies Site
☐ >0-4 Miles
☑ None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile _____

>1/4 - 1/2 Mile _____

>1/2 - 1 Mile _____

>1 - 2 Mile _____

>2 - 3 Mile _____

>3 - 4 Mile _____

Total Within 4 Miles[4] _____

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

☑ Stream ☐ River ☐ Pond ☐ Lake
☐ Bay ☐ Ocean ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

__1,300__ Feet
_____ Miles

Is There a Suspected Release to Surface Water[1]:

☑ Yes
☐ No

Site is Located in:

☐ Annual - 10 yr Floodplain
☐ >10yr - 100yr Floodplain
☐ >100yr - 500yr Floodplain
☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Drinking Water Intakes Been Identified:

☐ Yes
☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery:
_____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☑ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: __1,400___ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☑ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Piscataaway Creek	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

64,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____
Total Within 4 Miles [3-5]	_____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: Dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °47'22.12"	Longitude: 76 °52'17.89"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name: FT-03

Site Description: Site FT-03 is a former fire training area that is currently an open ERP site located in the western portion of JBA. Fire training operations at FT-03 occurred between 1959 and 1972. The site consisted of a 300- to 400-foot diameter bermed area and an adjacent drum storage area. During fire training activities, the bermed area was saturated with water then an estimated 1,000 to 2,000 gallons of flammable liquids consisting of waste oil, jet fuel, paint thinner, and other liquids were poured into the bermed area and ignited. Potential AFFF release.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:
Type of Ownership: ☐ Private ☑ Federal Agency Name: DOD ☐ State ☐ Indian ☐ County ☑ Municipal ☐ Not Specified ☐ Other_____			Type of Ownership: ☐ Private ☐ Federal Agency Name: _____ ☐ State ☐ Indian ☐ County ☐ Municipal ☐ Not Specified ☐ Other_____		

3. Site Evaluator Information

Name of Evaluator: Michael Roooney	Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/24/15
Street Address:11107 Sunset Hills Road, Suite 400	City:Reston		State: Virginia
Name of EPA or State Agency Contact:NA	Street Address:		
City:	State:	Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year 1959

Ending Year 1972

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

____3500_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type: (check all that apply)	Source Waste Quantity: (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

- ☐ Yes
- ☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles (check all that apply):

- ☐ Municipal
- ☐ Private
- ☑ None

Is There a Suspected Release to Ground Water[1]:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Wells Been Identified:

- ☐ Yes
- ☑ No

If Yes, Enter Primary Target Population:

___ People[3]

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile _____

>1/4 - 1/2 Mile _____

>1/2 - 1 Mile _____

>1 - 2 Mile _____

>2 - 3 Mile _____

>3 - 4 Mile _____

Total Within 4 Miles[4] _____

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

- ☐ Yes
- ☑ No

Nearest Designated Wellhead Protection Area[6]:

- ☐ Underlies Site
- ☐ >0-4 Miles
- ☑ None Within 4 Miles

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

- ☑ Stream
- ☑ River
- ☐ Pond
- ☐ Lake
- ☐ Bay
- ☐ Ocean
- ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

__1300_ Feet

_____ Miles

Is There a Suspected Release to Surface Water[1]:

- ☑ Yes
- ☐ No

Site is Located in:

- ☐ Annual - 10 yr Floodplain
- ☐ >10yr - 100yr Floodplain
- ☐ >100yr - 500yr Floodplain
- ☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Intakes Been Identified:

- ☐ Yes
- ☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery: _____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☑ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: __1,300___ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☑ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Piscataaway Creek	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

60,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____
Total Within 4 Miles [3-5]	_____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____ _____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °48'03.02"	Longitude: 76 °51'33.28"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name: FT-04

Site Description: Site FT-04 is a former fire training area that is currently an open ERP site located in the southeastern portion of JBA. Fire training operations at FT-04 occurred between 1973 and 1990. During fire training activities, flammable liquids consisting of JP-4, motor oil, and possibly solvents were ignited and extinquished with AFFF and water.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:

Type of Ownership:

☐ Private ☐ County
☑ Federal Agency ☑ Municipal
Name: DOD ☐ Not Specified
☐ State ☐ Other_____
☐ Indian

Type of Ownership:

☐ Private ☐ County
☐ Federal Agency ☐ Municipal
Name: _____ ☐ Not Specified
☐ State ☐ Other_____
☐ Indian

3. Site Evaluator Information

Name of Evaluator: Michael Roooney		Agency/Organization: HydroGeoLogic, Inc.	Date Prepared:2/24/15
Street Address:11107 Sunset Hills Road, Suite 400		City:Reston	State: Virginia
Name of EPA or State Agency Contact:NA		Street Address:	
City:	State:	Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year 1973

Ending Year 1994

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

___2,900_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type (check all that apply)	Source Waste Quantity (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

- ☐ Yes
- ☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles (check all that apply):

- ☐ Municipal
- ☐ Private
- ☑ None

Is There a Suspected Release to Ground Water[1]:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Wells Been Identified:

- ☐ Yes
- ☑ No

If Yes, Enter Primary Target Population:

___ People[3]

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

- ☐ Yes
- ☑ No

Nearest Designated Wellhead Protection Area[6]:

- ☐ Underlies Site
- ☐ >0-4 Miles
- ☑ None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile	_____
>1/4 - 1/2 Mile	_____
>1/2 - 1 Mile	_____
>1 - 2 Mile	_____
>2 - 3 Mile	_____
>3 - 4 Mile	_____
Total Within 4 Miles[4]	_____

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

- ☑ Stream
- ☑ River
- ☐ Pond
- ☐ Lake
- ☐ Bay
- ☐ Ocean
- ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

__1300_ Feet

_____ Miles

Is There a Suspected Release to Surface Water[1]:

- ☑ Yes
- ☐ No

Site is Located in:

- ☐ Annual - 10 yr Floodplain
- ☐ >10yr - 100yr Floodplain
- ☐ >100yr - 500yr Floodplain
- ☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Intakes Been Identified:

- ☐ Yes
- ☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery: _____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☑ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: __1,300___ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☑ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Piscataaway Creek	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

60,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____
Total Within 4 Miles [3-5]	_____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: _dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____ _____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °47'14.27"	Longitude: 76 °51'40.24"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name: Hare Berry Farms

Hare Berry Farm was a farm used to grow strawberries, raspberries, and blackberry crops located south of JBA. In May 1992, during the test of an aircraft fire suppression system approximately 500 gallons of AFFF entered into Piscataway Creek and was used for irrigation of the crops. Documented AFFF spills at this location. AF purchased this proeprty. Based on the operational history, there is an oppertunitiy for PFCs being released into the environment at this location.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:

Type of Ownership:

☐ Private ☐ County
☑ Federal Agency ☑ Municipal
Name: DOD ☐ Not Specified
☐ State ☐ Other_____
☐ Indian

Type of Ownership:

☐ Private ☐ County
☐ Federal Agency ☐ Municipal
Name: _____ ☐ Not Specified
☐ State ☐ Other_____
☐ Indian

3. Site Evaluator Information

Name of Evaluator: Michael Roooney	Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/25/15
Street Address:11107 Sunset Hills Road, Suite 400	City:Reston		State: Virginia
Name of EPA or State Agency Contact:NA	Street Address:		
City:	State:	Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year _unknown
Ending Year present

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type: (check all that apply)	Source Waste Quantity: (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

- ☐ Yes
- ☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles (check all that apply):

- ☐ Municipal
- ☐ Private
- ☑ None

Is There a Suspected Release to Ground Water[1]:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Wells Been Identified:

- ☐ Yes
- ☑ No

If Yes, Enter Primary Target Population:

___ People[3]

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

- ☐ Yes
- ☑ No

Nearest Designated Wellhead Protection Area[6]:

- ☐ Underlies Site
- ☐ >0-4 Miles
- ☑ None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile	_____
>1/4 - 1/2 Mile	_____
>1/2 - 1 Mile	_____
>1 - 2 Mile	_____
>2 - 3 Mile	_____
>3 - 4 Mile	_____
Total Within 4 Miles[4]	_____

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

- ☑ Stream
- ☑ River
- ☐ Pond
- ☐ Lake
- ☐ Bay
- ☐ Ocean
- ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

_11000__ Feet

_____ Miles

Is There a Suspected Release to Surface Water[1]:

- ☑ Yes
- ☐ No

Site is Located in:

- ☐ Annual - 10 yr Floodplain
- ☐ >10yr - 100yr Floodplain
- ☐ >100yr - 500yr Floodplain
- ☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Intakes Been Identified:

- ☐ Yes
- ☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery: _____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☐ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: ____ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☐ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Piscataway Creek___	_____	
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

54,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____
Total Within 4 Miles [3-5]	_____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: _Dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Camp Springs		State: MD	Zip Code:20746	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °47'14.27"	Longitude: 76 °51'40.24"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☑ Active ☐ Not Specified ☐ Inactive ☐ NA (GW plume, etc.)	

Site Name: LF-05

LF-05 is an ERP site located on the south east portion of JBA. Between the 1960s through the 1970s, a 2-3 acre pit located in the south east of LF-05 was used for disposal of liquid waste, dilute process waste and waste oils. Generally one 2,000-gallon tank truck was delivered to the site each week. The Environmental Chief noted that there were fires at LF-05. The Deputy Fire Chief did not recall the use of AFFF to extinguish fires in this pit. . Based on the operational history, there is a low propoability for PFCs being released into the environment at this location.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:
Type of Ownership: ☐ Private ☑ Federal Agency Name: DOD ☐ State ☐ Indian ☐ County ☑ Municipal ☐ Not Specified ☐ Other_____			Type of Ownership: ☐ Private ☐ Federal Agency Name: _____ ☐ State ☐ Indian ☐ County ☐ Municipal ☐ Not Specified ☐ Other_____		

3. Site Evaluator Information

Name of Evaluator: Michael Roooney			Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/25/15
Street Address:11107 Sunset Hills Road, Suite 400			City:Reston		State: Virginia
Name of EPA or State Agency Contact:NA			Street Address:		
City:		State:		Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- ☐ Industrial
- ☐ Commercial
- ☐ Residential
- ☐ Forest/Fields
- ☐ Agriculture
- ☐ Mining
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility:
- ☐ Other _____

Site Setting:

- ☑ Urban
- ☐ Suburban
- ☐ Rural

Years of Operation:

Beginning Year _unknown
Ending Year present

☐ Unknown

Type of Site Operations (check all that apply):

- ☐ Manufacturing (must check subcategory)
  - ☐ Lumber and Wood Products
  - ☐ Inorganic Chemicals
  - ☐ Plastic and/or Rubber Products
  - ☐ Paints, Varnishes
  - ☐ Industrial Organic Chemicals
  - ☐ Agricultural Chemicals
  - ☐ Miscellaneous Chemical Products
  - ☐ Primary Metals
  - ☐ Metal Coating, Plating, Engraving
  - ☐ Metal Forging, Stamping
  - ☐ Fabricated Structural Metal Products
  - ☐ Electronic Equipment
  - ☐ Other Manufacturing
- ☐ Mining
  - ☐ Metals
  - ☐ Coal
  - ☐ Oil and Gas
  - ☐ Non-metallic Minerals
- ☐ Retail
- ☐ Recycling
- ☐ Junk/Salvage Yard
- ☐ Municipal Landfill
- ☐ Other Landfill
- ☑ DOD
- ☐ DOE
- ☐ DOI
- ☐ Other Federal Facility _____
- ☐ RCRA
  - ☐ Treatment, Storage, or Disposal
  - ☐ Large Quantity Generator
  - ☐ Small Quantity Generator
  - ☐ Subtitle D
    - ☐ Municipal
    - ☐ Industrial
  - ☐ "Converter"
  - ☐ "Protective Filer"
  - ☐ "Non-or Late Filer"
- ☐ Note Specified
- ☐ Other_____

Waste Generated:

- ☑ Onsite
- ☐ Offsite
- ☐ Onsite and Offsite

Waste Deposition Authorized By:

- ☑ Present Owner
- ☐ Former Owner
- ☐ Present & Former Owner
- ☐ Unauthorized
- ☐ Unknown

Waste Accessible to the Public:

- ☐ Yes
- ☐ No

Distance to Nearest Dwelling, School, or Workplace:

_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type: (check all that apply)	Source Waste Quantity: (include unit)	Tier*:
☐ Landfill	_____	____
☐ Surface Impoundment	_____	____
☐ Drums	_____	____
☐ Tanks and Non-Dum Containers	_____	____
☐ Chemical Waste Pile	_____	____
☐ Scrap Metal or Junk Pile	_____	____
☐ Tailings Pile	_____	____
☐ Trash Pile (open drum)	_____	____
☐ Land Treatment	_____	____
☐ Contaminated GW Plume (unidentified source)	_____	____
☐ Contaminated SW/Sediment (unidentified source)	_____	____
☐ Contaminated Soil	_____	____
☑ Other_____	_____	____
☐ No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- ☐ Metals
- ☐ Organics
- ☐ Inorganics
- ☐ Solvents
- ☐ Paints/Pigments
- ☐ Laboratory/Hospital Waste
- ☐ Radioactive Waste
- ☐ Construction/Demolition Waste
- ☐ Pesticides/Herbicides
- ☐ Acids/Bases
- ☐ Oily Waste
- ☐ Municipal Waste
- ☐ Mining Waste
- ☐ Explosives
- ☑ Other _____

Physical State of Waste as Deposited (check all that apply):

- ☐ Solid
- ☐ Sludge
- ☐ Powder
- ☑ Liquid
- ☐ Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

- ☐ Yes
- ☑ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles (check all that apply):

- ☐ Municipal
- ☐ Private
- ☑ None

Is There a Suspected Release to Ground Water[1]:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Wells Been Identified:

- ☐ Yes
- ☑ No

If Yes, Enter Primary Target Population:

___ People[3]

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

- ☐ Yes
- ☑ No

Nearest Designated Wellhead Protection Area[6]:

- ☐ Underlies Site
- ☐ >0-4 Miles
- ☑ None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile	_____
>1/4 - 1/2 Mile	_____
>1/2 - 1 Mile	_____
>1 - 2 Mile	_____
>2 - 3 Mile	_____
>3 - 4 Mile	_____
Total Within 4 Miles[4]	_____

*Use population #s for PA Table 2

*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

- ☑ Stream
- ☑ River
- ☐ Pond
- ☐ Lake
- ☐ Bay
- ☐ Ocean
- ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

___ Feet

___1.7_____ Miles

Is There a Suspected Release to Surface Water[1]:

- ☑ Yes
- ☐ No

Site is Located in:

- ☐ Annual - 10 yr Floodplain
- ☐ >10yr - 100yr Floodplain
- ☐ >100yr - 500yr Floodplain
- ☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

- ☐ Yes
- ☑ No

Have Primary Target Drinking Water Intakes Been Identified:

- ☐ Yes
- ☑ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery:

_____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):
_____	_____
_____	_____
_____	_____
_____	_____

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☐ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: ____ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☐ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Piscataway Creek___	_____	
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☐ None
☑ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

54,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____
Total Within 4 Miles [3-5]	_____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres: Dozens of wetlands

Other Sensitive Environments Located Within 4 Miles of the Site:

☑ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: JBA		Street Address: NA			
City: Brandywine		State: MD	Zip Code:20613	County:Prince Georges	Co. Code:033	Cong. Dist:
Latitude: 38 °42'0.10"	Longitude: 76 °50'43.32"	Approximate Area of Site: _____ Acres _____ Square Ft		Status of Site: ☐ Active ☐ Not Specified ☑ Inactive ☐ NA (GW plume, etc.)	

Site Name: SS01

SS01 is a geographically isolated property administratively managed by JBA ERP located 8 mile southeast of JBA in the town of Brandywine. While in operation from 1943-1987, the SS01 was used for temporary storage of scrap materials and hazardous waste. There was a fire at the warehouse in 1987 that burned it to the ground and ceased operations at this DRMO. According to the Deputy Fire Chief he is unaware of the use of AFFF at this location. Based on the operational history, there is a low propoability for PFCs being released into the environment at this location. Open ERP site.

2. Owner/Operator Information

Owner: JBA			Operator: Same as "owner"		
Street Address:			Street Address:		
City: Camp Springs			City:		
State:Maryland	Zip Code:78236	Telephone:	State:	Zip Code:	Telephone:
Type of Ownership: ☐ Private ☑ Federal Agency Name: DOD ☐ State ☐ Indian ☐ County ☑ Municipal ☐ Not Specified ☐ Other_____			Type of Ownership: ☐ Private ☐ Federal Agency Name: _____ ☐ State ☐ Indian ☐ County ☐ Municipal ☐ Not Specified ☐ Other_____		

3. Site Evaluator Information

Name of Evaluator: Michael Roooney	Agency/Organization: HydroGeoLogic, Inc.		Date Prepared:2/25/15
Street Address:11107 Sunset Hills Road, Suite 400	City:Reston		State: Virginia
Name of EPA or State Agency Contact:NA	Street Address:		
City:	State:	Telephone:	

4. Site Disposition *(for EPA use only)*

Emergency Response/Removal Assessment Recommendation: ☐ Yes ☐ No Date: _____	CERCLIS Recommendation: ☐ Higher Priority SI ☐ Lower Priority SI ☐ NFRAP ☐ RCRA ☐ Other: _____ Date: _____	Signature: Name (typed): Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):

- [ ] Industrial
- [x] Commercial
- [x] Residential
- [x] Forest/Fields
- [ ] Agriculture
- [ ] Mining
- [x] DOD
- [ ] DOE
- [ ] DOI
- [ ] Other Federal Facility:
- [ ] Other _____

Site Setting:

- [ ] Urban
- [ ] Suburban
- [x] Rural

Years of Operation:

Beginning Year _1943
Ending Year 1987_

- [ ] Unknown

Type of Site Operations (check all that apply):

- [ ] Manufacturing (must check subcategory)
  - [ ] Lumber and Wood Products
  - [ ] Inorganic Chemicals
  - [ ] Plastic and/or Rubber Products
  - [ ] Paints, Varnishes
  - [ ] Industrial Organic Chemicals
  - [ ] Agricultural Chemicals
  - [ ] Miscellaneous Chemical Products
  - [ ] Primary Metals
  - [ ] Metal Coating, Plating, Engraving
  - [ ] Metal Forging, Stamping
  - [ ] Fabricated Structural Metal Products
  - [ ] Electronic Equipment
  - [ ] Other Manufacturing
- [ ] Mining
  - [ ] Metals
  - [ ] Coal
  - [ ] Oil and Gas
  - [ ] Non-metallic Minerals
- [ ] Retail
- [ ] Recycling
- [ ] Junk/Salvage Yard
- [ ] Municipal Landfill
- [ ] Other Landfill
- [x] DOD
- [ ] DOE
- [ ] DOI
- [ ] Other Federal Facility _____
- [ ] RCRA
  - [ ] Treatment, Storage, or Disposal
  - [ ] Large Quantity Generator
  - [ ] Small Quantity Generator
  - [ ] Subtitle D
    - [ ] Municipal
    - [ ] Industrial
  - [ ] "Converter"
  - [ ] "Protective Filer"
  - [ ] "Non-or Late Filer"
- [ ] Note Specified
- [ ] Other_____

Waste Generated:

- [x] Onsite
- [ ] Offsite
- [ ] Onsite and Offsite

Waste Deposition Authorized By:

- [x] Present Owner
- [ ] Former Owner
- [ ] Present & Former Owner
- [ ] Unauthorized
- [ ] Unknown

Waste Accessible to the Public:

- [ ] Yes
- [ ] No

Distance to Nearest Dwelling, School, or Workplace:

_____ Feet

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

Source Type: (check all that apply)	Source Waste Quantity: (include unit)	Tier*:
[ ] Landfill	_____	____
[ ] Surface Impoundment	_____	____
[ ] Drums	_____	____
[ ] Tanks and Non-Dum Containers	_____	____
[ ] Chemical Waste Pile	_____	____
[ ] Scrap Metal or Junk Pile	_____	____
[ ] Tailings Pile	_____	____
[ ] Trash Pile (open drum)	_____	____
[ ] Land Treatment	_____	____
[ ] Contaminated GW Plume (unidentified source)	_____	____
[ ] Contaminated SW/Sediment (unidentified source)	_____	____
[ ] Contaminated Soil	_____	____
[x] Other_____	_____	____
[ ] No Sources		

*C=Constituent, W=Wastestream, V=Volume, A=Area

General Type of Waste (check all that apply):

- [ ] Metals
- [ ] Organics
- [ ] Inorganics
- [ ] Solvents
- [ ] Paints/Pigments
- [ ] Laboratory/Hospital Waste
- [ ] Radioactive Waste
- [ ] Construction/Demolition Waste
- [ ] Pesticides/Herbicides
- [ ] Acids/Bases
- [ ] Oily Waste
- [ ] Municipal Waste
- [ ] Mining Waste
- [ ] Explosives
- [x] Other _____

Physical State of Waste as Deposited (check all that apply):

- [ ] Solid
- [ ] Sludge
- [ ] Powder
- [x] Liquid
- [ ] Gas

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

☑ Yes
☐ No

If Yes, Distance to nearest Drinking Well:

_____ Feet

Type of Drinking Water Wells Within 4 Miles
(check all that apply):

☐ Municipal
☐ Private
☑ None

Is There a Suspected Release to Ground Water[1]:

☐ Yes
☑ No

Have Primary Target Drinking Water Wells Been Identified:

☐ Yes
☐ No

If Yes, Enter Primary Target Population:

___ People[3]

Depth to Shallowest Aquifer:

___5-15__ Feet

Karst Terrain/Aquifer Present:

☐ Yes
☑ No

Nearest Designated Wellhead Protection Area[6]:

☐ Underlies Site
☐ >0-4 Miles
☐ None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile _____

>1/4 - 1/2 Mile _____

>1/2 - 1 Mile _____

>1 - 2 Mile _____

>2 - 3 Mile _____

>3 - 4 Mile _____

Total Within 4 Miles[4] _____

*Use population #s for PA Table 2
*Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

☑ Stream ☑ River ☐ Pond ☐ Lake
☐ Bay ☐ Ocean ☐ Other_____

Shortest Overland Distance From Any Source to Surface Water:

___ Feet
_____ Miles

Is There a Suspected Release to Surface Water[1]:

☐ Yes
☐ No

Site is Located in:

☐ Annual - 10 yr Floodplain
☐ >10yr - 100yr Floodplain
☐ >100yr - 500yr Floodplain
☐ >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

☐ Yes
☐ No

Have Primary Target Drinking Water Intakes Been Identified:

☐ Yes
☐ No

If Yes, Distance to Nearest Drinking Water Intake : _____ Miles[6]

If Yes, Enter Population Served by Target Intake:

_____ People[4]

List All Secondary Target Drinking Water Intakes:

Name:	Water Body:	Flow (cfs):	Population Served:

Total within 15 Miles [4] _____

Fisheries Located Along the Surface Water Migration Path:

☐ Yes ☑ No

If Yes, Distance to Nearest Fishery:
_____ Miles

Have Primary Target Fisheries Been Identified:

☐ Yes ☑ No

List All Secondary Target Fisheries[10]:

Water Body/ Fishery Name :	Flow (cfs):

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☐ Yes
☑ No

Have Primary Target Wetlands Been Identified:

☐ Yes
☑ No

List All Wetlands:

Water Body :	Flow (cfs):	Frontage miles:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Sensitive Environments Located Along the Surface Water Migration Path:

☐ Yes
☐ No

If Yes, Distance to Nearest Sensitive Environment: ____ feet

Have Primary Target Sensitive Environments Been Identified:

☐ Yes
☐ No

List All Sensitive Environments[11]:

Water Body :	Flow (cfs):	Sensitive Environment Type:
Timothy Branch___		_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Soil Exposure Pathway

Are People Occupying Residence or Attending School or Daycare on or Within 200 Feet of Area of Known or Suspected Contamination:

☐ Yes
☑ No

If Yes, Enter Total Residential Population:

_____ People[2]

Number of Workers Onsite[4]:

☑ None
☐ 1 - 100
☐ 101 - 1,000
☐ > 1,000

Population Within 1 Mile:

54,000 (4 miles)

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:

☐ Yes
☐ No

If Yes, List Each Terrestrial Sensitive Environment[5]:

_____
_____
_____

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air[1]:

☐ Yes
☑ No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____
Total Within 4 Miles [3-5]	_____

Wetlands Located Within 4 Miles of the Site[6]:

☑ Yes
☐ No

If Yes, How Many Acres:

Other Sensitive Environments Located Within 4 Miles of the Site:

☐ Yes
☐ No

List All Sensitive Environments Within 1/2 Mile of the Site[6]:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____

*Refer to PA Table 10 for calculations on air pathway exposures

[1-11] Refers to question number on the PA scoresheet for each particular pathway

APPENDIX C

RECORDS OF COMMUNICATION

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DEPARTMENT OF THE AIR FORCE
AIR FORCE CIVIL ENGINEER CENTER
ENVIRONMENTAL RESTORATION PROGRAM
JOINT BASE ANDREWS, MD 20762

30 Jan 2015

Mr. David M. Connolly, REM
Chief, Environmental Restoration
Air Force Civil Engineering Center (AFCEC/CZOE)
3466 N Carolina Avenue
Joint Base Andrews, MD 20762

Mr. S. Andrew Sochanski, PG, RPM
U.S. Environmental Protection Agency: Region 3
Federal Facilities Branch
1650 Arch St. (3HS11)
Philadelphia, PA 19103

SUBJECT: Perfluorinated Compound (PFC) Strategy for Joint Base Andrews (JBA) and the Brandywine Defense Reutilization and Marketing Office (DRMO)

Dear Mr. Sochanski:

The intent of this letter is to present the strategic US Air Force (AF) approach Joint Base Andrews (JBA) intends to use to ensure adequate protection of human health and the environment from exposure to perfluorinated chemicals (PFCs), to be documented in the *Site Management Plan (SMP) of the JBA Federal Facilities Agreement (FFA), Under CERCLA Section 120, Administrative Docket Number: CERC-03-2011-0169FF for EPA ID # MD0570024000*, as well as the *SMP for the Brandywine DRMO FFA, under CERCLA Section 120, Administrative Docket Number: CERC-03-2010-0047FF for EPA ID # MD9570024803.*

Since December 2010, JBA has received numerous requests from the US Environmental Protection Agency (EPA) to investigate the potential release of perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) at Joint Base Andrews (JBA) and the Brandywine Defense Reutilization and Marketing Office (DRMO). More recently, EPA has indicated that unless PFOS and PFOA are adequately addressed, consideration would be given to formally non-concur with primary documents of the two FFAs for these two National Priority List (NPL) sites.

PFOS and PFOA are part of a large class of chemicals known as perfluorinated compounds which are perfluoroalkyl substances that include long-chain perfluoroalkyl sulfonate (PFAS) (includes PFOS), and long-chain perfluoroalkyl carboxylate (PFAC) (includes PFOA). To prevent confusion, this letter will address all the above using the term perfluorinated compounds (PFCs) to match the term used in AF's Interim Guidance on Perfluorinated Compounds, which was issued 17 Sep 2012.

PFCs are known to be an active ingredient in certain types of aqueous film-forming foams (AFFF) developed between 1963 and 1969, then authorized and integrated into use by the Air Force for petroleum fire suppression beginning in 1970. During fire training, equipment maintenance, and use, AFFF has been released to the environment at an unknown number of Air Force installations. AFFF can contain and degrade into PFOS, and may further degrade into PFOA.

JBA ERP has not yet documented whether PFOS-containing AFFF or articles are utilized at JBA or Brandywine DRMO, but AF intends to address these compounds appropriately through a systematic approach based on AF guidance, program scheduling, and funding availability.

Because there is a possible pathway for PFCs to have entered the environment and they may present a potentially unacceptable risk to human health, they meet the definition of an emerging contaminant (EC) within Department of Defense Instruction (DoDI) 4715.18, entitled "Emerging Contaminants" and issued 11 Jun 2009. The instruction was developed based upon a series of white papers agreed to by DoD, EPA, and Environmental Council of States (ECOS) as a result of an EC working group. On 17 Sep 2012, AF issued its Interim Guidance on Perfluorinated Compounds, which advises AF installations on how the AF will implement DoDI 4715.18. Air Force Instruction (AFI) 32-7020, entitled “The Environmental Restoration Program,” was recertified on 7 Nov 2014 and addresses ECs in chapter 18; it affirms the EC methodology that is laid out in DoDI 4715.18. These instructions and guidance will be the foundation for the JBA PFC strategy.

Using the CERCLA Tiers I, II, and III partnering process, EPA and AF have tentatively agreed, at least conceptually, to outline the systematic approach to address PFC issues at each of the two Sites by adding an appendix to the *Site Management Plan (SMP) of the JBA FFA, Under CERCLA Section 120, Administrative Docket Number: CERC-03-2011-0169FF for EPA ID # MD0570024000,* as well as the *SMP for the Brandywine DRMO FFA, under CERCLA Section 120, Administrative Docket Number: CERC-03-2010-0047FF for EPA ID # MD9570024803*. This approach will afford the opportunity to regularly update and refine the appendix with each annual amendment to the SMP as the PFC program develops and evolves. It also provides a convenient, centralized reference point in the SMP for PFC related updates. The appendix will present the plan for determining whether a release actually occurred (beginning with the FY14 contracted project), followed by an investigation, if appropriate, to determine if the release presents an unacceptable risk (using a FY15 project). The fiscal plan and program can be presented, as well as budgeting and execution plans for each phase of the strategy as it’s implemented.

The SMP appendix would identify and create *Areas of Potential Contamination* (APCs) for PFCs and would highlight the process and framework for determining whether a release actually occurred, followed by an investigation, if appropriate, to determine if it presents an unacceptable risk. The new term *Areas of Potential Contamination* is being suggested to differentiate from the term Area of Concern (AOC) that was traditionally used in the Environmental Restoration Program. APCs will give AF and EPA the latitude to create or delete APCs as needed to

implement the AF enterprise-wide PFC strategy at JBA and Brandywine DRMO. The projected list of APCs is included in the attached SMP Appendix.

The 2012 AF Interim Guidance for PFCs established the AF enterprise-wide strategy for PFCs, which is being adopted and implemented at JBA and the Brandywine DRMO. It includes the following steps:

Step 1: Initial sampling
Step 2: Delineation of confirmed environmental releases
Step 3: Evaluation of the need for interim response actions based on risk assessment and human exposure potential
Step 4: Mitigation of exposure to humans and off-site migration, if warranted

Step 1; Part A: JBA has commenced the first step in this AF enterprise-wide strategy for PFCs. To accomplish the first step in this process, AF has planned, programmed, budgeted, and executed a task order contract in July 2014, funded using FY14 Defense Environmental Restoration Account (DERA). The scope of the project is to accomplish the initial assessment phase of this process, including a review of existing information and an on-site and/or off-site reconnaissance to determine if a release of PFCs may require additional investigation or action, and to evaluate the magnitude and severity of the release and threat to public health or welfare or the environment. The initial site reconnaissance is currently scheduled to begin at JBA on 26 Jan 2015.

Step 1; Part B: Depending on the data collected from the initial assessment, in accordance with the National Oil and Hazardous Substances Contingency Plan (NCP), it may be necessary to augment that assessment with samples collected for laboratory analysis. The sampling design would likely consider an evaluation of the conceptual site model (CSM), chemical properties specific to PFCs, and the timeframe since any suspected historical or ongoing release to determine the likely extent of contaminant migration with respect to exposure receptors, real property parcel boundaries, or surface water discharge points. This might include the use of groundwater models to augment the investigation and sampling design. All field and sampling activities would be conducted in accordance with the Uniform Federal Criteria Quality Assurance Project Plan (UFP-QAPP) in order to acquire quantitative chemical data generated from laboratory analysis of samples plus field data to determine whether there was a release of PFCs. Thereafter, the AF would evaluate the magnitude and severity of the release, the nature of the associated threats to public health or welfare or the environment, and determine whether action or further investigation is appropriate. If the subsequent site investigation steps described above are determined to be necessary, JBA will use programmed FY15 DERA funds. This process is all included in the first step integrated into the AF Enterprise-wide strategy for PFCs outlined above, and as described in the AF interim guidance on PFCs.

Step 2: If the outcome of the investigation from Step 1 is that a full remedial investigation (RI) is required, that requirement would be funded no sooner than FY16.

Step 3 & 4: AF will evaluate the appropriate response for Step 3 and Step 4 based on the RI results from step 2. If necessary, step 3 would be funded no sooner than FY17.

Attached to this letter is the proposed Appendix to be amended to the SMPs for JBA and Brandywine DRMO. The partnership AF has built with EPA is highly valued and appreciated, and is an integral aspect to proper implementation of the two FFAs for JBA and Brandywine DRMO. Please feel free to contact me regarding any of the ideas presented herein, as well as any other related issues at (301) 981-1653 or david.m.connolly8.civ@mail.mil.

Sincerely,

30 Jan 2015

David M. Connolly, REM
Chief, Environmental Restoration
Joint Base Andrews, MD

Attachments:

1. JBA SMP Appendix A – PFC Strategy for JBA
2. Brandywine DRMO SMP Appendix A – PFC Strategy for the Brandywine DRMO

cc: Mr. Rick Grills, P.G, MDE LMD/FF
Mr. Ken Clare, PGCHD

APPENDIX A

Perfluorinated Compound (PFC) Strategy For Joint Base Andrews (JBA)

Introduction

This Appendix presents the strategic US Air Force (AF) approach Joint Base Andrews (JBA) intends to use to ensure adequate protection of human health and the environment from exposure to perfluorinated compounds (PFCs), now being documented in this *Site Management Plan (SMP) of the JBA Federal Facilities Agreement (FFA), Under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 120, Administrative Docket Number: CERC-03-2011-0169FF for EPA ID # MD0570024000.*

Perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) are part of a large class of chemicals known as perfluorinated compounds (PFC). PFCs are perfluoroalkl substances that include long-chain perfluoroalkyl sulfonate (PFAS) (includes PFOS), and long-chain perfluoroalkyl carboxlate (PFAC) (includes PFOA). To prevent confusion, this Appendix will address all the above using the term PFCs, to match the terms used in the AF Interim Guidance on PFCs issued 17 Sep 2012.

JBA Environmental Restoration Program (ERP) has not yet documented whether PFOS-containing aqueous film forming foam (AFFF) or articles are utilized at JBA, but AF intends to address these compounds appropriately through a systematic approach based on AF guidance, program scheduling, and funding availability.

Because there is a possible pathway for PFCs to have entered the environment and they may present a potentially unacceptable risk to human health, they meet the definition of an emerging contaminant (EC) within Department of Defense Instruction (DoDI) 4715.18, entitled "Emerging Contaminants" and issued 11 Jun 2009. On 17 Sep 2012, AF issued its Interim Guidance on Perfluorinated Compounds, which advises AF installations on how the AF will implement DoDI 4715.18. Air Force Instruction (AFI) 32-7020, entitled “The Environmental Restoration Program,” was recertified on 7 Nov 2014 and addresses ECs in chapter 18; it affirms the EC methodology that is laid out in DoDI 4715.18. These instructions and guidance will be the foundation for the JBA PFC strategy.

Using the CERCLA Tiers I, II, and III partnering process, EPA and AF have agreed to outline the systematic approach to address PFC issues at JBA by adding this appendix to the *Site Management Plan (SMP) of the JBA FFA, Under CERCLA Section 120, Administrative Docket*

Number: CERC-03-2011-0169FF for EPA ID # MD0570024000. This approach will afford the opportunity to regularly update and refine this appendix with each annual amendment to the SMP as the PFC program develops and evolves. This appendix presents the plan for determining whether a release actually occurred (beginning with the FY14 contracted project), followed by an investigation, if appropriate, to determine if the release presents an unacceptable risk (using a FY15 project). The fiscal plan and program can be presented, as well as budgeting and execution plans for each phase of the strategy as it's implemented.

Areas of Potential Contamination

This SMP appendix identifies and creates *Areas of Potential Contamination* (APCs) for PFCs and highlights the process and framework to begin the remedial process for PFCs by presenting the plan for determining whether a release occurred, followed by an investigation, if appropriate, to determine if PFCs present an unacceptable risk. Refer to the next section for these details, *Current and Planned PFC Activities at JBA.*

The new term *Areas of Potential Contamination* is being created so EPA and AF program managers can appropriately execute the early stages of the remedial process. APCs will not necessarily require the same systematic approach that was established for Areas of Concern (AOCs), which were historically used as precursors to validating a site in the Installation Restoration Program (IRP), nor would APCs require the rigid process established for Operable Units (OUs), Supplemental Response Actions (SRAs), or Accelerated Operable Units (AOUs) as defined in the FFA. Using APCs will afford EPA and AF program managers the latitude to create, delete, combine, or divide APCs as needed to appropriately implement the AF enterprise-wide PFC strategy at JBA without being burdened by a rigid administrative process that could prove counterproductive.

APCs will be used until EPA and AF agree that enough information is available to appropriately craft the long-term strategy for managing the PFC remedial process implementation for JBA in accordance with the FFA.

The following list of APCs is based on knowledge of historical operational activities or incidents, such as fire training, burn pits, emergency responses, spills, or other releases of PFC containing AFFF:

- FT002, (aka FT-02, Fire Training Area Number 1 [includes SWMU-67]),
- FT003, (aka FT-03, Fire Training Area No. 2 [includes SWMU-68]),
- FT004, (aka FT-04, Fire Training Area No. 4 [includes SWMU-8 and SWMU-70]),
- The Currently Operational Fire Training Area
- Burn Pit at LF005, (aka LF-05, Leroy's Lane Landfill)

- AT069 (aka SWMU 69, Fire Protection Training Area 3, Helicopter Fire Training Area).

Current and Planned PFC Activities at JBA

The 2012 AF Interim Guidance for PFCs established the AF enterprise-wide strategy for PFCs, which is being implemented at JBA and the Brandywine DRMO. It includes the following steps:

Step 1: Initial sampling

Step 2: Delineation of confirmed environmental releases

Step 3: Evaluation of the need for interim response actions based on risk assessment and human exposure potential

Step 4: Mitigation of exposure to humans and off-site migration, if warranted

Step 1; Part A: Initial sampling – JBA has commenced the first step in this AF enterprise-wide strategy for PFCs. To accomplish the first step in this process, AF has planned, programmed, budgeted, and executed a task order contract in July 2014, funded using FY14 Defense Environmental Restoration Account (DERA). The scope of the project is to accomplish the initial assessment phase of this process, including a review of existing information and an on-site and/or off-site reconnaissance to determine if a release of PFCs may require additional investigation or action, and to evaluate the magnitude and severity of the release and threat to public health or welfare or the environment.

- FY14 DERA Funding - The initial site reconnaissance began at JBA on 26 Jan 2015. This includes interviews with JBA staff with who have a breadth of institutional operations knowledge about JBA, and may have specific or anecdotal knowledge of AFFF usage. The assessment will evaluate potential releases of PFCs at each of the APCs listed above. However, it will go further by evaluating the potential of releases from fire stations, fire suppression systems (hangar and building AFFF systems plus inventory, testing and maintenance areas), lagoons/ponds, time and distance testing, emergency response sites (aircraft crash sites, maintenance fires, emergency landings, drone crashes, etc.), current and historical use of AFFF, and other known and suspected AFFF applications and releases. AF intends to share the documentation for this effort with EPA when it is available, later in 2015.

Step 1; Part B: Initial sampling – Depending on the data collected from the initial assessment, in accordance with the National Oil and Hazardous Substances Contingency Plan (NCP), it may be necessary to augment that assessment with samples collected for laboratory analysis. The sampling design would likely consider an evaluation of the conceptual site model (CSM),

chemical properties specific to PFCs, and the timeframe since any suspected historical or ongoing release to determine the likely extent of contaminant migration with respect to exposure receptors, real property parcel boundaries, or surface water discharge points. This might include the use of groundwater models to augment the investigation and sampling design. All field and sampling activities would be conducted in accordance with the Uniform Federal Criteria Quality Assurance Project Plan (UFP-QAPP) in order to acquire quantitative chemical data generated from laboratory analysis of samples plus field data to determine whether there was a release of PFCs. Thereafter, the AF would evaluate the magnitude and severity of the release, the nature of the associated threats to public health or welfare or the environment, and determine whether action or further investigation is appropriate. If the subsequent site investigation steps described above are determined to be necessary, JBA will use programmed FY15 DERA funds. This process is all included in the first step integrated into the AF Enterprise-wide strategy for PFCs outlined above, and as described in the AF interim guidance on PFCs.

- FY15 DERA Funding – Inspections at prioritized probable release areas
    - Prioritization based on results of Step 1; Part A, the potential for human exposure, and regulatory pressure.

Step 2: Delineation of confirmed environmental releases – If the outcome of the investigation from Step 1 is that a full remedial investigation (RI) is required, that requirement would be funded no sooner than FY16.

- FY16 DERA Funding (and beyond) – remedial investigations.

Step 3 & 4: AF will evaluate the appropriate response for Step 3 (Evaluation of the need for interim response actions based on risk assessment and human exposure potential) and Step 4 (Mitigation of exposure to humans and off-site migration, if warranted) based on the RI results from step 2. If necessary, step 3 would be funded no sooner than FY17.

Attachment 1 – USAF, *Air Force Interim Guidance on Perfluorinated Compounds*, released by A7C, Sep 2012

Attachment 2 – USDOD, *DoDI 4715.18, Emerging Contaminants*, Jun 2009.

Attachment 3 – USAF, Air Force Instruction (AFI) 32-7020, *The Environmental Restoration Program*, Chapter 18, Nov 2014.

APPENDIX A

Perfluorinated Compound (PFC) Strategy For the Brandywine Defense Reutilization and Marketing Office (DRMO)

Introduction

This Appendix presents the strategic US Air Force (AF) approach Joint Base Andrews (JBA) intends to use to ensure adequate protection of human health and the environment from exposure to perfluorinated compounds (PFCs) from the Brandywine Defense Utilization and Marketing Office (DRMO), now being documented in this *Site Management Plan (SMP) for the Brandywine DRMO Federal Facilities Agreement (FFA), under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 120, Administrative Docket Number: CERC-03-2010-0047FF for EPA ID # MD9570024803.*

Perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) are part of a large class of chemicals known as perfluorinated compounds (PFC). PFCs are perfluoroalkl substances that include long-chain perfluoroalkyl sulfonate (PFAS) (includes PFOS), and long-chain perfluoroalkyl carboxlate (PFAC) (includes PFOA). To prevent confusion, this Appendix will address all the above using the term PFCs, to match the terms used in the AF Interim Guidance on PFCs issued 17 Sep 2012.

JBA Environmental Restoration Program (ERP) has not yet documented whether PFOS-containing aqueous film forming foam (AFFF) or articles were utilized at the Brandywine DRMO, but AF intends to address these compounds appropriately through a systematic approach based on AF guidance, program scheduling, and funding availability.

Because there is a possible pathway for PFCs to have entered the environment and they may present a potentially unacceptable risk to human health, they meet the definition of an emerging contaminant (EC) within Department of Defense Instruction (DoDI) 4715.18, entitled "Emerging Contaminants" and issued 11 Jun 2009. On 17 Sep 2012, AF issued its Interim Guidance on Perfluorinated Compounds, which advises AF installations on how the AF will implement DoDI 4715.18. Air Force Instruction (AFI) 32-7020, entitled “The Environmental Restoration Program,” was recertified on 7 Nov 2014 and addresses ECs in chapter 18; it affirms the EC methodology that is laid out in DoDI 4715.18. These instructions and guidance will be the foundation for the Brandywine DRMO PFC strategy.

Using the CERCLA Tiers I, II, and III partnering process, EPA and AF have agreed to outline the systematic approach to address PFC issues at the Brandywine DRMO by adding this appendix to the *SMP for the Brandywine DRMO FFA, under CERCLA Section 120, Administrative Docket Number: CERC-03-2010-0047FF for EPA ID # MD9570024803*. This approach will afford the opportunity to regularly update and refine this appendix with each annual amendment to the SMP as the PFC program develops and evolves. This appendix presents the plan for determining whether a release actually occurred (beginning with the FY14 contracted project), followed by an investigation, if appropriate, to determine if the release presents an unacceptable risk (using a FY15 project). The fiscal plan and program can be presented, as well as budgeting and execution plans for each phase of the strategy as it's implemented.

Areas of Potential Contamination

This SMP appendix identifies and creates *Areas of Potential Contamination* (APCs) for PFCs and highlights the process and framework to begin the remedial process for PFCs by presenting the plan for determining whether a release occurred, followed by an investigation, if appropriate, to determine if PFCs present an unacceptable risk. Refer to the next section for these details, *Current and Planned PFC Activities at the Brandywine DRMO.*

The new term *Areas of Potential Contamination* is being created so EPA and AF program managers can appropriately execute the early stages of the remedial process. APCs will not necessarily require the same systematic approach that was established for Areas of Concern (AOCs), which were historically used as precursors to validating a site in the Installation Restoration Program (IRP), nor would APCs require the rigid process established for Operable Units (OUs), Supplemental Response Actions (SRAs), or Accelerated Operable Units (AOUs) as defined in the FFA. Using APCs will afford EPA and AF program managers the latitude to create, delete, combine, or divide APCs as needed to appropriately implement the AF enterprise-wide PFC strategy at for the Brandywine DRMO without being burdened by a rigid administrative process that could prove counterproductive.

APCs will be used until EPA and AF agree that enough information is available to appropriately craft the long-term strategy for managing the PFC remedial process implementation for the Brandywine DRMO in accordance with the FFA.

The following list of APCs is based on knowledge of historical operational activities or incidents, such as fire training, burn pits, emergency responses, spills, or other releases of PFC containing AFFF:

- Brandywine DRMO Burn Pit
- Brandywine DRMO Warehouse Fire

Current and Planned PFC Activities at the Brandywine DRMO

The 2012 AF Interim Guidance for PFCs established the AF enterprise-wide strategy for PFCs, which is being implemented at the Brandywine DRMO. It includes the following steps:

Step 1: Initial sampling

Step 2: Delineation of confirmed environmental releases

Step 3: Evaluation of the need for interim response actions based on risk assessment and human exposure potential

Step 4: Mitigation of exposure to humans and off-site migration, if warranted

Step 1; Part A: Initial sampling – JBA has commenced the first step in this AF enterprise-wide strategy for PFCs. To accomplish the first step in this process, AF has planned, programmed, budgeted, and executed a task order contract in July 2014, funded using FY14 Defense Environmental Restoration Account (DERA). The scope of the project is to accomplish the initial assessment phase of this process, including a review of existing information and an on-site and/or off-site reconnaissance to determine if a release of PFCs may require additional investigation or action, and to evaluate the magnitude and severity of the release and threat to public health or welfare or the environment.

- FY14 DERA Funding - The initial site reconnaissance began at the Brandywine DRMO on 26 Jan 2015. This includes interviews with JBA staff with who have a breadth of institutional operations knowledge about the Brandywine DRMO, and may have specific or anecdotal knowledge of AFFF usage. The assessment will evaluate potential releases of PFCs at each of the APCs listed above. However, it will go further by evaluating the potential of releases from fire stations, fire suppression systems (hangar and building AFFF systems plus inventory, testing and maintenance areas), lagoons/ponds, time and distance testing, emergency response sites (aircraft crash sites, maintenance fires, emergency landings, drone crashes, etc.), current and historical use of AFFF, and other known and suspected AFFF applications and releases. AF intends to share the documentation for this effort with EPA when it is available, later in 2015.

Step 1; Part B: Initial Sampling – Depending on the data collected from the initial assessment, in accordance with the National Oil and Hazardous Substances Contingency Plan (NCP), it may be necessary to augment that assessment with samples collected for laboratory analysis. The sampling design would likely consider an evaluation of the conceptual site model (CSM), chemical properties specific to PFCs, and the timeframe since any suspected historical or ongoing release to determine the likely extent of contaminant migration with respect to exposure receptors, real property parcel boundaries, or surface water discharge points. This might include

the use of groundwater models to augment the investigation and sampling design. All field and sampling activities would be conducted in accordance with the Uniform Federal Criteria Quality Assurance Project Plan (UFP-QAPP) in order to acquire quantitative chemical data generated from laboratory analysis of samples plus field data to determine whether there was a release of PFCs. Thereafter, the AF would evaluate the magnitude and severity of the release, the nature of the associated threats to public health or welfare or the environment, and determine whether action or further investigation is appropriate. If the subsequent site investigation steps described above are determined to be necessary, JBA will use programmed FY15 DERA funds. This process is all included in the first step integrated into the AF Enterprise-wide strategy for PFCs outlined above, and as described in the AF interim guidance on PFCs.

- FY15 DERA Funding – Inspections at prioritized probable release areas
    - Prioritization based on results of Step 1; Part A, the potential for human exposure, and regulatory pressure.

Step 2: Delineation of confirmed environmental releases – If the outcome of the investigation from Step 1 is that a full remedial investigation (RI) is required, that requirement would be funded no sooner than FY16.

- FY16 DERA Funding (and beyond) – remedial investigations.

Step 3 & 4: AF will evaluate the appropriate response for Step 3 (Evaluation of the need for interim response actions based on risk assessment and human exposure potential) and Step 4 (Mitigation of exposure to humans and off-site migration, if warranted) based on the RI results from step 2. If necessary, step 3 would be funded no sooner than FY17.

Attachment 1 – USAF, *Air Force Interim Guidance on Perfluorinated Compounds*, released by A7C, Sep 2012

Attachment 2 – USDOD, *DoDI 4715.18, Emerging Contaminants*, Jun 2009.

Attachment 3 – USAF, Air Force Instruction (AFI) 32-7020, *The Environmental Restoration Program*, Chapter 18, Nov 2014.

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
WASHINGTON DC

17 SEP 2012

MEMORANDUM FOR ALL MAJCOM/A7
AFCEE/DR
NGB/A7O
AF/SG3
AFRPA/DR

FROM: HQ USAF/A7C

SUBJECT: Interim Guidance on Perfluorinated Compounds

Perfluorinated compounds (PFCs) are classified as emerging environmental contaminants based on increasing regulatory interest, potential risk to human health and the environment, and evolving regulatory standards. Some Air Force installations have received requests from regulators for environmental sampling for PFCs. MAJCOMs and active installations should refer such requests to Col Jeff Knippel, AFCEE/ER, DSN 969-8784, jeffry.knippel@us.af.mil. AFCEE, NGB and AFRPA are the AF POCs for cleanup and will implement the attached guidance in accordance with DoDI 4715.18, *Emerging Contaminants* at active installations, ANG installations and closure properties, respectively.

All Air Force installations in the United States, territories, possessions, Base Realignment and Closure (BRAC) properties, active ranges, and other than operational ranges, as well as Air Force Government-Owned, Contractor-Operated (GOCO) facilities, are subject to the attached guidance. Responses to regulator requests to sample for PFCs and response actions based on the documented presence of PFCs at an Air Force installation or GOCO facility will be in accordance with the attached guidance. This guidance has been coordinated with the NGB, AFCEE and AFRPA and will be incorporated into AFI 32-7020, *Environmental Restoration.* My POC for this matter is Ms. Elaine Ross, DSN 612-4260, elaine.ross@pentagon.af.mil.

MARK A. CORRELL, SES, P.E., USAF
The Deputy Civil Engineer
DCS/Logistics, Installations & Mission Support

Attachments
1. PFC Guidance

cc:
AFLOA/JACE-FSC
SAF/IEE
AFLCMC/WNV

Interim
Air Force Guidance
On Sampling and Response Actions for
Perfluorinated Compounds at Active and BRAC Installations

27 Aug 2012

1**. Summary**. Perfluorinated compounds (PFCs) are classified as emerging environmental contaminants based on increasing regulatory interest, potential risk to human health and the environment, and evolving regulatory standards. Some Air Force installations have received requests from regulators to environmental sampling for PFCs. The Air Force will exercise due diligence to protect human health and the environment. Requests for action on PFCs will be addressed on a case-by-case basis when a regulatory driver, direct human exposure, and/or off-site migration is identified. In the absence of a regulatory driver, the Air Force will respond to emerging contaminants such as PFCs at targeted Air Force restoration sites in a systematic manner informed by site-specific exposure data and supporting evaluation of potential risk. The systematic evaluation will begin with fire training areas (FTAs) that were operable between 1970 and 2000. Sampling, when authorized, will be executed as a standalone activity using an appropriate contract mechanism. It is not appropriate to address PFCs under Performance Based Remediation Contracts (PBR) at this time because of the lack of a clear legal drivers and specific performance objectives. Results of initial sampling will confirm release, identify sites with potential PFC contamination, and provide necessary input for planning, programming, and budgeting for follow-on efforts. Upon confirmation of release, delineation and potential response actions for PFCs will be approved by AFCEE/ER (active installations) or AFRPA/BPM (BRAC installations), and coordinated with installation Bioenvironmental Engineering (BE) flight as separate steps.

This guidance will:

- Provide installation RPMs and Base Environmental Coordinators (BECs) with a response to regulator request for PFC sampling
- Provide guidance for initiating Air Force Enterprise-wide strategy for PFCs
- Provide supporting technical information for analysis and risk assessment
- Be updated periiodically to reflect the evolving understanding of the environmental characteristics and risks associated with PFC exposure

2. **Background.** PFCs are a class of synthetic fluorinated chemicals used in many industrial and consumer products, including defense-related applications. They are persistent, found at low levels in the environment, and bioaccumulate. PFCs have demonstrated toxicity, but levels that cause effects are not yet established. In 1970, the Air Force began using Aqueous Film Forming Foam (AFFF) fire fighting agents containing PFCs to extinguish petroleum fires. AFFF can contain and degrade into

perfluorooctane sulfonate (PFOS), and may further degrade into perfluorooctoanoic acid (PFOA). During fire training, equipment maintenance, and use, AFFF was released directly to the environment. Although manufacturers have reformulated AFFF to eliminate PFOS, EPA continues to permit use of PFOS-based AFFF and the Air Force maintains a significant inventory of PFOS-based AFFF product.

Because the number of PFC contaminated Air Force sites and the extent of impacted groundwater and soil contamination is unknown, AFCEE/TDV initiated limited environmental sampling at targeted locations based on previous activities. This limited sampling demonstrated potential for PFC release at unlined Air Force FTAs that were in operation between 1970 and 2000.

3. **Regulatory Requests for Sampling**. Requests for environmental sampling for PFCs by regulatory agency officials will be addressed on a case-by-case basis. Upon receiving a request for sampling of PFCs, the installation must notify AFCEE/ER (active installations) or AFRPA/BPM (BRAC installations) prior to agreement to initiate any PFC-related sampling action.

A. The base must receive, in writing, (letter or e-mail) the request for sampling citing the specific local, state or federal statute, regulation or written enforceable agreement driving the requirement. If there is a legal requirement, the installation must then:

    1. Describe a reasonable basis to suspect a potential release of PFCs that is associated with Air Force activities at specific locations on the installation.

    2. Determine if an exposure pathway exists for the probable contamination to threaten public health and/or if potential for offsite migration is likely.

    3. Coordinate and obtain authorization from the AFCEE/ER (active installations) or AFRPA/BPM (BRAC installations). AFCEE/ER or AFRPA/BPM will validate the possibility of an environmental release and the legal basis for requested sampling with AFLOA/JACE-FSC, and coordinate technical issues with AFCEE/TDV before authorizing sampling.

    4. Program for initial sampling as a standalone contracting action.

B. In the absence of a legal requirement, the installation shall discuss with regulators the Air Force approach to systematically addressing potential responses to PFC releases Air Force–wide at targeted Air Force environmental restoration sites (see Section 4 below).

C. Initial sampling, when authorized, should be a one-time event, and the quality assurance project plan for such efforts should comply with the technical guidance in Section 1, ATCH 1. Initial sampling should not be included with ongoing remedial action operation or long term monitoring work plans.

4. **Air Force Restoration Enterprise-Wide Response to Possible Release of PFCs.** Per DoDI 4715.18, *Emerging Contaminants*, in the absence of an applicable legal driver, the Air Force may confirm a possible release of an emerging contaminant such as PFCs, followed by delineation, if: a reasonable basis exists to suspect a potential release associated with Air Force activities at an installation; an exposure pathway exists for the probable contamination to threaten public health; and/or potential for off-site migration is likely.

A. This Air Force guidance initiates a step-wise Air Force strategy. Step 1 is to confirm an environmental release of PFCs has occurred. Step 2 is to delineate the extent of PFC contamination and conduct a pathway evaluation to determine potential risk to human health or off-site migration as described in Section 2, ATCH 1. Step 3 is to mitigate, on a case-specific basis, any validated human exposures with interim action until promulgated cleanup standards and improved remedial technologies are available. If circumstances warrant, such as to expedite property transfer, AFRPA may seek SAF/IEE approval through its chain of command to implement a final mitigation strategy.

B. AFCEE/ER (active installation) or AFRPA/BPM (BRAC installation) will validate the program funding requests and coordinate technical issues with AFCEE/TDV before authorizing sampling.

1. Programming funds for initial sampling is anticipated at the FY 2014 budget submission, with initial sampling to occur in FY 2015.

2. Programming funds for delineation of extent of PFC release and evaluation of potential risk to human health and/or off site migration (based on initial sampling results) is anticipated in FY 2016, with activities to delineate extent of PFC contamination to occur in FY 2017.

3. In the absence of a regulatory requirement for PFCs, the Air Force will respond to validated human exposure to PFCs with appropriate interim action to mitigate exposures. Programming funds for potential interim response actions will be considered at sites where the extent of release is delineated and a human exposure pathway is complete and/or off-site migration has been identified and is anticipated after FY 2017.

4. Programming funds and authorization for interim action before FY 2018 in response to human exposure will be addressed on a case-specific basis. The Air Force will exercise due diligence to protect human health and the environment.

5. **Initial Confirmation Sampling of PFCs at Targeted Air Force Environmental Restoration Program Sites.** Step 1 of the Environmental Restoration Program (ERP) Air Force-wide strategy for addressing potential environmental contamination of PFCs

above the EPA Office of Water provisional health advisory (PHA) levels is initial sampling to confirm a possible environmental release of PFOS at concentrations greater than or equal to 0.2 µg/L, and of PFOA at concentrations greater than or equal to 0.4 µg/l in ground water. Each active Air Force installation in the United States with a FTA that was operable between 1970 and 2000 must prepare a Project Cost Estimating Assumptions Document (PCEAD) to program funds for initial sampling. It is assumed that each FTA will have a previously assigned site identifier in EESOH-MIS and results of prior investigation to inform work planning. The sampling activity will be programmed according to the current EESOH-MIS site status or, if the site is at Site Completion, as an AFCEE/ER (active installations) or AFRPA/BPM (BRAC installations)-validated "new site".

A. Data collected from sampling should be of sufficient quality and quantity to definitively confirm if PFCs are present within known site boundaries. Please refer to the attached "Technical Support Guidance: Section 1" for information on Analytical methods.

B. AFCEE/TDV will continue preliminary evaluation of other potential PFC release locations to determine whether more locations associated with other activities and systems need to be considered. Objectives of initial PFC sampling actions at FTAs will be to confirm release and identify potential human exposure and/or off-site migration.

6. **Response Actions Following Confirmation of PFC Contamination:** Step 2 of the Environmental Restoration Program AF-wide strategy for addressing potential environmental contamination of PFCs is delineation of confirmed environmental releases. Following confirmation of an environmental release at concentrations greater than or equal to the thresholds of 0.2 µg/L for PFOS and 0.4 µg/L for PFOA, the potential for human and environmental risk must be evaluated. The installation will prepare follow-on PCEADs, validated by AFCEE/ER (active installations) or AFRPA/BPM (BRAC installations), for delineation of the extent of the PFC release and evaluation of risk to human health and off site migration based on initial sampling results.

For purposes of this guidance "delineation" is defined as determination of the length, depth and width of impact to soil, groundwater, surface water, and sediment. Delineating the extent of a release requires sampling, analysis, validation, pathway analysis, risk evaluation, and reporting activities. This information must be of sufficient quality to define the magnitude of groundwater, subsurface soil, surface water, and/or sediment PFC contamination. Coordination with regulatory agencies is necessary to determine appropriate Data Quality Objectives and project design. If agreement cannot be reached at the installation level, consult with AFCEE/ER (active installations) or AFRPA/BPM (BRAC installations) to determine an appropriate course of action.

Any detection of PFOS at concentrations greater than or equal to the 0.2 µg/L, and of PFOA at concentrations greater than or equal to 0.4 µg/L, in ground water requires risk evaluation and pathway assessment. Please see Attachment 1*: Supporting Technical*

Information: Section 2 *Risk Evaluation and Pathway Assessment* at page 7 for information on risk evaluation and pathway assessment.

7. **Response Actions Following Delineation of PFC Contamination:** Step 3 of the Environmental Restoration Program Air Force-wide strategy for addressing potential environmental contamination of PFCs is to determine whether an interim response action is warranted. At BRAC installations, program managers should consult with AFRPA/BPM as to whether a remedy needs to be final or interim. Based on the evaluation of risk and the potential for human exposure (e.g., drinking water is affected) or if there is off-site migration, it may be necessary to initiate interim response actions. The current US EPA OSRTI sub chronic toxicity values (described in the attached "*Supporting Technical Information*: Section 3") are not appropriate to derive final remedial actions. However, screening values developed using these values may be used to inform the need for site-specific interim actions. Interim response to reduce risk may include plume migration control, provision of drinking water, land use controls, or monitoring until appropriate risk-based values are identified.

When delineation and pathway assessment indicate a response action is warranted, the proposed response will be evaluated to determine whether it is appropriate to integrate the response into the restoration program. When an action is warranted, consult with AFCEE/ER (active installations) or AFRPA/BPM (BRAC installations) to determine whether to prepare a standalone PCEAD for each site, or integrate the programming requirement into on-going remediation requirements. AFCEE/ER will notify HQ USAF/A7CA of instances in which a response action has been found to be warranted. AFRPA/BPM will notify SAF/IEE through its chain of command of instances in which a response action has been found to be warranted. Programming funds for potential response action is anticipated after FY 2017 unless a case-specific response to mitigate validated human exposure is warranted. All funding requirements will be validated by AFCEE/ER (active installations) or AFRPA/BPM (BRAC installations). Coordinate findings addressing confirmation of release, delineation and potential response actions for PFCs, with the installation BE flight. The BE flight will sample the base drinking water supply when knowledge gained from environmental sampling indicates the system may be impacted.

8. **Reporting and Data Management.** Active and BRAC installations will submit data on PFC sampling (e.g., location and media sampled, results, etc.) to AFCEE/ERD (ERPIMS data group). AFCEE/ER in coordination with AFCEE TDV will validate the accuracy of the data and compliance with Air Force and DoD policies. All validated PFC sampling data submitted to ERPIMS and reports of potential release investigation submitted to AFCEE/ER will be retained as part of the installation Administrative Record.

9. **Conflict Resolution.** Air Force and regulators should strive to agree on how and when to sample for PFCs, the means to determine the nature and scope of the risk to human health and the environment and the response actions needed in accordance with DoDI 4715.18 References (e) and (f). Should the public or regulator disagree with the

Air Force about potential PFC contamination and/or possible exposure routes and additional sampling, the issue should be elevated for resolution to AFCEE/ER (active installations) or AFRPA/BPM (BRAC installations) and AFLOA/JACE-FSC. The AFCEE Regional Environmental Offices in Atlanta, GA; Dallas, TX; and San Francisco, CA (AFCEE/TDA/TDC/TDW) provide assistance within their respective regions.

10. **Public Affairs.** All communication with the public and/or the media regarding potential or confirmed PFC contamination shall be reviewed and approved prior to release by the BE flight and the Air Force Public Affairs office responsible for the installation in question. AFCEE/ER (active installations) or AFRPA/BPM (BRAC installations) and AFLOA/JACE-FSC must also review and approve communication with the public and/or the media before release. The responsible Public Affairs office shall furnish a copy of this information to SAF/PAO. Risk communication support will be considered during response planning and implementation for sites involving human exposure when appropriate.

Attachment 1:

Supporting Technical Information:

1. **Analysis.** Analysis will be performed using a combination of liquid chromatography and tandem mass spectrometry (LC-MS-MS) methodology in accordance with guidance developed by the DoD Environmental Data Quality Workgroup (EDQW) and supported with appropriate quality assurance and quality control measures. Analysis will include six PFCs:

   a. Perfluorooctanesulfonic acid (PFOS),

   b. Perfluorohexanesulfonic acid (PFHXS),

   c. Perfluorooctanoic acid(PFOA),

   d. Perfluoroheptanoic acid(PFHPA),

   e. Perfluorononanoic acid (PFNA) and

   f. Perfluorobutanesulfonic acid (PFBS).

   USEPA Method 537 provides for the analysis of PFCs in drinking water and commercial labs have developed standard operating procedures for the analysis of PFCs in other media (soil, sediments, and groundwater). All of these methods use LC/MS/MS instrumentation. Laboratories must be accredited for PFC analysis under the DoD Environmental Laboratory Accreditation Program (ELAP).

Table 1 – Recommended Methods for PFC Analysis

Method (Technique)	Applicability	Limitations	Target Reporting Limits
EPA 537 Rev 1.1 LC-MS-MS	Drinking Water	Validated for drinking water samples only	PFOS 20.0 ng/L PFOA 40.0 ng/L
LC-MS-MS	Groundwater		PFOS 20.0 ng/L PFOA 40.0 ng/L
LC-MS-MS	Soil		PFOS 0.5 mg/kg PFOA 1.2 mg/kg

Should installations have questions or concerns regarding sample collection techniques, sample volumes required, analysis method, etc., prior to conducting PFC sampling, they should contact AFCEE TDV (all media), or the approved lab conducting the analyses. Additional guidance with more procedural detail will be provided separately.

If groundwater sample concentrations of the four non-PFOS or PFOA PFCs are found to exceed 0.2 µg/L, consult with AFCEE/ER (active installations) or AFRPA/BPM (BRAC installations) to determine a recommended course of action.

2. **Risk Evaluation and Pathway Assessment.** There is little guidance on evaluating associated risks from human or ecological exposure to PFCs. When warranted, site-specific risk assessment in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Defense Environmental Restoration Program (DERP), and/or the National Contingency Plan (NCP) will be accomplished to evaluate the extent of actual or potential exposure and risk.

A. The USEPA Office of Water (OW) established sub chronic Provisional Health Advisories (PHAs) for PFOS (0.2 µg/L) and PFOA (0.4 µg/l) for drinking water. EPA health advisory values are non-enforceable concentrations of drinking water contaminants. Note: the OW is currently revising these values with updated level expected by mid-2013.

B. The USEPA Office of Superfund Remediation and Technology Innovation (OSRTI) developed sub chronic toxicity values for PFOA (2E-4 mg/kg/day) and PFOS (8E-5 mg/kg-day) for oral exposures.

C. AFCEE/TDV calculated soil screening values based on the OSRTI (residential, direct contact) for PFOS, at 5 mg/kg and PFOA at 12 mg/kg.

D. State regulatory agencies (e.g. Minnesota, New Jersey, and North Carolina) have also established their own advisory levels for drinking water and groundwater. Additionally, several other states are currently discussing adopting pre-existing or deriving de novo toxicity values to set enforceable remedial objectives.

E. Pathway assessment shall include the development of a conceptual site model (CSM) to verify and evaluate completed exposure pathways. At a minimum, the assessment should:

    1. Determine and confirm a release of PFCs and that a drinking water source has been or may be impacted.

    2. Verify whether any drinking water systems on or near the Air Force installation have been sampled for PFCs or if PFCs have otherwise been detected.

    3. Establish through personal knowledge/interviews and record searches whether any soil or sediment potentially contaminated with PFCs that may threaten public health has or could be used for material, topsoil, or other uses on or off the installation.

4. Review existing documentation of environmental sampling/testing and/or hydrogeological investigations conducted for other contaminants at the site and other relevant information provided by personnel. Determine the direction of groundwater flow and proximity of potential PFC sources to drinking water wells on and/or off an Air Force installation. Note: sampling and analysis for PFOS and PFOS has not typically been accomplished during previous investigations.

5. Confirm that an actual or potential complete exposure pathway exists from source to receptor.

6. Provide Installation remedial restoration project and water quality managers' data to work with regulators and the public, as appropriate, to discuss potential exposure scenarios and pathways.

3. **Remedial Investigation/Site-Specific Risk Assessment.**

A. The USEPA Office of Superfund Remediation and Technology Innovation (OSRTI) developed sub chronic toxicity values for PFOA (2E-4 mg/kg/day) and PFOS (8E-5 mg/kg-day) for oral exposures. The current US EPA OSRTI sub chronic toxicity values (described above) are not appropriate to derive remedial actions. However, screening values developed using the US EPA OSRTI values may be used to inform the need for site-specific interim actions (i.e. to mitigate a complete human exposure pathway or off- site migration).

B. The site-specific risk assessment will be based on delineation of the release (extent of impact to soil and groundwater at the site) and appropriate site-specific assumptions about exposure. Where a site-specific risk assessment indicates PFC concentrations could potentially result in unacceptable risk, the site will be prioritized for potential response action in accordance with the DoD relative risk assessment process. Risk shall be assessed using the toxicity values approved by AFCEE/TDV in accordance with DoDI 4715.18 Enclosure 3, unless there are promulgated applicable or relevant and appropriate requirements (ARARs) that dictate the use of another value. Coordinate with AFCEE/ER (active installations), AFRPA/BPM (BRAC installations) and AFCEE/TDV to identify the most scientifically valid and appropriate toxicity values and risk assessment methodologies.

Department of Defense
INSTRUCTION

NUMBER 4715.18
June 11, 2009

USD(AT&L)

SUBJECT: Emerging Contaminants (ECs)

References: See Enclosure 1

1. PURPOSE. This Instruction establishes policy and assigns responsibilities for the identification, assessment, and risk management of ECs that have the potential to impact the Department of Defense in accordance with the authority in DoD Directive (DoDD) 5134.01 (Reference (a)) and the guidance in DoDD 4715.1E, DoD Instruction 5000.02, and Defense Acquisition University Risk Management Guide (References (b), (c), and (d)).

2. APPLICABILITY. This Instruction:

a. Applies to OSD, the Military Departments, the Office of the Chairman of the Joint Chiefs of Staff and the Joint Staff, the Combatant Commands, the Office of the Inspector General of the Department of Defense, the Defense Agencies, the DoD Field Activities, and all other organizational entities within the Department of Defense (hereafter referred to collectively as the "DoD Components").

b. Applies to the DoD activities and programs involving the development, production, use, storage, or release of chemicals and materials that can be considered ECs at DoD operations, activities, and installations in the United States.

c. Applies to the DoD-managed response actions at formerly used defense sites.

d. Does not apply to:

(1) Contractor-owned or contractor-operated facilities.

(2) Radiological data collected under the Naval Nuclear Propulsion Program or other DoD radiological programs.

(3) Chemical, biological, radiological, nuclear, and explosive incident training or response programs.

3. DEFINITIONS. See Glossary.

4. POLICY. It is DoD policy that:

a. Chemicals and materials used, or planned to be used, by the Department of Defense that meet the definition of an ECs shall be identified as early as possible.

b. Risks to people, the environment, and DoD missions, programs, and resources shall be assessed and, when appropriate, actions shall be taken to reduce risks related to ECs development, use, or release.

c. The Department of Defense, where necessary, perform sampling, conduct site-specific risk assessments, and take response actions for ECs released from DoD facilities in accordance with chapter 160 of title 10, United States Code (U.S.C.) (Reference (e), known as the "Defense Environmental Restoration Program"), and consistent with chapter 103 of title 42, U.S.C., (Reference (f), known as the "Comprehensive Environmental Response, Compensation, and Liability Act of 1980") and the procedures in this Instruction.

d. Subject to appendix 2 to title 5, U.S.C. (Reference (g), known as the "Federal Advisory Committee Act"), the Department of Defense shall work cooperatively and collaboratively with appropriate representatives from regulatory agencies, industry, and academia on ECs issues and initiatives.

5. RESPONSIBILITIES. See Enclosure 2.

6. PROCEDURES. See Enclosures 3 and 4.

7. RELEASABILITY. UNLIMITED. This Instruction is approved for public release and is available on the Internet from the DoD Issuances Web Site at http://www.dtic.mil/whs/directives.

8. EFFECTIVE DATE. This Instruction is effective immediately.

Ashton B. Carter
Under Secretary of Defense
for Acquisition, Technology and Logistics

Enclosures
1. References
2. Responsibilities
3. Use of Provisional Toxicity Values
4. Initiation of Actions Related to EC Releases
Glossary

ENCLOSURE 1

REFERENCES

(a) DoD Directive 5134.01, "Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L))," December 9, 2005
(b) DoD Directive 4715.1E, "Environment, Safety, and Occupational Health (ESOH)," March 19, 2005
(c) DoD Instruction 5000.02, "Operation of the Defense Acquisition System," December 8, 2008
(d) Defense Acquisition University, "Risk Management Guide for DoD Acquisition (Sixth Edition, Version 1.0)," August 2006
(e) Chapter 160 of title 10, United States Code
(f) Chapter 103 of title 42, United States Code
(g) Appendix 2 to title 5, United States Code
(h) DoD Directive 5105.18, "DoD Committee Management Program," February 8, 1999
(i) U.S. Environmental Protection Agency Web Site, "IRIS Substance Assessment Tracking System"[1]
(j) California Environmental Protection Agency, Office of Environmental Health Hazard Assessment Web Site, "Toxicity Criteria Database"[2]
(k) U.S. Department of Human and Health Services, Agency for Toxic Substances and Disease Registry Web Site, "Minimal Risk Levels"[3]
(l) U.S. Environmental Protection Agency Web Site, "Health Effects Assessment Summary Table"[4]
(m) U.S. Environmental Protection Agency EPA-505-B-04-900A/DTIC ADA 427785, "Uniform Federal Policy for Quality Assurance Project Plans: Evaluating, Assessing, and Documenting Environmental Data Collection and Use Program," March 2005
(n) U.S. Environmental Protection Agency EPA-505-F-03-00/DTIC ADA 39530, "Uniform Federal Policy for Implementing Environmental Quality Systems: Evaluating, Assessing, and Documenting Environmental Data Collection/Use and Technology Programs," March 2005

[1] Available at http://cfpub.epa.gov/iristrac/index.cfm
[2] Available at http://www.oehha.ca.gov/risk/chemicalDB/index.asp
[3] Available at http://www.atsdr.cdc.gov/mrls/index.html
[4] Available at http://www.epa.gov/radiation/heast

ENCLOSURE 2

RESPONSIBILITIES

1. DEPUTY UNDER SECRETARY OF DEFENSE FOR INSTALLATIONS AND ENVIRONMENT (DUSD(I&E)). The DUSD(I&E), under the authority, direction, and control of the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)), shall:

a. Provide oversight and guidance to ensure the early identification, assessment, and mitigation of risks related to ECs.

b. Invite the participation of Program Executive Offices and program managers (PMs), as appropriate, in the assessment of risks and implementation of risk management actions.

c. Maintain a dynamic list of ECs with potential impacts on DoD personnel and functions.

2. ASSISTANT DEPUTY UNDER SECRETARY OF DEFENSE FOR ENVIRONMENT, SAFETY, AND OCCUPATIONAL HEALTH (ADUSD(ESOH)). The ADUSD(ESOH), under the authority, direction, and control of the DUSD(I&E), shall:

a. Develop and manage an EC program to:

(1) Provide early identification of EC issues.

(2) Conduct cross-Service, cross-system assessments of the impacts of ECs on DoD personnel, missions, and business functions. The impact assessments shall use information from other programs to the extent practical (e.g., safety and occupational health assessments).

(3) Develop, in coordination with the DoD Components, risk management options for potential investments by PMs for those ECs with high risk to the Department of Defense.

(4) Maintain a "watch list" of ECs with potential high risks to the Department of Defense and an "action list" of ECs with probable high risk to the Department.

b. Ensure consultation with the DoD Components and appropriate OSD offices through a staff-level ECs Steering Group and an executive-level ECs Governance Council. The Governance Council shall comply with the requirements of DoDD 5105.18 (Reference (h)).

c. Prepare budget requests and justifications to implement the ECs program.

d. Provide updates to senior DoD leadership concerning newly identified risks and risks that could be reduced through proactive risk management actions.

e. Serve as the focal point for ECs issues with Federal and State agencies, industry, and academia.

f. Develop policies and prepare Congressional briefings and testimony as required.

3. DIRECTOR, DEFENSE LOGISTICS AGENCY (DLA). The Director, DLA, under the authority, direction, and control of the USD(AT&L), through the Deputy Under Secretary of Defense for Logistics and Materiel Readiness, shall provide data to the ADUSD(ESOH) related to National Stock Numbers and requisition history for chemicals and materials being assessed by the ADUSD(ESOH).

4. HEADS OF THE DoD COMPONENTS. The Heads of the DoD Components shall:

a. Comply with this Instruction.

b. Provide subject matter experts for specific ECs impact assessments when requested by the ADUSD(ESOH).

c. Provide representatives, as appropriate, for the ECs Steering Group and ECs Governance Council.

d. Plan, program, and budget, as appropriate, for the implementation of risk management actions needed to mitigate risks to human health, the environment, and DoD functions. These actions can include toxicological studies, materials substitution, research and development, testing and qualification of alternative materials and processes, source and scope of use studies, new analytical techniques, implementation of treatment and cleanup technologies, and deployment of new or improved personal protective equipment.

ENCLOSURE 3

USE OF PROVISIONAL TOXICITY VALUES

1. GENERAL. The identification of toxicity values is a crucial step in conducting site-specific risk assessments for contaminated sites. The identification of toxicity values for ECs presents special challenges.

2. HIERARCHY OF TOXICITY VALUES. The Department of Defense shall use the hierarchy in paragraphs 2.a. through 2.c. of this enclosure for selecting toxicity values for ECs.

a. Tier 1 – U.S. Environmental Protection Agency (EPA) Integrated Risk Information System (IRIS). The toxicity values listed on the EPA IRIS Web Site (Reference (i), known as the "IRIS Substance Assessment Tracking System" or "IRIS Track") have undergone rigorous peer review and are considered to be validated. The completion of IRIS assessments is a multi-step process including internal peer review, EPA program and regional office review, Federal interagency review, and external peer review with a public notice and comment period. The various steps are described in Reference (i).

b. Tier 2 – EPA Provisional Peer-Reviewed Toxicity Values (PPRTVs). The Office of Research and Development/National Center for Environmental Assessment/Superfund Health Risk Technical Support Center develops PPRTVs on a chemical-specific basis when requested by the EPA's Superfund Program for use in site-specific risk assessments. However, the PPRTVs are developed in a shorter period of time than the IRIS assessments and, although these assessments undergo external peer review, this review may be more limited and does not include EPA and interagency review as is done with the IRIS assessments. Furthermore, their development typically includes a limited evaluation of information on mode of action, other toxicological end points, and other information that provides a better understanding of the toxicology of these chemicals. Often, the amount of relevant information on the toxicity of these chemicals is less because fewer studies have been conducted and reported. However, the PPRTVs are generally the best quantification of the dose-response scientific data that are available at the time they are developed because the PPRTVs utilize current information and methodologies.

c. Tier 3 – Other Toxicity Values. Tier 3 includes additional EPA and non-EPA sources of toxicity information. Priority should be given to sources of information that use sound science and are the most current, peer-reviewed, transparent, and publicly available. Example sources for Tier 3 include the California State EPA Toxicity Criteria Database, the U.S. Department of Human and Health Services Minimal Risk Levels, and the EPA's Health Effects Assessment Summary Table (References (j), (k), and (l)). Values may also be found by using an Internet search engine to search for "toxicity values" for a specific chemical.

3. TYPES OF ASSESSMENTS. The types of assessments that should be used to guide the selection of toxicity values in all cases are:

a. Transparent assessments (in which toxicity values are derived) that clearly identify the information used and how it was used.

b. Assessments that have been externally and independently peer reviewed, where reviewers and affiliations are identified. Other things being equal, assessments with more extensive peer review are preferred. Panel peer reviews are considered preferable to letter peer reviews.

c. Assessments that were completed with a previously promulgated and publicly available methodology. Methodologies that were externally peer reviewed are preferred over those that were not externally peer reviewed.

d. Assessments that consider the quality of studies used, including the statistical power or lack thereof to detect effects, corroborate data among pertinent studies, and make best use of all available science.

e. Assessments and values that is publicly available or accessible. There may be a further preference for toxicity assessments that invited and considered public comment (as well as, but not in lieu of, external peer review).

f. Other things being equal, toxicity values that are consistent with the duration of human exposure being assessed. For example, an externally peer-reviewed subchronic reference dose (RfD) should be preferred to an externally peer-reviewed chronic RfD when assessing an exposure of 2 years for non-cancer toxicity.

4. ADDITIONAL CONSIDERATIONS

a. While there should be a preference for assessments using established methodologies to derive toxicity values, these methodologies should also be informed by the current best scientific information and practices. New assessment methodologies should provide reproducible results and meet quality assurance and quality control requirements.

b. Parties involved in the risk assessment should seek to identify the best, or most scientifically defensible, toxicity value. When the DoD Component with lead agency responsibility for response actions is unable to identify a scientifically defensible toxicity value, for example, due to the lack of relevant toxicological studies or lack of an appropriate surrogate for a given chemical, the site-specific risk assessment should identify this as an uncertainty in the risk characterization.

ENCLOSURE 4

INITIATION OF ACTIONS RELATED TO ENVIRONMENTAL EC RELEASES

1. GENERAL. The Department of Defense and regulators should strive to reach agreement on how and when to sample for ECs, the means to determine the nature and scope of the risk to human health and the environment, and the response actions needed in accordance with References (e) and (f).

2. PRINCIPLES FOR DETERMINING ACTIONS. These principles should be applied in determining appropriate site-specific actions related to ECs consistent with References (e) and (f).

a. Based on the site history and site inspection, determine whether there is a known or suspected release of an ECs that would trigger a need for sampling at a site and whether there is an appropriate analytical method.

b. If information exists to support sampling, develop a field sampling and analysis plan with agreed-upon data quality objectives. The quality assurance project plan for such efforts should comply with the EPA's Uniform Federal Policies for Quality Assurance Project Plans and for Implementing Environmental Quality Systems (References (m) and (n)). Among other things, the plan should identify an approved analytical method that meets the required detection limits for the ECs. In the event the sample quantification limit (SQL) is insufficient to analyze at the levels necessary to determine whether an unacceptable risk exists, other options such as analytic surrogates may be explored. If an analytical method with a sufficiently sensitive SQL is not available, the issue generally should be brought to the attention of the DoD Environmental Data Quality Work Group for consultation with counterparts in regulatory agencies.

c. All sources of toxicological and human health information should be searched to ascertain the best available science and identify uncertainties. (This process is more fully described in Enclosure 3.) In addition, if gaps in the human health science exist, recommendations should be made to appropriate State agencies, the EPA, or other agencies for additional studies to reduce uncertainty.

d. Baseline risk assessments shall integrate the toxicological data with site-specific exposure factors and provide the basis for determining the extent of the risk and for taking any necessary response action.

e. If agreement cannot be reached at the site level, the DoD Components should consult with their chain of command in accordance with established policies to determine an appropriate course of action. In such cases, the parties reserve all rights and authorities under existing laws and regulations.

f. Where agreement is not reached on cleanup levels, interim response actions to reduce risk (for example, plume migration control, provision of drinking water, land use controls, or monitoring) may be appropriate until risk-based values are identified.

GLOSSARY

PART I: ABBREVIATIONS AND ACRONYMS

ADUSD(ESOH)	Assistant Deputy Under Secretary of Defense for Environment, Safety, and Occupational Health
DLA	Defense Logistics Agency
DoDD	Department of Defense Directive
DUSD(I&E)	Deputy Under Secretary of Defense for Installations and Environment
ECs	emerging contaminants
EPA	Environmental Protection Agency
IRIS	Integrated Risk Information System
PM	Program Manager
PPRTV	provisional peer-reviewed toxicity values
RfD	reference dose
SQL	sample quantification limit
U.S.C.	United States Code
USD(AT&L)	Under Secretary of Defense for Acquisition, Technology, and Logistics

PART II: DEFINITIONS

These terms and their definitions are for the purpose of this Instruction.

EC

As identified by the DUSD(I&E), a contaminant that:

Has a reasonably possible pathway to enter the environment;

Presents a potential unacceptable human health or environmental risk; and

Does not have regulatory standards based on peer-reviewed science, or the regulatory standards are evolving due to new science, detection capabilities, or pathways.

ECs are identified and assessed exclusively through a three-tiered process called “scan-watch-action.”

installation. A base, camp, post, station, yard, center, homeport facility for any ship, Government-owned and/or contractor-operated facility, or other activity under the jurisdiction of the Department of Defense, including any leased facility. Such term does not include any facility used primarily for civil works, rivers and harbors projects, or flood control projects.

IRIS. A database administered by the EPA that contains toxicity data related to the risks to human health from chemicals and materials.

State. Includes the 50 States, the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, Guam, the United States Virgin Islands, and American Samoa.

United States. Includes the States as defined in this Glossary, as well as Midway and Wake Islands and any other territory or possession of the United States and the associated navigable waters, contiguous zones, and ocean waters of which the natural resources are under the exclusive management authority of the United States.

BY ORDER OF THE
SECRETARY OF THE AIR FORCE

AIR FORCE INSTRUCTION 32-7020

7 NOVEMBER 2014

Civil Engineering

THE ENVIRONMENTAL RESTORATION PROGRAM

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

ACCESSIBILITY: Publications and forms are available on the e-Publishing website at **www.e-Publishing.af.mil** for downloading or ordering.

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(Energy and Environment Branch)

Certified by: AF/A4CF
(Mr. Robert M. Gill)

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7 February 2001

This publication implements Air Force Policy Directive (AFPD) 32-70, *Environmental Quality*, and provides guidance and procedures for executing the Air Force (AF) Environmental Restoration Program (ERP) within the United States. This Instruction applies to operations, activities, and installations of the United States Air Force (USAF), which includes the Active Air Force, Air Force Reserve, and Air National Guard (ANG). (For the purposes of this Instruction, reference to active installations includes Air Force Reserve installations.) The Instruction also applies to activities at government-owned, contractor-operated facilities and activities at third-party sites (TPS) where environmental restoration activities are managed by the USAF. The requirements in this Instruction apply to all ERP activities, regardless of when the contamination was released or the legal authority driving the activity. New provisions in this Instruction will not have retroactive application unless otherwise specifically provided. The ERP adheres to the requirements of the Defense Environmental Restoration Program (DERP) as outlined in Department of Defense Instruction (DODI) 4715.7, *Defense Environmental Restoration Program (DERP)*. Additional guidance for the DERP is provided in Department of Defense Manual (DODM) 4715.20, *Defense Environmental Restoration Program (DERP) Management*. This Instruction may be supplemented at any level, but all supplements that directly implement this publication must be routed to Headquarters, United States Air Force, Deputy Chief of Staff for Logistics, Installations & Mission Support - Directorate of Civil Engineers - Facilities, Environment and Energy Division (HQ USAF/A4CF) for coordination prior to certification and approval. Refer recommended changes and questions about this publication to the Office of

Primary Responsibility (OPR) using the AF Form 847, *Recommendation for Change of Publication*; route AF Forms 847 from the field through the appropriate functional chain of command. The authorities to waive wing/unit level requirements in this publication are identified with a Tier number following the compliance statement. See AFI 33-360, *Publications and Forms Management*, Table 1.1, for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the Publication OPR for non-tiered compliance items. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, *Management of Records,* and disposed of in accordance with the Air Force Records Disposition Schedule (RDS) located in the Air Force Records Information Management System (AFRIMS). The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force.

SUMMARY OF CHANGES

This document has been substantially revised and must be completely reviewed. Major changes include: incorporating the Office of the Secretary of Defense (OSD) decision to expand the ERP to include environmental response actions, regardless of the date of release or the legal authority driving the activity, and the Air Force Secretariat direction to achieve cost and schedule efficiencies and program effectiveness by implementing a performance-based approach to environmental restoration as much as feasible, minimize life-cycle costs, and maximize the reduction of Air Force environmental liabilities. Other changes include tiering of compliance items IAW AFI 33-360; the addition of sections addressing the Military Munitions Response Program (MMRP), emerging contaminants, and environmental liabilities; clarifications on processes and documentation; the shift from MAJCOMs to the Air Force Civil Engineer Center (AFCEC) for ERP execution; and clarification of the role of risk and the proper selection of toxicity values throughout the restoration process. This revision does not change the source of ERP funding for activities within the scope of the ERP.

Chapter 18

EMERGING CONTAMINANTS

18.1. Emerging Contaminants (EC). ECs are contaminants characterized by a possible pathway to enter the environment and that present a potential unacceptable human health or environmental risk. ECs are contaminants that either do not have promulgated regulatory standards based on peer-reviewed science, or contaminants that do have promulgated regulatory standards but it is reasonably anticipated that such standards may change due to new science, detection capabilities, or pathways. Possible triggers for classifying a contaminant as an EC include additional exposure pathways or new information about such pathways; changed analyses or analytical methods; and new information concerning receptor impacts. Other potential triggers for classifying a contaminant as an EC include regulator requests for more information, data, or analyses based on a reasonable belief that an unaddressed risk may be presented by that contaminant; proposed reviews and actions resulting from the AFCEC surveillance process; or potential costs and schedule impacts to the ERP.

18.2. Decision Process for EC Responses

18.2.1. Air Force ERP enterprise-wide response to EC is designed to promote consistent response actions, facilitate identification of funding requirements for programming purposes, and outline how technical program elements will provide support for analysis, risk assessment, and decision making.

18.2.1.1. Policy and strategic direction for enterprise-wide ERP response actions for ECs must be issued by SAF/IEE and be consistent with DODI 4715.18, *Emerging Contaminants*.

18.2.1.2. If release of an emerging contaminant is above applicable screening values (e.g., has the potential for exceeding unacceptable risk levels based on current knowledge), determine if a drinking water source has been, or may be, impacted, and confirm whether an actual human exposure pathway exists. At active installations and ANG facilities, when results indicate potential human exposure, the appropriate AFCEC/CZ division(s) or NGB/A7O, as applicable, will coordinate with the Bioenvironmental Engineer if there is potential contamination of a drinking water supply.

18.2.1.3. When warranted, a site-specific risk assessment will be accomplished to evaluate the extent of actual or potential exposure and risk. Risk shall be assessed using appropriate toxicity values approved by AFCEC/CZT IAW Enclosure 3 of DODI 4715.18 and promulgated requirements that would be considered ARARs for the specific site at issue.

18.2.1.4. IAW Enclosure 4 of DODI 4715.18, necessary response actions for ECs should be determined by a baseline risk assessment that integrates the toxicological data with site-specific exposure factors to provide the basis for determining the extent of the risk. Any decision to undertake response actions must also be in accordance with applicable legal requirements and this Instruction.

18.2.2. Actions related to sampling.

18.2.2.1. Regulatory requests for sampling and decisions to conduct environmental investigations or response actions for ECs will be addressed on a case-by-case basis in consultation with AFLOA/JACE and IAW legal requirements, EC-specific guidance, if available, and this Instruction.

18.2.2.2. Upon request to evaluate an EC for potential response actions, the appropriate AFCEC/CZ division(s), AFCEC/CIB, or NGB/A7O must ascertain whether applicable and relevant or appropriate state and/or local requirements would require such an evaluation or potential response actions(s) IAW this Instruction.

18.2.2.3. AFCEC/CZR, AFCEC/CIB or NGB/A7O, as applicable, will coordinate with AFLOA/JACE before authorizing sampling. The frequency and scope of sampling is limited to what is authorized.

18.2.2.4. For active installations and ANG facilities, if the request for testing or actual testing involves direct exposure of Air Force personnel (e.g., air, drinking water), the appropriate AFCEC/CZ division(s) or NGB/A7O, as applicable, will coordinate appropriate sampling with AFCEC/CZT, the local Bioenvironmental Engineer, and USAFSAM under the applicable cleanup framework. At BRAC locations, AFCEC/CIB and applicable Air Force offices will coordinate with regulatory agencies and tenants as required and appropriate under the applicable cleanup framework (normally CERCLA or RCRA).

18.2.2.5. Toxicity information used in human health risk assessments must be consistent with the NCP (e.g. 40 CFR 300.430(e)(2)(i)) and the Toxicity Hierarchy in OSWER Directive 9285.7-53, *Human Health Toxicity Values in Superfund Risk Assessments*) and DODI 4715.18. Further, AFCEC EC-specific guidance should also be followed as applicable.

18.2.2.6. When results of a site-specific review indicate a requirement for substantial sampling and investigation or that the selected remedy is not protective, notify, coordinate, and obtain authorization from AFCEC/CZ division(s) or NGB/A7O, as applicable, in coordination with AFCEC/CZT (for active installations and ANG facilities) or AFCEC/CIB (for BRAC locations) prior to any related action.

18.3. Five-Year Reviews

18.3.1. During the five-year review, it is appropriate to examine whether a change in a contaminant's risk information or new information about exposure pathways, such as vapor intrusion, warrants further investigation at the site. Five-year reviews are discussed in paragraph 16.4.

18.3.2. Under CERCLA, if an EC and appropriate exposure pathways were evaluated in a completed health risk assessment approved by the lead regulatory agency (typically as part of an RI/FS), and there is a completed DD for the site, then the risk assessment or the DD shall be reopened or revised only IAW 40 CFR 300.430(f)(1)(ii)(B)(1) for changed ARARs. For ECs for which cleanup levels were originally risk-based, remedies specified in the DD will be reopened only when the original risk-based cleanup level is no longer protective.

18.3.3. For ECs with new toxicity levels or health standards and that were not evaluated in a risk assessment or a DD, the appropriate AFCEC/CZ division(s) or NGB/A7O, as applicable, in coordination with AFCEC/CZT, or AFCEC/CIB shall evaluate the risk and recommend appropriate follow-up action consistent with applicable legal requirements and this Instruction.

JUDITH A. FEDDER, Lieutenant General, USAF
DCS/Logistics, Installations & Mission Support

DEPARTMENT OF THE AIR FORCE
79TH MEDICAL WING (AFDW)

AFTERACTION REPORT

Event: Aircraft Fire-Fighting Foam (AFFF) Release at Hangar 11 on 20 Mar at 1400 hours.

Chronology: Bioenvironmental Engineering Flight (BEF) was notified at approximately 1100 hours by 459 Command Post that a spill of unknown origin and severity had occurred at Hangar 11 (building 3635). We asked both the Command Post and the base Fire Department whether they had information regarding the nature of the spill or what contaminants were expected; no information was available at that time. We received a second call about 1115 informing us that AFFF was released at Hangar 11, but the amount was still in question. We were also informed that the AFFF was entering the nearest storm drain.

SSgt L. Blackshear, SSgt C. Acosta and MSgt R. Valenti reviewed stormwater discharge maps to determine the most advantageous sampling location. It was determined that we would sample storm water in a creek behind building 3710. SrA I. Garcia contacted STL Laboratories in Baltimore, MD to determine what sampling containers were needed for analysis of AFFF in stormwater. It was determined that we would collect 2 liters for lab analysis by STL and an extra 8-oz container for analysis using our HAPSite analyzer.

SrA L. Costin and A1C D. Miller were dispatched to the scene at approximately 1125 hours. Samples were collected from the creek mentioned above at a site approximately 100' east of the footbridge. An oily sheen was noted by our technicians at the time that samples were collected; no other obvious signs of contamination (i.e., foam) were noted. This initial response was ended at approximately 1215 hours when SrA Costin and A1C Miller returned with samples for later analysis.

We were since been informed by Civil Engineering technicians that approximately 15 gallons were released at the time of the incident.

Original signed…

ROBERT J. VALENTI, MSgt, USAF
NCOIC, Bioenvironmental Engineering

AFFF Spill 8 Jul 05

SIRIS - FORMAir Force Spill Incident Report Internet System (SIRIS)
Spill ID#1159

Who is preparing this report?
NAME:John A. Franz
E-MAIL:john.franz@andrews.af.mil
MAJCOM:AMC
BASE:Andrews
REPORT TYPE:Update
ORGANIZATION:89 CES/CEV
DUTY PHONE:301 981-7120

What happened?

DATE OF RELEASE:7/8/2005
RELEASE TIME:0130

MATERIAL RELEASED:
AFFF

QTY. UNITS:Gallons
QTY. OF RELEASE:750
QTY. RECOVERED:550

EQUIPMENT TYPE: AIRCFRAFT TYPE:none
Other (Add Remarks Below)

EQUIPMENT/FACILITY INVOLVED:
(include tail number or equipment model number)Hangar 11

BRIEF NARRATIVE:
AFFF supression system on hangar 11 dumped AFFF and water mixture. Dump apparently occurred as result of system overpressurization resulting in leaking gasket causing the system to sense a pressure loss and firing the supression foam dump. Approx 750 gallons of AFFF was released to the hangar floor and immediate asphalt/concrete areas inside and outside the hangar. Do to heavy rains at the time approx 200 gallons of AFFF was released to the storm system. AFFF was noted in the storm system and stream outfall at the base perimeter. No foam was noted in the sanitary sewer system.

LOCATION OF RELEASE:LATITUDE: 0.0 LONGITUDE: 0.0

Was the release contained on a hard surface?
(Concrete, Asphalt)No 750

Did the release enter the storm drain or surface water?Yes 200

Did the release enter the sanitary drain?No 0

Did the process owner have sufficient clean-up capabilities?No

Did the release reach and soak into any soil?No 0

Was the release cleaned within 24 hours?Yes N/A

What is the estimated date the site will be cleaned up or remedial action will be complete? 7/9/2005

Do you anticipate any enforcement actions from a regulatory agency for this incident? No

RELEASE CLASSIFICATION:
CLASS III

ROOT CAUSE OF RELEASE (FROM EIIB)
A9.5.1.1. Component failure despite regular maintenance

Is the release reportable to a regulatory agency? Yes (as precautionary measure)

Any continuing threat to the environment?No

Was the Fire Department notified? Yes
Did they visit the release site? Yes
(If yes, provide clarification in 'Remarks' below)

Was the NRC notified? No
Did they visit the release site? No
(If yes, provide clarification in 'Remarks' below)

Was the state env reg notified? Yes
Did they visit the release site? No
(If yes, provide clarification in 'Remarks' below)

Were there any injuries? No

Was the media involved? No

ESTIMATED COST TO CLEAN UP$ 5000 NOTE: Manpower and Costs inputs are

not required for Aircraft/
Weapons Class A incidents.

ESTIMATED MAN HOURS: 50

IF THERE WERE INJURIES, PLEASE DESCRIBE:
N/A

REMEDIAL ACTION TAKEN:
Base fire dept responded and took immediate action to try and control release. Due to heavy rains at the time the effort to keep out of the storm drain was not successful. The base utilties shop responded and shut the entire hangar 11 supression system down. An off base contractor (Tri County Industries
was contacted thru CONS and responded to the site to initiate the cleanup. Cleanup is underway.

REMARKS
Base environmental responded and assessed the release. Although the utilities personnel indicated no AFFF appeared to be in the sanitary sewer outfall, the local sanitary sewer district was notified as a precautionary measure as it it possible some may have gotten into the system. There was a release to the storm sewer system. Significant foaming was observed in the creek oufall running off base to Cabin Branch Creek. The Maryland Dept of the Environment was notified. Estimate 200 gallons released to the storm system. Although AFFF is not classified as a hazardous material, due to the amount of the release and the foaming in the creek outfall there is a possibility of an enforcement action by the state. If AFFF did get in sanitary system an enforcement action would be issued by the Washington Suburban Sanitary Commission.

Spill Home Page

HGL	Date: 1/26/2015 Time: 1:00	**COMMUNICATION RECORD**

Name of Base, State: Joint Base Andrews, Maryland	
Interviewer: Michael Rooney	
Organization: HGL	**Phone: 703-736-4559**
Position/role on this project: Project Manager	**Email: mrooney@hgl.com**

Interviewee: Sgt Lewis Thomas	
Organization: 11 CE Fire Supervisor (WATERS)	**Phone:**
Position/Job Title: Water/Fuels WFSM	**Email:**
How Long in this Postion? Since 1 April 2014	
How long at this Base in current and previous positions? 9 months	
Have you held similar positions at other bases? Yes JBLE,	
Which bases? JBLE, OSAN Air Base	
How long? 1 yr	

Discussion:

Never saw AFFF refills or releases
small pump transfered from 55gallon drums to the tanks
observed HANGER 18, failed acceptance test

AFFF + HEF both on Facility
ANSOL producer of AFFF, based on recent usage

Observed HEF releases NO AFFF

Contained it, plugged sewers, closed doors, shut down lift station

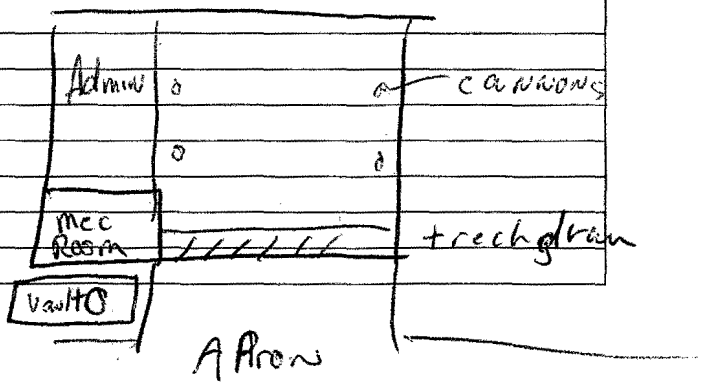
Stays closed when there is an alarm - recovery system
- Various components contracted out - water Terrapin, Alarm contractor
- Not much maintence without all parties working together on containment system

Safety Containment pit

89th → CE

Bldg 1288 HANGER 18 Old SAM HANGER 4N

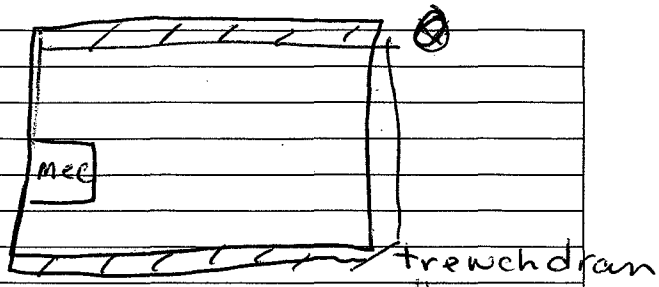
1/26/2015 - 1:13 pm
2-1,000 gallon AFFF towers
4 CANNONS
trench drain



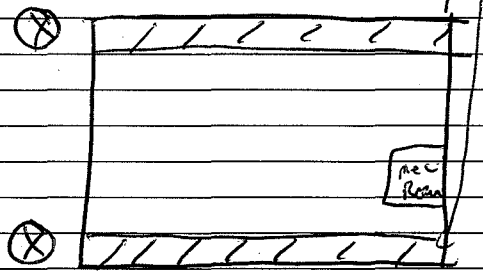
4N

(Dyncorp)
Robert Brown - Ctr Support for West
Side Hangers
35 yrs exp on HF

HANGER 6 (Bldg 1279)
orginally AFFF → MEF
MEF Jetx 2¾% 1,000 gallon tank
- valve open on conteinment system
- should be closed. Broke ?

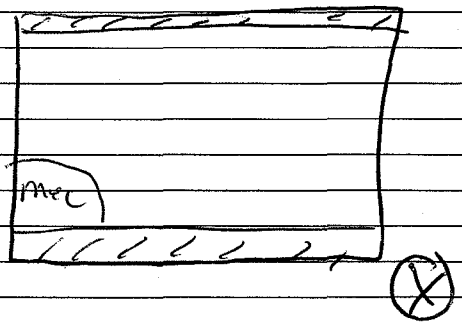


HANGER 7 (Bldg 1280)
orginally AFFF → MEF
MEF Jetx 2¾%
Ansul 1,000 gallons
55gallon drum in room

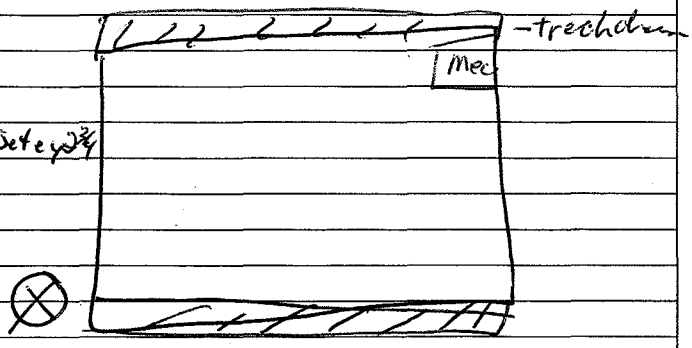


HANGER 5 (Bldg 1714)
orginally AFFF → MEF
MEF Jetx 1,000 gallons Ansul

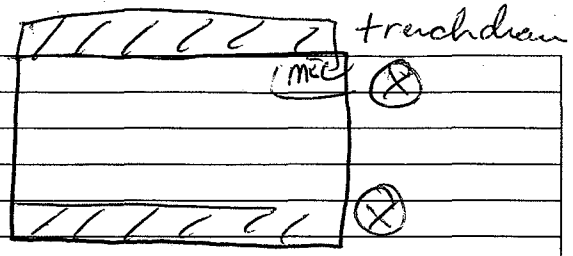
FOAM Dump 2014
release estimated 3rd Qtr 2014
MEF lines Froze



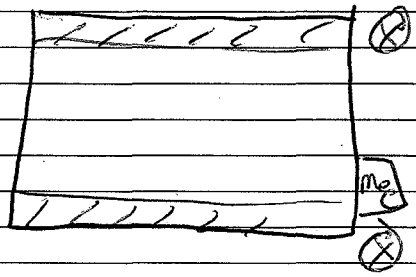
HANGER 4 (Bldg 1734)
orginally AFFF → MEF
2 - 500gallon tanks Ansul Jetex ¾



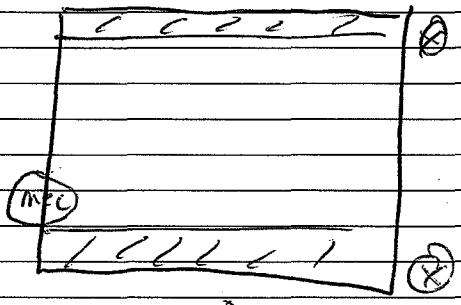
MANGeR 3 (Bldg 1754)
Orginally AFFF → MEF
2-500gallons of Jetex



MANGer 2 (Bldg 1794)
Orginally AFFF → MEF
2-500gallons of Jetex



MANGeR 1 (Bldg 1914)
Orginally AFFF → MEF
1,000 gallons 2¾ Jetex



West Side Fuel Cell (Bldg 1915)
Orginally AFFF → MEF
600 gallon Jet-ex 3¾ %

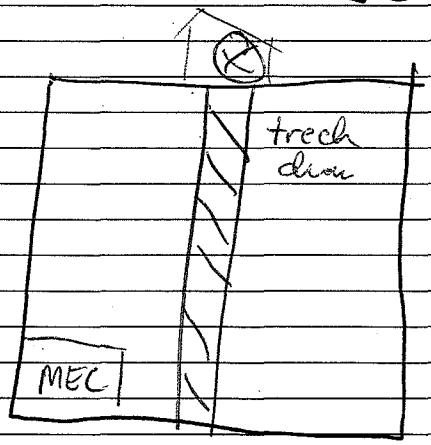
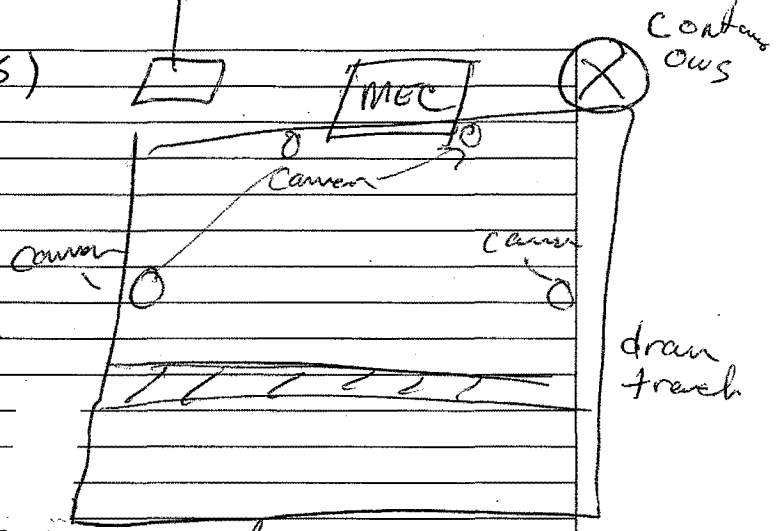


photo on DOOR AFFF - previously AFFF
used in Mangers

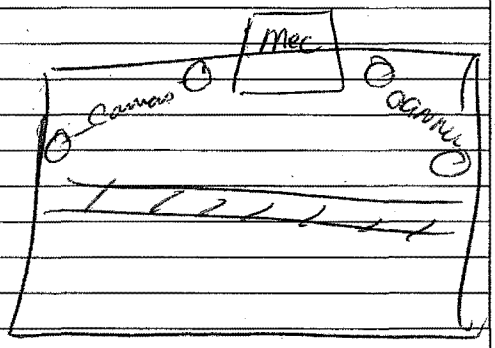
HANGER 8 (Bldg 1225)
AFFF

2 - 1,100 gallon tanks AFF
above rafters
ANSUL
- 4 cannons
Lift station outside NW corner
OWS containment NE corner
- several floor drains



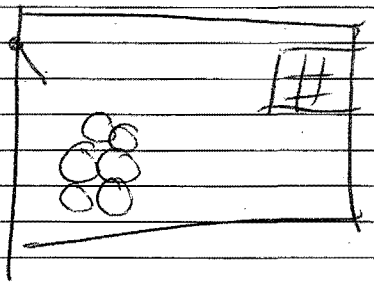
Lt Matt Doller, 113th Deputy BCE
Hangers 8 & 9 upgraded to AFFF in Sept 1998 under
project AJXP 0000229 C

HANGER 9 (BLDG 1228)
AFFF
Identical setup to Hanger 8



Bldg 3444 - NOT A HANGER - storage warehouse

275 gallon AFFF tote + cannon dated 5/2004
Buckeye AFF part # 50295 MIL-F-24385F
6 - 55 gallons of JET X 2 3/4 %



Kickoff meeting attendees

HGL	Date: Time:	**COMMUNICATION RECORD**

Name of Base, State: Joint Base Andrews, Maryland	
Interviewer: Michael Rooney	
Organization: HGL	**Phone: 703-736-4559**
Position/role on this project: Project Manager	**Email: mrooney@hgl.com**
Interviewee: See below	
Organization:	**Phone:**
Position/Job Title:	**Email:**
How Long in this Postion?	
How long at this Base in current and previous positions?	
Have you held similar positions at other bases?	
Which bases?	
How long?	

Discussion:

DAVID Connolly - ERP Chief — Donna Jackson - RE
Keith Frechofer - ERP PM
Fran Sanders - ERP PM
Gary Felch - MAB WASTE Manager
Robert Spiers - 89th Historian
Joe Thompson - FD Assistant Chief
Michelle Quinn - Tank PoL Manager
Todd Braun - Water Programs

- All Spills or foam release has a report Documented by FD & transmitted to EE/ENV.
- FD does not retain records
- Follow up w/ CE ENV flight to identify Spill/Release Reports
-

Donna Jackson - Real Property — 25+ years exp

provided RE Record of Bldg w/ AFFF

HGL	Date: Time:	**COMMUNICATION RECORD**

Name of Base, State: Joint Base Andrews, Maryland	
Interviewer: Michael Rooney	
Organization: HGL	**Phone: 703-736-4559**
Position/role on this project: Project Manager	**Email: mrooney@hgl.com**
Interviewee: Mr Blackwell	
Organization: PAG	**Phone:**
Position/Job Title: FM	**Email:**
How Long in this Postion? since 2003	
How long at this Base in current and previous positions? 2003	
Have you held similar positions at other bases? —	
Which bases? —	
How long? —	

Discussion:

HANGER - 19 — NO photos or drawings permitted in this area

3 * 250 gallon portable cannons
AFFF - 3% Buckeye - 7/2004 date

Talk to Judy Bibble - AFCEC. Cleared photos from 2011 visit + AFFF replaced 2005 with EF

-7

HANGER 20 - NO photos or drawings permitted in this area

HANGER 20 - MASMEF
2300 gallon tank - Buckeye 2-3% High Ex Foam
2005 - FOAM shoot on Floor

Chuck Duke - FM, PAG here since 2006

MASMEF
1500 gallon ANSUL
10,000 gallon storage tank underground to catch spills

HGL

Date: 1/27/2015
Time: 9:00

COMMUNICATION RECORD

Name of Base, State: Joint Base Andrews, Maryland	
Interviewer: Michael Rooney	
Organization: HGL	**Phone: 703-736-4559**
Position/role on this project: Project Manager	**Email: mrooney@hgl.com**

Interviewee:	Dominic Koah		
Organization:	11 CES / WFSM	**Phone:**	
Position/Job Title:	SrA	**Email:**	

How Long in this Postion? 2 yr

How long at this Base in current and previous positions? 2 yrs

Have you held similar positions at other bases? NO

Which bases?

How long?

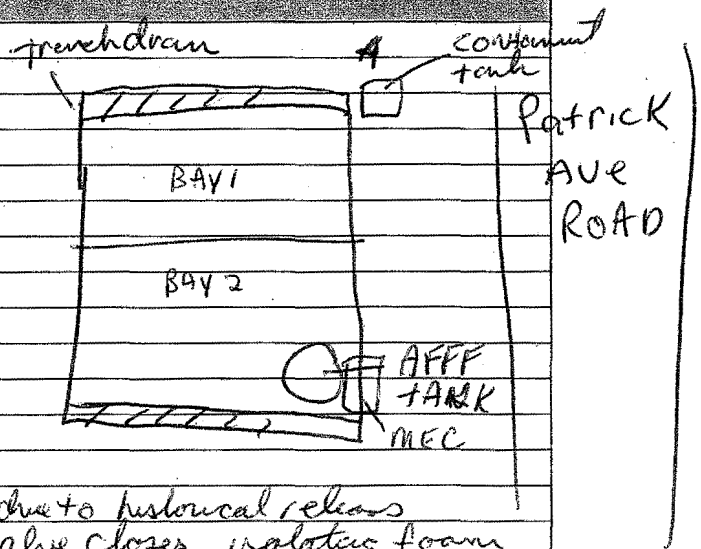
Discussion: 459th MXS

MANGER 10 - Bldg 3640

5 wets 3 Deluge AFFF
1,000 gallon AFFF tank
3 CANNONS
3% AFFF Chemguard

RUNWAY

Apron



Secondary capture tank installed due to historical releases - when foam dumps, trips sensor & valve closes isolating foam suppression capture systems. Floor drains to containment only when valve tripped.

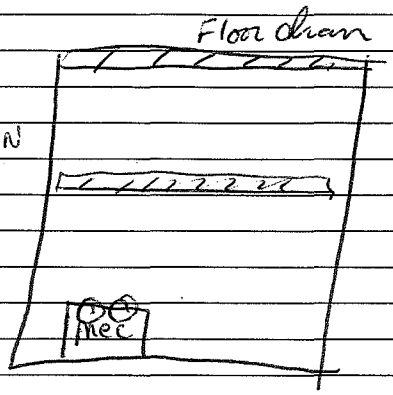
John Houtz - 459th FM — here since 2008
- MANGER 10 had large historical Foam Dumps - None last 5-6 yrs.

HANGER 11 Bldg 3635 459th MxS
10:50 - 11:20

2 wets, 5 deluge

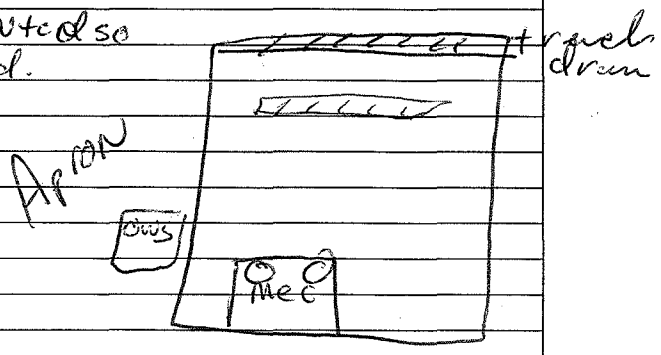
2 - 1,000 gallon AFFF tanks
6 - Foam cannons

Arrow AFFF



Bldg 3629 - EAST Side Fuel Cell 459th MxS

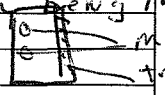
2 - 1,000 gallon AFFF tanks - PAINTed so many times over hard to read.
NO ID Plate of MANufacture
Foam Cannons



Bruce Webb - 459th tech since 1999 working here - FM
Fuel cell had 2 releases on the Summer of 2003 & 2004
- Sensors changed after 2004 release, No dumps saved
- ~~Reported to FD~~
- Full Dumps on Both occasions
- got into storm drains
- NO Knowledge of AFFF manufacture C.E fills sump

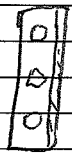
NAVY HANGERS 12, 13, 14 Never HAD AFFF

HANGer 12 (Bldg 3188)
- Never AFFF, New HEF system being installed



HANGer 13
- Never HAD AFFF

HANGer 14
- Brand New HEF Systems
- Never HAD AFFF



3 MEC Rooms

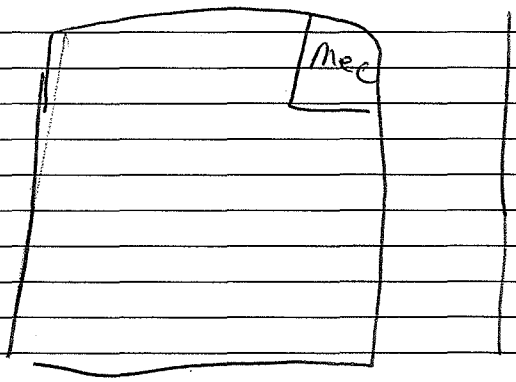
1/28
10:40

HANGER 16 113th AWG

4N

10:42 photo of MEC ROOM Exterior
photo of HEF Blown in cavity

No photo inside hanger due to planes



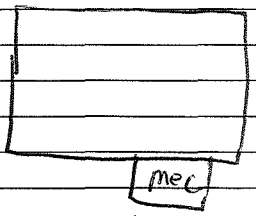
- USe to be AFFF → HEF
- logistical challenges getting in area
- secured area

500 gallon Jetex 2 3/4 %
wet, Foam, & deluge systems

Matthew Doller - Deputy BCE
Dec 2009 D from AFFF to HEF - AJXF 102012
Bldg 3302 113th Mxs - Aircraft fuel syst repair

11:05

AFFF 3%
- Secondary containment around tanks
No signs or labels - ~500 gallon tank



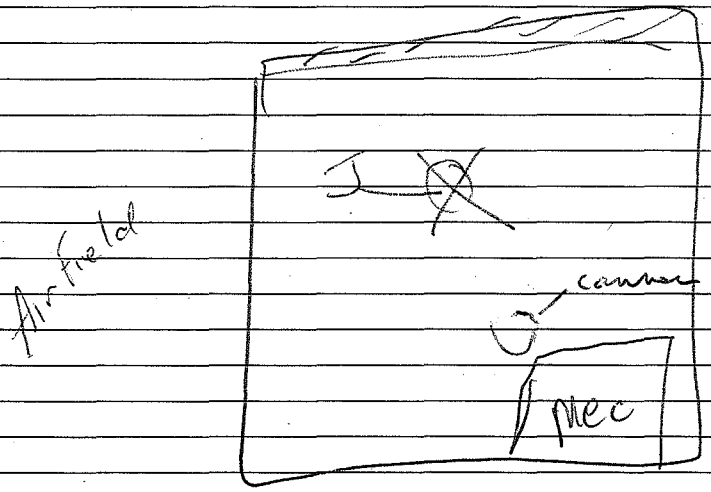
Bldg 2487 MD State Police

11:00 Jerry Williams – MD state Police –
said to call BJ Payne about any info requests

200 gallon AFFF Ansul

No record of AFFF spills on record

AN



11:24 ASA

High Security Area
MEF – new construction, no AFFF in Hangar
– sto is ERP-Site FT-04
. 300 gallon MEF
Buckeye 2-2%

– photo of FT-04 operational Hanger/Apron
– LUC Sign

No drawing or Photos permitted, except MEC room and exterior

HGL

Date: 1/27/15
Time: 10:50

COMMUNICATION RECORD

Name of Base, State: Joint Base Andrews, Maryland	
Interviewer: Michael Rooney	
Organization: HGL	**Phone: 703-736-4559**
Position/role on this project: Project Manager	**Email: mrooney@hgl.com**
Interviewee: HAROLD MARBury	
Organization: 459th	**Phone**
Position/Job Title: SR MSGT	**Email:**
How Long in this Postion? 30yrs	
How long at this Base in current and previous positions? 30 yrs	
Have you held similar positions at other bases?	
Which bases? JBA	
How long?	

Discussion:

AFFF tanks in HANGER 10, 11, Ann Bldg 3629 Fuel cell all changed to AFFF

- Tanks contents of AFFF manufacturers changed overtime

- Incidents occured of Foam releases. there are Recovery systems - OWS etc to capture releases

- In the 80's or 90's OWS went in

- System Failures in 10, 11 & Fuelcell resulting in Foam dumps

Recalled Bldg 3629 Fuel Cell Foam Dump in HANGER + capture in Recovery tanks

- Cleanup done by contractors - not sure how that is managed - foam goes into OWS

Remembers 3 or 4 large AFFF releases
Reported to FD once a release occurs - no records

Sgt Stanforth - 459th - since 2001
- remembered HANGER 10 release 7-8yrs ago - big mess
Joint in piping Failed - Foam all over
Contractor removes Foam + disposes offbase

HGL	Date: 1/28/15 Time: 7:00	**COMMUNICATION RECORD**

Name of Base, State: Joint Base Andrews, Maryland	
Interviewer: Michael Rooney	
Organization: HGL	**Phone: 703-736-4559**
Position/role on this project: Project Manager	**Email: mrooney@hgl.com**
Interviewee:	
Organization:	**Phone:**
Position/Job Title:	**Email:**
How Long in this Postion?	
How long at this Base in current and previous positions?	
Have you held similar positions at other bases?	
Which bases?	
How long?	

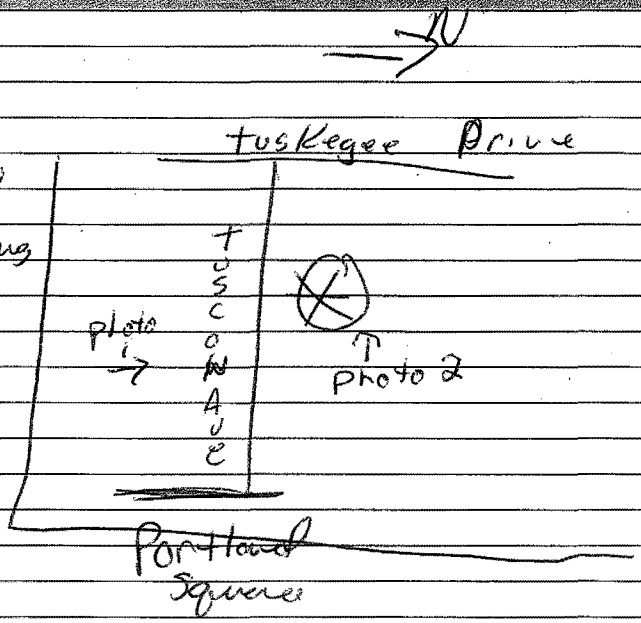
Discussion:

SWMU 69

Former Military Housing
- Abandoned & torn down
- Open Field
  Some trees from old housing remain

photo 1 - Facing N

photo 2 - Facing W

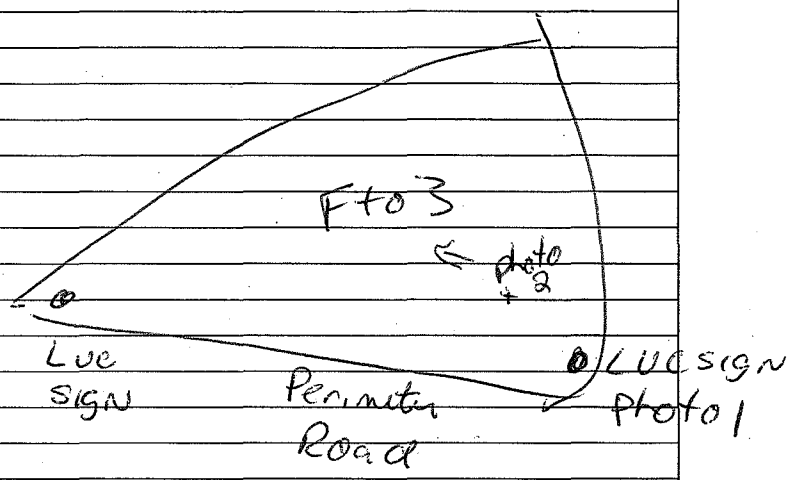


1/28/15 7:30

FT-03

Currently Golf Course
rolling grass hills

photo 1 - Luc sign
photo 2 - Facing West



HGL	Date: 1/28/16 Time: 8:00	**COMMUNICATION RECORD**

Name of Base, State: Joint Base Andrews, Maryland	
Interviewer: Michael Rooney	
Organization: HGL	**Phone: 703-736-4559**
Position/role on this project: Project Manager	**Email: mrooney@hgl.com**
Interviewee: William Wood	
Organization: CE BASE Supply	**Phone:**
Position/Job Title: Manager	**Email:**
How Long in this Postion? 8yrs	
How long at this Base in current and previous positions? 8yr	
Have you held similar positions at other bases? Yes 30yr Retired AF	
Which bases? MANY	
How long?	

Discussion:

Over CAR Keer Kistrack is wharehouse / supply

- Process customers requests for AFFF
- Folks call Customs Service to order & process request

Wharehouse

489 - 5 gallons buckets of Ansulite AFFF 3% in inventory

maintain 489 - 5 gallon buckets in supply

INStock inventory dates range from 2006 2008 & 2009

HGL	Date: 1/28/15 Time: 9:00	**COMMUNICATION RECORD**

Name of Base, State: Joint Base Andrews, Maryland	
Interviewer: Michael Rooney	
Organization: HGL	**Phone: 703-736-4559**
Position/role on this project: Project Manager	**Email: mrooney@hgl.com**

Interviewee: Chief Tim Pitman	
Organization: FD	**Phone:**
Position/Job Title: FD chief	**Email:**
How Long in this Postion? 2 yr	
How long at this Base in current and previous positions? 30 yrs FF	
Have you held similar positions at other bases?	
Which bases?	
How long?	

Discussion:

With the exception of NAVY HANGers 12/13/14 all other have AFFF
Mangers have AFFF converted to HEF recently in some areas

MAINTAINS a fleet of Foam trucks. Two FD Bldg
Station 1 Bldg 1287 Station 2 Bldg 3464

4 - P23 trucks 500 gallons of AFFF per truck
1 - P19 truck 210 gallons
1 - RAPID intervention Vehicle (RIV) 50 gallons AFFF
1 - RIV 65 gallon AFFF
1 - Trailer 1,000 gallons AFFF

NO foam on the engines

Any release of AFFF is reported to CE ENV. - POC Steve Richards

Crash truck - leaked AFFF in Front of Station 1 in Dec 2012
- into containment drain mostly
- Fuel cell recent AFFF dump

MANCer 14 - recruit Acceptance test - Big MEF release - on Manholes coming out of manhole covers into the air - Flair in Sewer

FTA - Built in 1995
- line fire 2x per yr - 2 consecutive days
- No foam used since
- except annually test of equipt Parked, requires Monthly use of AFFF to test all equipt
- Use of AFFF Cleared w/ Steve Richards
- 2 trucks have not worked properly - during testing

For past 10 months, Once per month
~ 1-2 gallon AFFF 3% sprayed at FTA

BASE Supply orders all AFFF
FD has closed Ansulite past 2 yrs

Annual fire & distance training
- use lined pit at FTA FD spray Foam

Photo of R10 & P-23

Travis Manchester - 5 yrs @ FD
- Monthly testing of trucks is on Saturdays 1st SAT of every month
- Multiple 5 gallon Buckets kept at FD
- Citied storage issues - lack of storage
- mentored off Base Emergency Response - used Foam large mulch Fire years ago

---

Tech Sgt Dameon MOORE - Fire Station 1 @ JBA since 2012, 10 yrs exp in FD

FD #2 does not house any surplus AFFF other than what is in trucks - all AFFF kept at FD #1
Vehicles identified @ FD #1 cover both FD 1 & 2

FD #2 trench drains capture goes to OWS

FT-02 photos 9:40

- Active Air field
- all concrete, tower + operational Bldgs
- photo of Apron + LUC sign

Follow up Chief Pelman on 1/29 @ 1:44

143 5gallon buckets of AFFF in FD #1

FTA

- 1 meal pit
- recirculated with
- drain pit → goes to evaporation pond when using foam
- If water only used, - just let it evaporate

HGL	Date: 1/28/15 Time: 1:30	**COMMUNICATION RECORD**

Name of Base, State: Joint Base Andrews, Maryland	
Interviewer: Michael Rooney	
Organization: HGL	**Phone: 703-736-4559**
Position/role on this project: Project Manager	**Email: mrooney@hgl.com**
Interviewee: Joseph Thompson	
Organization: FD	**Phone**
Position/Job Title: Asst chief	**Email**
How Long in this Postion? since 1988	
How long at this Base in current and previous positions? 11	
Have you held similar positions at other bases? —	
Which bases? —	
How long? —	

Discussion:

MANGer 12, 13, 14 - NO AFFF ; NO fire suppression until recently

SWMU-69 - NO Knowledge of FT - did Know SAW Antonio was old runway before his time

FT-03 - Ceased operations in 1988 or prior to his arrival
FT-04 - NO recollection

New Fire Training Area 1995
- retention pond - pumps water into FT pit - captured
- use daily for Water Training

Gravel around plane training pit, recirculates into pond

USE CP-23, CP19H & CD34

MANGers 6 of 7 - Remembers historical Foam Dumps
459 - Maybe 10 or 11 AFFF during in 2000 transfer
MANGer 20 - 2009-2010 - Foam Dump HEF
Befor 1988 - Hanger Bay Foam incident @ Strawberry Farm
Annihilated by FD last 5 years

Arc testing in front of Station

1,000 gallon AST at FD#1 No longer here

Crash truck leaked ~100 gallons AFFF 2 yrs ago
- went down sewer, drained to surface depression area south of AFI - No Flow into Patapsco Creek

Emergency Response Support of Base used AFFF
- Used AFFF ~ 2008-2009 @ DC fire
- Mulch Fire in P&C

P-19 used off Base - 210 gallons AFF

1st SAT of month - Check Foam patterns

Reach 50 ft - 200-250 ft straight line

Distance trans - last 4-5 yrs

Occasional testing right in front of FD#1
5-#0 gal of AFFF used per ~~shall be tested~~

Full tank of Foam 500 gallons (P-23) empties after apply 10,000 gallons of water

Refill truck w/ 5 gallon Buckets

If foam does not meet standard - contaminated etc - turned over to CE

Contaminated - coagulated over time - sits for a couple yrs

Cleared out in Stalls 4-5 yrs ago & Front of FD#1

Conversion from AFFF → MEF in hangers NO sooner than 2005

total of 73 FD present.

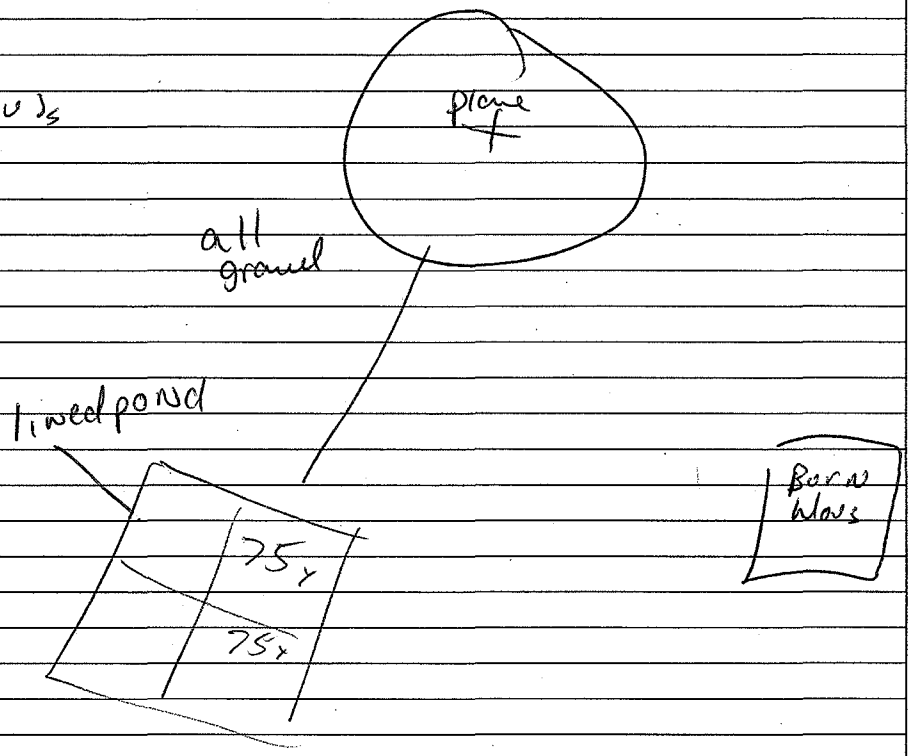
AFFF

3:00 Active FTA

Water off of pond fills rocks w/ 2-3 inches water
- propane grates - fire → whoosh

monthly Foam mtg pit

4 x P23
1 x P-19
2 x P34 (RIVs)



Felder, Gary T CIV USAF AFDW (US)

From: Ramjattan, Andy R MSgt 316 CES/CECS
Sent: Tuesday, March 20, 2007 1:11 PM
To: Franz, John A Civ 316 CES/CEV; Brown, Joseph L Jr Civ 316 CES/CEVP; Harris, Keith M Civ 316 CES/CEVP; Felder, Gary T Civ 316 CES/CEV; Braun, Todd A Civ 316 CES/CEVQ; Valenti, Robert J MSgt 79 AMDS/SGPB
Cc: Duffy, Brian P LtCol 316 CES/CC; Miller, Michael D Maj 316 CES/CEO; Carson, Larry A Civ 316 CES/CD; Valenti, Robert J MSgt 79 AMDS/SGPB
Subject: AFFF SPILL AT HANGAR 11

FINDINGS ON AFFF SPILL AT HANGER 11

TIME: 10:41

LOCATION: SOUTH END OF HANGAR 11

AMOUNT: 15 GALLONS

INCIDENT: CONTRACTOR WORKING OUTSIDE OF HANGAR 11 ON THE SOUTH SIDE HIT AN AFFF LINE SPILLING 15 GALLONS OF THE SUBSTANCE ON THE PARKING SURFACE.

REPORT FORM BIO-ENVIRONMENTAL: RESPONED TO THE SITE, TOOK SAMPLES AND CURRENTLY RUNNING TEST TO DETERMINE SERVERITY. MSGT VALENTI WILL BE COMPLETING A DETAILED REPORT AT THE END OF THE DAY TO SUBMITT TO BASE OPS, 316 ENV. FLIGHT AND FIRE DEOARTMENT.

FOR ADDITIONAL INFO CALL MSGT VALENTI @ 7-3380

Andy R. K. Ramjattan

Andy R. K. Ramjattan, MSgt. USAF

316 CES/CEVP

Andrews A.F.B. Md.

Com-301-981-1082/9955

Fax-301-981-7125

Felder, Gary T CIV USAF AFDW (US)

From: Richards Steve Mr. 89CES/CEVR
Sent: Saturday, March 24, 2001 2:07 PM
To: Schloesser Daniel GM13 AMC/CEV; Washington Phillip AMC/CEVQ; Shepherd Sherrill GM14 AMC/CEV
Cc: Stottlemyer Todd Capt 89AW/JA; Bauer Ralph A Lt Col 89AW/JA; Karibian Alexander P. Maj 89CES/CEO; Tomaseski, Heather Mrs. 89CES/CEV; Young Ben Col 89AW/CV; Bullock Ronnie J. Col 89SPTG/CC; Sarandos Chris LtCol 89SPTG/CD; Howe Dave C LtCol 89CES-CC; Carson Larry A Mr 89CES/CED; Romasz James S. Capt 89CES-CEV; Devier-Heeney Carol L. Ms. 89CES-CEVP; Walsh John Mr. 89CES/CEVC; Lee Clyde Mr. 89CES/CEVC; Carroll Dana LtCol 89AW/PAO; Csutoras Deborah Civ 89AW/PA; Bender Joseph T. Lt Col 89AW/SE; Malone Gary F Mr 89OSS/OSA; Brydon James K. Lt Col 89AW/CP; Gordon, Scott; Semsel Daniel Maj 89SUPS/CC; Chase Leo E. Mr. 89SUPS/LGSA; Dolan Brian Mr 89CES/CEVR; Domako Kenneth E Civ 89CES/CEVQ; Domako Sherral A Ms 89CES/CEVQ; Felder Gary T. Civ 89CES/CEV; Gerrard Roger I. Lt Col 89CES/CEV; Harris Keith M Mr 89CES/CEVP; Holtzman Allan F. Mr. 89CES/CEVQ; Potter David SSgt 89CES/CEVP; Smith Stephanie K. Ms. 89CES/CEV; Tomaseski Devin 1Lt 89CES/CEV; Whibley Anne 89CES/CEV; Seeley, Jon; Hawkins James A BrigGen 89AW-CC; Parker Stefan MSgt 89AW/CP; Colvin Donald TSgt 89AW/CP; Richards Steve Mr. 89CES/CEVR
Subject: RE: AFFF spill 24 March 2001

SPILL REPORT FOLLOWS:

>Subject: AFFF Spill 24 March 2001
>
>Spill Report Follows:
>
>
>Date: 24 Mar 01
>
>Time of Release: 0817 hr (discovered in sanitary line at 0915)
>
>Location: Bldg 3629
>
>Material Spilled: AFFF
>
>Surface Material Spilled Onto: Bldg floor
>
>Approximate Amount Spilled: 15 gal AFFF
>
>Did Spill Enter a Waterway? AFFF entered Sanitary Sewerline. No release to waterway.
>
>Injuries: None
>
>Organization Responsible: 89 CES
>
>Cause: Steam leak in close proximity to AFFF control box activated AFFF suppression system.
>
>Immediate Action: AFFF defoamed and vacuumed up from bldg floor and Sanitary line. Stormdrain outfalls inspected, no release to stormdrain.

>
>Long-Term Action: Repair steam leak. Repair fire suppression control system. Investigate and repair suspected sanitary line cross connections.
>
>Primary, Situation Specific Reason For Notifying HQ AMC/CE: Requires a report to a state enforcement agency. MDE, National Response Center, and Washington Suburban Sanitary Commission notified. Report made to MDE Oil Control, NRC, and WSSC. Potential to receive enforcement action is high. Note: All regulatory agencies notified within specific time requirement.
>
>Any Other Information: Approx 3 to 4 gallons of suspected residual JP-8 flushed from sanitary line by AFFF surge. JP-8 also contained and vacuumed up. Absorbent also used to clean up fuel residue. Report to MDE and NRC made due to the 3 to 4 gallons of suspected JP-8 being flushed out by AFFF. (NRC and MDE would not normally notified for an AFFF only spill).
>
> V/r,
>
> Steve Richards
> Environmental Flight Chief, Acting
> 89 CES/CEV
> Andrews AFB, MD
> DSN 858-7120
>
>

RP - Inventory By Selected Category Code - PCN SF022-2005

ANDREWS AIR FORCE BASE

Inv/Ctl 'D' & 'X' and Cost < Capitalization Thresold will NOT show Cost Basis -- Expense Improvement is NOT included in Cost Basis.

Installation: ANDREWS AIR FORCE BASE Instl: AJXF CMD: AFDW

Category: 880217 Description: AFFF PA SPKLR SYS

Fac Nbr	ITC NCD	CD IN	C	ABH DRD	Vac Area	Out NLS	Out LS	Total Area	UM	Area Othr	UM	Rent Paid	Rent Rec	Cost Basis	Est Value	Year Comp
01280	1P2	1L	X		0			65587	SF	690	HD	0		0	0	1960
01539	1P1	2W	X		0			1572	SF	10	HD	0		0	0	1961
01714	1P1	1L	X		0			1600	SF	1	HD	0		0	0	1958
01734	1P1	1L	X		0			65703	SF	16	HD	0		0	0	1960
01754	1P1	1L	X		0			63865	SF	16	HD	0		0	0	1961
01794	1P1	1L	X		0			65703	SF	16	HD	0		0	0	1961
01915	1P1	1L	X		0			18967	SF	12	HD	0	0	0	0	1969
03002	1P2	54	X		0			7300	SF	66	HD	0	0	0	0	1984
03635	1P2	0M	X		0			24300	SF	6	HD	0	0	0	0	1944
03640	1P2	0M	X		0			49976	SF	1	HD	0	0	0	0	1944
Total:					0			364573		834				0	0	

Installation Total: 0 SF 0 SY 0 AC 0 0

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