Final
Preliminary Assessment Report for Perfluorinated Compounds at Niagara Falls Air Reserve Station Niagara County, New York

August 2016

Submitted to:
Air Force Civil Engineer Center
3515 General McMullen Suite 155
San Antonio, Texas 78226-2018

Submitted by:
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Savannah District
100 W. Oglethorpe Avenue
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Oak Ridge, Tennessee 37830-8022
under
Contract No. W912HN-15-C-0022

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Acronyms and Abbreviations

AOC	area of concern
ASL	Aerostar SES LLC
AST	aboveground storage tank
AFFF	aqueous film forming foam
AMSL	above mean sea level
ARS	Air Reserve Station
AFB	Air Force Base
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene and xylenes
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
cm/sec	centimeter per second
CES	Civil Engineer Services
E&E	Ecology and Environment, Inc.
EDR	Environmental Data Resources Incorporated
EOD	Explosive Ordnance Disposal
EPA	United States Environmental Protection Agency
FPTA	fire protection training area
FS	feasibility study
FTA	fire training area
HDR EOC	HDR Environmental, Operations and Construction, Inc.
Hi Ex	high expansion foam
IRP	Installation Restoration Program
MIL-Spec	military specification
NFARS	Niagara Falls Air Reserve Station
NYDEC	New York State Department of Environmental Conservation
NYPA	New York Power Authority
PA	preliminary assessment
PFC	perfluorinated compound
PFOA	perfluorooctanoic acid
PFOS	perfluorooctane sulfonate
PWS	public water supply
RI	remedial investigation
SAIC	Science Applications International Company
SARA	Superfund Amendments and Reauthorization Act of 1986
SPDES	State Pollutant Discharge Elimination System
TPH	total petroleum hydrocarbons
USAF	United States Air Force
USGS	United States Geological Survey

1. INTRODUCTION

Aerostar SES LLC (ASL) has been contracted by the U.S. Army Corps of Engineers Savannah District (Contract No. W912HN-15-C-0022) to perform preliminary assessment (PA) activities at Niagara Falls Air Reserve Station (NFARS) to determine locations of potential environmental release of perfluorinated compounds (PFCs). Specifically, the ASL team is completing PA activities consistent with the United States Environmental Protection Agency (EPA) guidance for preparing PAs under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) (EPA, 1991) to determine potential release locations of PFCs from fire training areas (FTAs) and other known or suspected PFC or aqueous film forming foam (AFFF) usage or storage areas.

ASL conducted activities associated with this PA at NFARS during the week of February 1, 2016, in accordance with the CERCLA and the Superfund Amendments and Reauthorization Act of 1986 (SARA) preliminary assessment processes. Opened in 1928 as a city-owned municipal airport, NFARS has been an active military facility since 1942 and has hosted a wide variety of active and reserve USAF units to include air defense units, fighter interceptor squadrons, air refueling wings, and support groups (Global Security, EA Engineering, 2010).

1.1 BACKGROUND

PFCs are compounds used in the formulation of AFFF, which the USAF 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 (RCRA), there is evidence that perfluorooctane sulfonate (PFOS) and perfluorooctoanic acid (PFOA), which can be found in the environment following AFFF release, may present potential, noncarcinogenic 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 USAF beginning in 1970:

- Military specification (MIL-Spec) 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; and
- A History of Fire Protection Training at Chanute AFB, 1964-1976 (Coates, 1977).

Based on USAF performance testing results on AFFF, the USAF Director of Civil Engineering, M.G. Goddard, issued authorization for the USAF to procure AFFF in 1970. No usage of AFFF by the Air Force could have occurred prior to 1970.

1.2 PURPOSE AND OBJECTIVES

The purpose and objective of this PA report is to identify locations at NFARS where PFCs may have been released to the environment and to conduct an initial assessment of possible migration pathways and receptors of potential contamination.

This PA report documents the known FTAs as well as additional locations (non-FTAs) where AFFF may have been released into the environment at NFARS (Table 1-1). Locations that are considered non-FTAs include, but are not limited to, hangars, fire stations, emergency response, and any other location 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. Figure 1-1 shows the location of NFARS and Figure 1-2 shows the location of all FTA's and non-FTA sites identified for potential AFFF releases.

Table 1-1 Fire Training Areas and Non-Fire Training Areas Identified for Potential Aqueous Film Forming Foam Releases for Niagara Falls Air Reserve Station, New York

Fire Training Areas
Current Fire Training Area
FT005/FPTA No. 01/Site 10
FT006/FPTA No. 02/Site 11
FT007/FPTA No. 03/Site 9
Non-Fire Training Areas
Hangars
Hangar 907
Hangar 917
Hangar 850
Hangar 707
Hangar 706
Fire Stations
Building 821 (Current Fire Station)
Building 700 (Former Fire Station)
Emergency Response
Blue Angels Crash Site
Other Spills and Releases
Tank B Dike
Fox Row/Taxiway Alpha
Stormwater Outfalls
Hulby Street/Emergency Management Training Spill
Unknown Spray Test Area

FPTA = fire protection training area

1.3 BASEWIDE ENVIRONMENTAL SETTING

1.3.1 Geology

The NFARS is located in Niagara County, New York, approximately 6 miles east of the City of Niagara Falls and 15 miles north of the City of Buffalo and is located on the Lake Towanda plain, which is part of the Erie-Ontario province. This province is characterized by generally flat terrain with beach ridges and moraines forming areas of low relief (Johnston, 1964). The ground surface in the area of NFARS slopes gradually from 600 feet above mean sea level (amsl) along the northernmost boundary to 585 feet amsl along the southern boundary. Overburden thickness throughout the facility ranges from approximately 3 feet near Cayuga Creek to nearly 18 feet in the northwestern portion of the facility (EA Engineering, 2010). The overburden is comprised of three main types of material: reworked topsoil/fill, lacustrine deposits, and glacial till. Areas near Cayuga Creek may contain fluvial deposits.

Bedrock below the thin layer of overburden is Middle Silurian Lockport Dolostone, which consists of gray to brownish gray, fine to coarse grained, massive to thinly bedded dolostone. Regionally, the Lockport Dolostone consists of four formations. In the locale of NFARS the Guelph Formation, the uppermost unit is not present. Underlying the Guelph Formation, the Eramosa Formation is present in the

area of NFARS; however, it is missing the upper 10–20 feet. The Eramosa Formation is a dolomite and is described as a biostromal, bituminous, medium- to massive-bedded dolomite. Below the Eramosa Formation lies the Upper Goat Island Formation, which is a light to dark gray, medium- to thin-bedded argillaceous dolomite with thin shale partings and locally present vugs. (Brett et al., 1995).

Previous work conducted at NFARS has recorded that the top 10 feet of the Lockport Dolostone are generally more heavily fractured than below and contains mainly horizontal bedding plane fractures with localized vertical fracturing. Fracture concentrations vary heavily based on location. Other features of the Lockport Formation observed during previous work include fossil coral and algal structures; stylolites; vugs; and secondary mineralization of calcite, dolomite, fluorite, galena, and gypsum (EA Engineering, 2010).

1.3.2 Hydrogeologic Setting

Groundwater flow in the area of NFARS is regionally south to southwest. Locally, flow directions vary based on proximity to the Cayuga Creek which enters the facility from the northeastern quadrant and parallels the aircraft aprons and runway before exiting to the south (EA Engineering, 2010). Local flow directions have been observed to the east, southeast, south, and southwest at various previously investigated sites. Shallow groundwater varies in flow direction based upon seasonal water level fluctuation as well as proximity to Cayuga Creek (EA Engineering, 2010).

The fine grained nature of the unconsolidated overburden (till and lacustrine deposits) produces a very low hydraulic conductivity in the area. This leads to high surface runoff with low infiltration rates. Water movement through the overburden is restricted except in areas with sand lenses and dehydration cracking. Permeability throughout the NFARS has been reported to range from as low as 7.6×10^{-9} centimeter per second (cm/sec) up to 1.08×10^{-3} cm/sec (USAF 1994).

1.3.3 Hydrologic Setting

1.3.3.1 Cayuga Creek

The middle reach of Cayuga Creek flows along the southern boundary of NFARS and has an approximate bed elevation of 572 feet amsl (United States Geological Survey [USGS], 1980a and 1980b). It is a tributary of the Niagara River and lies within the Erie-Niagara Drainage Basin of western New York State in Niagara County, New York as well as being part of the Niagara Tonawanda Creek Watershed. The sub watershed area for the Cayuga Creek Main stem is approximately 16.4 square miles. Beginning to the north of NFARS in the town of Lewiston, it flows south through NFARS and the City of Niagara Falls before joining with Bergholtz Creek and then the Little River before finally discharging into the Niagara River five miles upstream of Niagara Falls (New York Power Authority [NYPA], 2006).

The Cayuga Creek and its constituents are not used for drinking or industrial make up water. Cayuga Creek is an impaired creek and is classified as a Class C stream, indicating that it categorically has water quality suitable for primary and secondary contact, including recreation and fishing (USAF, 1994; NYSDEC, 2014).

1.3.3.2 Bergholtz Creek

Bergholtz Creek is part of the Tonawanda Creek Watershed. The Cayuga Creek empties into the Bergholtz Creek before entering the Little River and then the Niagara River. The sub watershed area for Bergholtz Creek is approximately 13.5 square miles

1.3.3.3 Little River

The Little River is the main tributary to the Niagara River for the creeks and streams of the Towanda Creek Watershed. The Little River enters the Niagara River Northeast of Grand Island.

1.3.3.4 Niagara River

The Niagara River is the drainage outlet for four of the five great lakes–Superior, Michigan, Huron, and Erie–with water flowing in a northern direction from Lake Erie to Lake Ontario. A major source of hydroelectric power for both the United States and Canada, the Niagara River has a gradient of approximately 326 feet and a flow rate of 204,700 cubic feet per second (Britannica, 2016).

The Niagara River has been designated one of the 41 areas of concern (AOCs) in the great lakes basin because of impaired beneficial use (NYPA, 2006). The Towanda Creek Watershed, which contributes to the Niagara River in this area, has a total drainage area of approximately 34.1 square miles (NYPA, 2006).

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 contaminants from a release or migration from an identified location.

The primary surface water features at NFARS are the Cayuga Creek, Bergholtz Creek, and Little River that drain into the Niagara River. These tributaries are considered primary ecological receptors for NFARS, including associate plant and animal species. The majority of the Air Reserve Station (ARS) drains to the Niagara River via the Cayuga Creek.

There are no nature preserves along the route that the Cayuga Creek and its cohorts take to the Niagara River. However, the Niagara River and its surrounding areas are a designated National Heritage Area that is managed by a collection of local agencies and organizations with guidance from the National Park Service.

Table 1-2 lists endangered species that have the potential to exist within the boundaries of NFARS.

In addition to the listed species, multiple wetlands exist within NFARS. The areas designated as wetlands within NFARS are not within the boundary of any potential AFFF release locations, but FT 007/Fire Protection Training Area (FPTA) No. 03/Site 9 and the current FTA are within several hundred feet of an identified wetland area.

Table 1-2 Endangered Species Niagara Falls Air Reserve Station

Mammals
Allegheny Woodrat
Birds
American Bittern Peregrine Falcon Bald Eagle Common Nighthawk Common Tern Grasshopper Sparrow Henslows Sparrow Horned Lark Least Bittern Loggerhead Shrike Northern Harrier Osprey Piping Plover Red Shouldered Hawk Short Eared Owl Upland Sandpiper Vesper Sparrow
Amphibians and Reptiles
Eastern Box Turtle Northern Cricket Frog Queen Snake
Plants
Eastern Prairie Fringed Orchid

Source: *Integrated Natural Resources Management Plan (INRMP) and Environmental Assessment of the Implementation of the INRMP, Niagara Falls Air Reserve Station, New York* (HDR EOC, May 2012)

1.4 PRELIMINARY ASSESSMENT METHODS

The performance of this PA included

- reviewing information and reports in the Administrative Record;
- reviewing documents related to USAF use of AFFF;
- conducting a PA visit to NFARS;
- conducting interviews with base environmental management personnel, the NFARS Fire Department current and former personnel, and aircraft hangar maintenance and operations personnel;
- visiting and photographing locations where AFFF has been used, stored, or transferred between containers; and
- 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 hazards assessments within the PA will not be applicable.

1.5 REPORT ORGANIZATION

This PA report is organized as follows:

- Section 1, Introduction, provides a project overview, provides a basewide environmental setting and describes the methods used to conduct the PA.
- Section 2, Fire Training Areas, describes the FTAs identified during the PA visit.
- Section 3, Non-Fire Training Areas, describes the non-FTAs identified during the PA visit.
- Section 4, Summary and Conclusions, summarizes and provides conclusions for both FTAs and non-FTAs.
- Section 5, References, provides references consulted during the preparation of this PA report.
- Appendix A, Niagara Falls ARS Communication Log, provides records of all communications during the PA visit.
- Appendix B, Niagara Falls ARS Photo Record Log and Field Photographs, provides photos taken during the PA visit.
- Appendix C, Niagara Falls ARS PA Assessment Forms
- Appendix D, ASL February 2016 Site Visit Notes

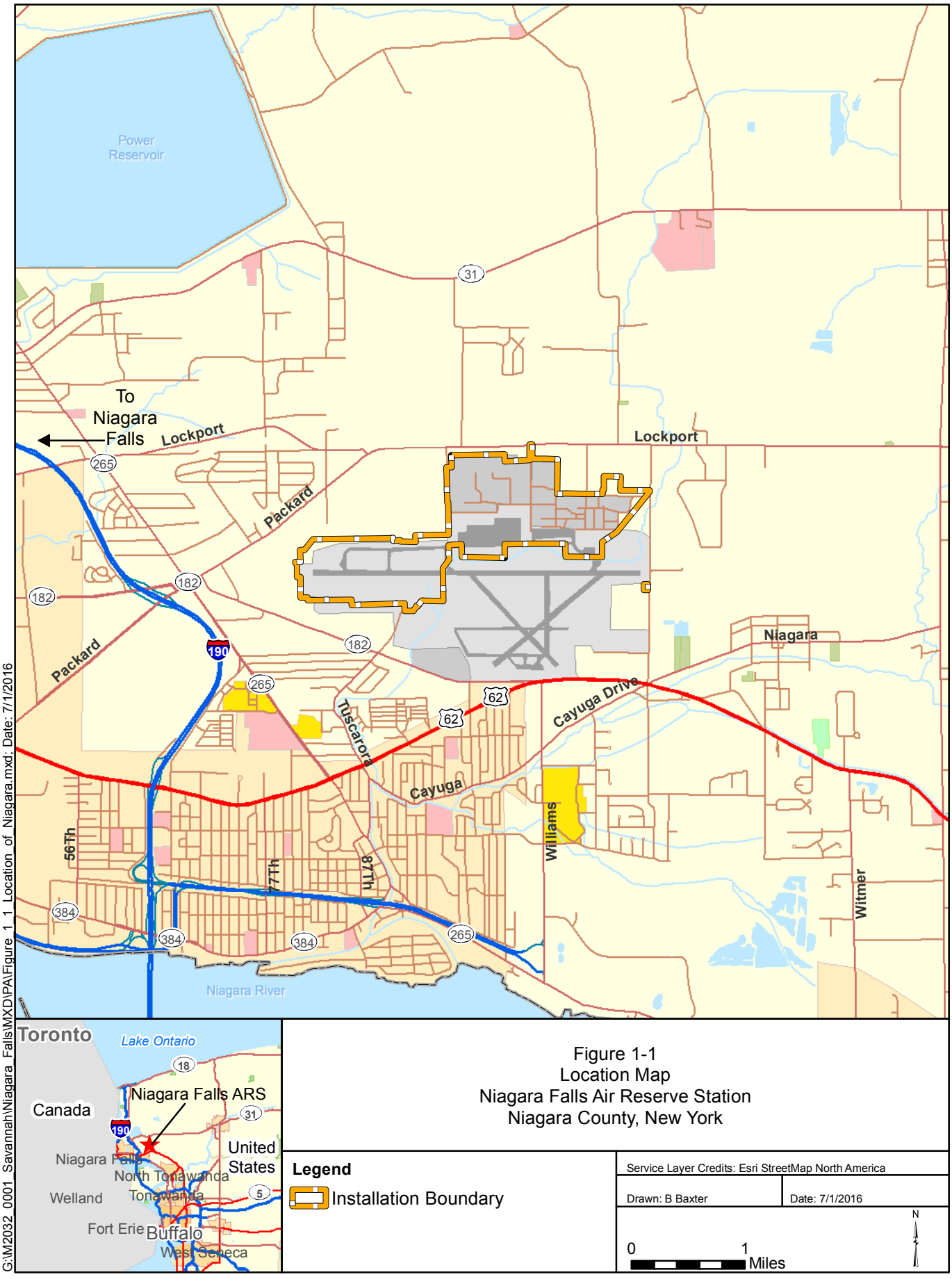

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Figure 1-1
Location Map
Niagara Falls Air Reserve Station
Niagara County, New York

Legend

Installation Boundary

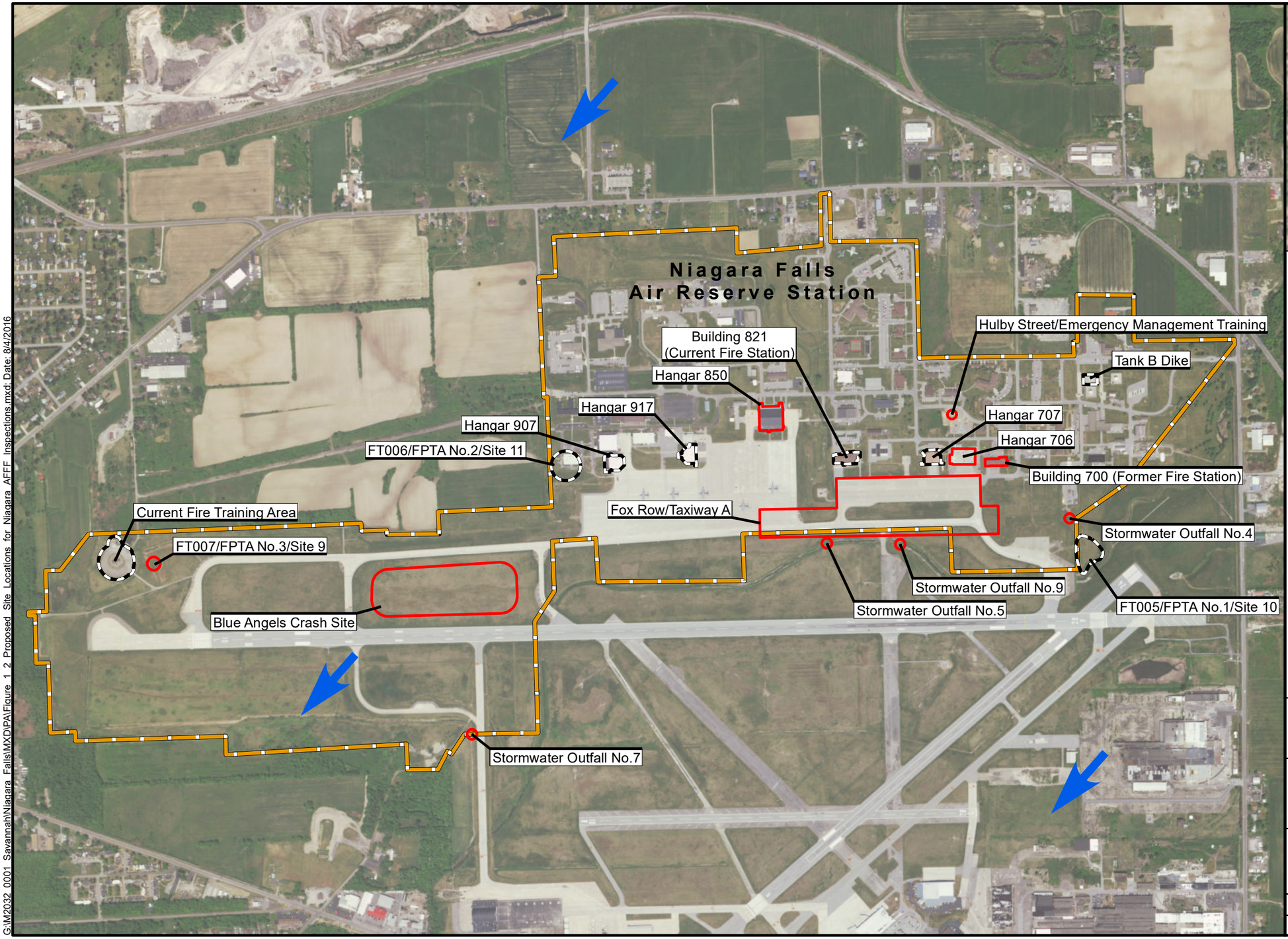
Service Layer Credits: Esri StreetMap North America

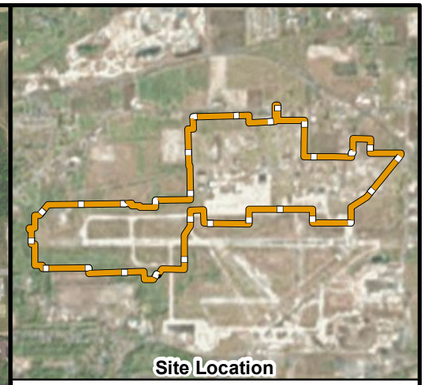
Drawn: B Baxter

Date: 7/1/2016

0 1 Miles

N





Legend

- Presumed Groundwater Flow Direction
- Proposed AFFF Investigation Site
- Areas with No Additional Investigation
- Installation Boundary

N

0 0.125 0.25

Miles

Niagara Falls Air Reserve Station
Niagara County, New York

Figure 1-2
Areas Investigated for Potential PFC Contamination at NFARS

Aerostar SES LLC

Drawn: B Baxter

Date: 8/4/2016

Service Layer Credits: Esri ArcGIS Online Aerial Photography

G:\M2032_0001 Savannah\Niagara Falls\MXD\PA\Figure 1_2 Proposed Site Locations for Niagara AFFF Inspections.mxd; Date: 8/4/2016

2. FIRE TRAINING AREAS

2.1 CURRENT FIRE TRAINING AREA

2.1.1 Description and Operational History

The current FTA is located at the west end of the facility approximately 800 feet north of the runway turnaround. The location is primarily bordered by grassy areas with wetlands to the north and east. FPTA No. 03/Site 9 is approximately 400 feet to the east of the current FTA. The areas to the east, south, and west are all maintained by the USAF and kept groomed, while across the base boundary to the north is a lightly wooded area on private property. The geographic coordinates for this location are 43° 09”08.40”N latitude, 78° 58’08.40”W longitude.

This FTA is the only current operating FTA at NFARS. It has a lined burn pit that contains a mock aircraft. The current FTA has been operational since 1997 and uses propane as a fuel source. All fire training activities are conducted using water only. During the PA site visit in February of 2016, the assistant fire chief reported that AFFF has never been used at this location to his knowledge the previous fire chief had no recollection of AFFF use at this location either (Appendix A).

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 FT005/FPTA NO. 01/SITE 10

2.2.1 Description and Operational History

Site FT005/FPTA No. 01/Site 10 is a former FTA located on the eastern side of the facility adjacent to the former alert aircraft facilities and approximately 800 feet north of the main runway centerline. To the south and west of the location are paved taxiways that supported the former alert facilities, and to the north and east are maintained grassy areas. Cayuga Creek is approximately 400 feet away from the location on the eastern and southern sides. The original size of the pit is unknown and is now filled with soil and covered with grass. This facility was active from 1955–1963. The geographic coordinates of the site are 43°06’41.86” N latitude and 78°56’00.00” W longitude.

FT005/FPTA No. 01/Site 10 was investigated and remediated under the Installation Restoration Program (IRP). The operational history of FT005/FPTA No. 01/Site 10 predates the use of AFFF by the USAF for fire training operations. According to a remedial investigation (RI) conducted by Ecology and Environment, Inc. (E&E), for the USAF, during its active use period FT005/FPTA No. 01/Site 10 served as the base's principal FTA. A variety of combustible liquids were released into a pit of unknown size and then ignited.

According to documents found on the USAF Administrative Record, the site has not yet been closed, however, the most recent record available was published in 2012. Details on historical investigations and RIs conducted at this site are available through the USAF Administrative Record.

2.2.2 Waste Characteristics

Not Applicable.

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 exposure and air pathways

Not Applicable.

2.3 FT006/FPTA NO. 2/SITE 11

2.3.1 Description and Operational History

Site FT006/FPTA No. 02/Site 11 is a former FTA located in the center of the NFARS immediately south of Building 936. To the east, south, and west of the location are maintained, grassy areas. Immediately to the north is Building 936. The original size of the pit is unknown and is now filled with soil and covered with grass. According to the IRP RI/feasibility study (FS), the facility was active in the mid-1950s through the mid-1960s concurrent with FT005/FPTA No. 01/Site 10. The geographic coordinates of the site are 43°06'07.14" N latitude and 78°57'07.14" W longitude.

FT006/FPTA No. 02/Site 11 was investigated and remediated under the IRP. The operational history of FT006/FPTA No. 02/Site 11 predates the use of AFFF by the USAF for fire training operations. According to an RI/FS conducted by Science Applications International Company (SAIC) for the USAF, during its active use period, FT006/FPTA No. 02/Site 11 did not have a functional containment system. Due to its concurrent use with FT005/FPTA No. 01/Site 10, it can be presumed that the uncontained use of fuels also occurred at FT006/FPTA No. 02/Site 11.

According to documents found on the USAF administrative record, the site achieved 'No Further Action Required' status in 1990 (Headquarters USAF, 1990). Details on historical investigations and RI conducted at this site are available through the USAF administrative record.

2.3.2 Waste Characteristics

Not Applicable.

2.3.3 Pathway and Environmental Hazard Assessment

2.3.3.1 Groundwater pathway

Not Applicable.

2.3.3.2 Surface water pathway

Not Applicable.

2.3.3.3 Soil exposure and air pathways

Not Applicable.

2.4 FT007/FPTA NO. 03/SITE 9

2.4.1 Description and Operational History

Site FT007/FPTA No. 03/Site 9 is a former FTA located on the west side of NFARS. Approximately 400 feet west of FT007/FPTA No. 03/FPTA No. 03 is the current FTA and the main runway centerline is approximately 770 feet to the south. FT007/FPTA No. 03/FPTA No. 03 is surrounded by maintained, grassy areas. The site was active beginning in the early 1960s through the late 1990s. The geographic coordinates of the site are 43°06'41.97" N latitude and 78°58'03.10" W longitude.

FT007/FPTA No. 03/Site 9 was investigated and remediated under the IRP. The operational history of FT007/FPTA No. 03/Site 9 includes the use of AFFF and dry chemicals to put out training fires ignited with JP-4 and other flammable liquids. Training operations were conducted at this site between 20 and 30 times per year. During its active use period, FT007/FPTA No. 03/Site 9 did not have a functional containment system. The training area consisted of a large oval pit with a low earthen berm that drains into an intermittent stream located to the north of the pit (Portage, 2012).

According to documents found on the USAF administrative record, the site achieved 'No Further Response Action Planned' status in 1999 (E&E, 1999). Details on historical investigations and RIs conducted at this site are available through the USAF administrative record.

2.4.2 Waste Characteristics

Beginning in 1979, JP-4 was the only accelerant used to ignite training fires. Previous to that, unknown mixtures of combustibles (likely similar to those used at FT005/FPTA No.01/Site 10 and FT006/FPTA

No. 02/Site 11) were probably used. There is no record of a retention pond for the collection of excess liquids. Surface runoff moving towards Cayuga Creek has been observed in the past (SAIC, 1989).

During the PA interview conducted in February 2016, the current fire chief and the assistant fire chief stated that they did not have knowledge or records of the volume of AFFF released during each training event at FT007/FPTA No. 03/Site 9. However, based on the size of the crash trucks at NFARS, it is estimated that between 200 and 300 gallons of AFFF were released during each training event.

2.4.3 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 receptors 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 (EPA, 1989).
Database research (EDR, 2016) shows 29 daycare facilities, 13 schools, 27 hospitals, and one college within the potential migration area of 4 miles from any given potential release location of PFCs. No elementary schools or child development centers are located on base. The closest day care is located approximately 5,628 feet hydrologically cross gradient (northwest) of the location. The closest elementary school is located approximately 8,103 feet cross gradient (south) of the location.

2.4.3.1 Groundwater pathway

The basewide geologic and hydrogeologic settings are provided in Section 1. Groundwater use in the area of NFARS is both industrial and domestic in nature. According to the New York State Department of Environmental Conservation (NYDEC) water well locator and the USGS National Water Information System, there are no public water wells within 4 miles of this location, although several private wells exist (EDR, 2016). The human population both on and off base primarily relies on the public water supply (PWS) provided by the Niagara County Water District. Drinking water for the City of Niagara Falls and the County of Niagara is obtained from the upstream west branch of the Niagara River. The thin layer of overburden covering the Lockport Dolostone that ranges from 3 feet to 18 feet contains the surficial aquifer which is of primary concern in the area. The soils throughout NFARS are moderately drained, have slow permeability in the subsoil, and have a seasonally high water table of 6 to 12 inches below surface (HDR Environmental, Operations and Construction, Inc. [HDR EOC], 2012). Soils in the area are saturated, ponded, or flooded long enough during the growing season to develop anaerobic conditions (HDR EOC, 2012).

Previous investigations at FT007/FPTA No. 03/Site 9 by SAIC and E&E in 1989–1991 and 1990–1992, respectively, both resulted in ‘No Further Action’ recommendations. According to these reports, water levels in the shallow unconsolidated aquifer occurred at an average depth of 3.32 feet below ground surface (bgs). Local groundwater flow surrounding the former FTA is to the north-northwest due to the wetlands located in the immediate vicinity. Soil sampling from these investigations found metals contaminants within regional background ranges with elevated nickel and vanadium levels. Groundwater sampling found similar results for metals, along with benzene, toluene, ethylbenzene, and xylenes (BTEX) and total petroleum hydrocarbons (TPH). The BTEX and TPH constituents appeared to be

migrating off site, volatilizing or biodegrading between investigations. The extent of contamination for both forms of media was found to be generally limited (USAF, 1994).

The population both on and off base within a 4-mile radius of the site primarily relies on drinking water provided by surface water intakes on the Niagara River slightly more than 8 miles to the south and upstream of the Cayuga Creek entry to the Niagara River.

2.4.3.2 Surface water pathway

Surface drainage originating from the majority of NFARS flows preferentially towards the Cayuga Creek that bisects the facility. In instances similar to FT007/FPTA No. 03/Site 9, where the localized surface water flow is to the north-northwest and the Cayuga Creek is to the south, surface water typically reaches a drainage or wetland that then connects with and flows to the Cayuga Creek further downstream. FT007/FPTA No. 03/Site 9 is located adjacent to identified wetlands and an unnamed drainage that connect to the Cayuga Creek in the area of Outfall 007. Refer to Section 1.3.3.2 for details on the migration path of surface drainage from this site, including flood plain and sensitive environment information. There are no identified surface water intakes or downstream fisheries adjacent to the surface water migration path 15 miles downstream of the site.

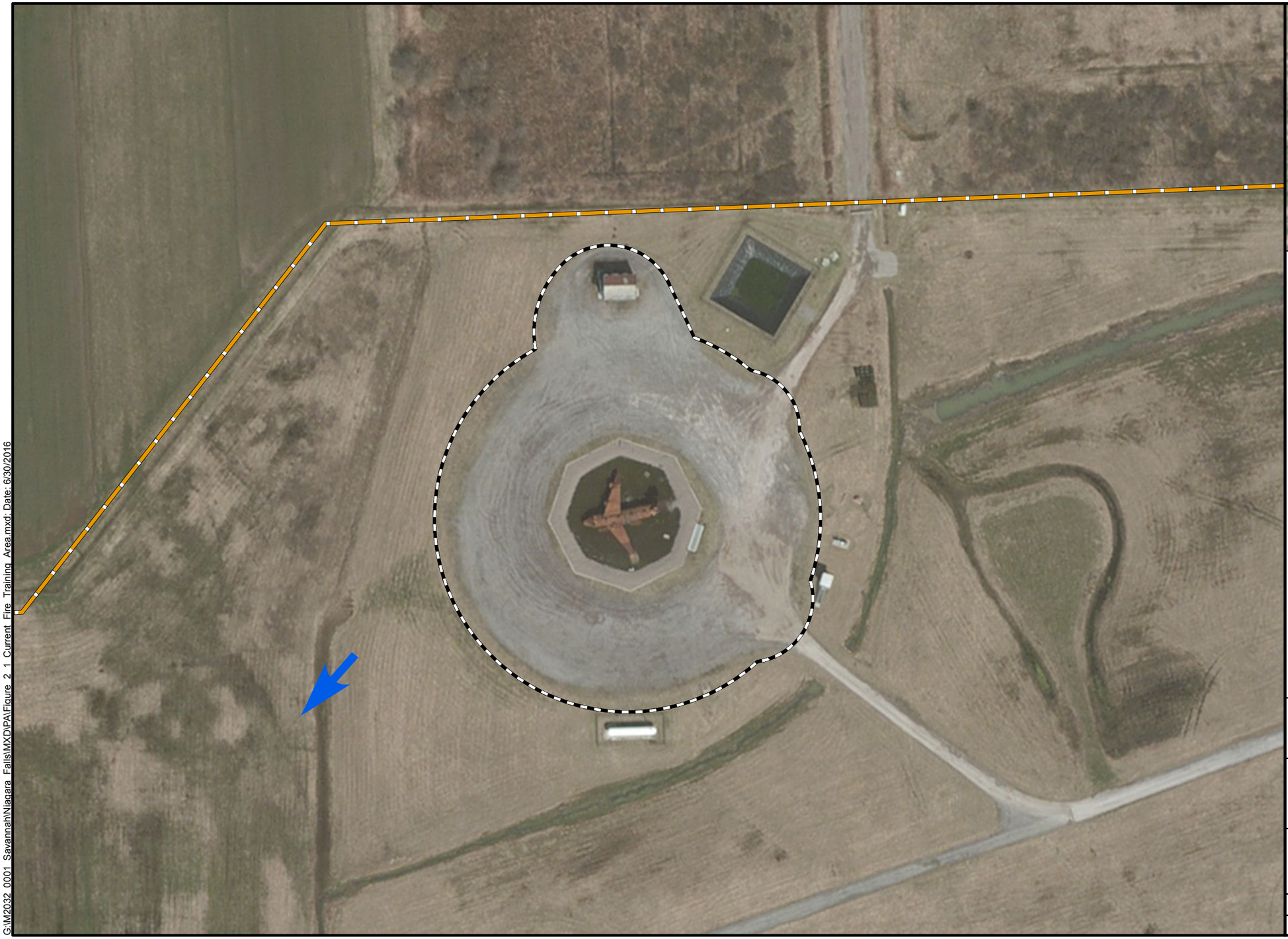
2.4.3.3 Soil exposure and air pathway

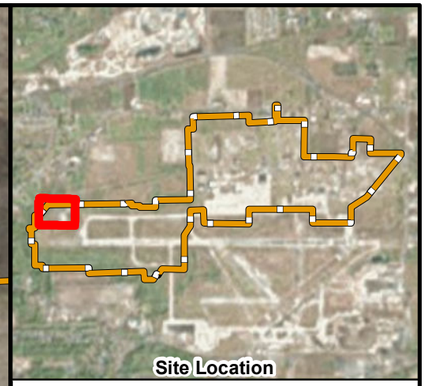
The site is a former FTA that has been inactive since 1997 and is currently maintained as part of the area around the main runway. The well-vegetated site would preclude any fugitive dust emissions and potential exposures. Current land use does not involve any human health exposures, and future land use is likely to remain unchanged due to the site's proximity to an active runway. The potential exists for exposure to burrowing animals.

There are no residents or workers at the site. The nearest residential area is 1,425 feet north of the site. Population details of the residential areas within a 4-mile radius are discussed in Section 2.4.3.1.

There are no schools or daycare facilities within a 200-foot radius of the site. The nearest school is Geraldine J. Mann Elementary School, approximately 1.49 miles south of NFARS in a residential area.

The adjacent, unnamed wetland areas have the potential to contain ecological receptors discussed in Section 1.3.4.





Legend

- Presumed Groundwater Flow Direction
- Areas with No Additional Investigation
- Installation Boundary

N

0 50 100 150

Feet

Niagara Falls Air Reserve Station
Niagara County, New York

Figure 2-1
Current Fire Training Area

Aerostar SES LLC

Drawn: B Baxter

Date: 6/30/2016

Service Layer Credits: Esri ArcGIS Online Aerial Photography

G:\M2032_0001_Savannah\Niagara_Falls\MXD\PA\Figure_2_1_Current_Fire_Training_Area.mxd: Date: 6/30/2016

Legend

- Presumed Groundwater Flow Direction
- Areas with No Additional Investigation
- Installation Boundary

N

0 50 100 150

Feet

Niagara Falls Air Reserve Station
Niagara County, New York

Figure 2-2
FT005/FPTA No.1/Site 10

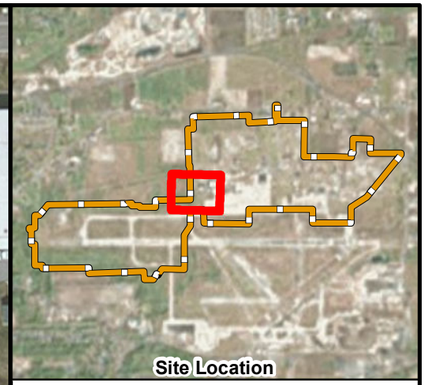
Aerostar SES LLC

Drawn: B Baxter

Date: 7/1/2016

Service Layer Credits: Esri ArcGIS Online Aerial Photography

G:\M2032_0001_Savannah\Niagara_Falls\MXD\PA\Figure_2_2_FPTA_No_01_Site_10.mxd; Date: 7/1/2016



Legend

- Presumed Groundwater Flow Direction
- Areas with No Additional Investigation
- Installation Boundary

N

0 50 100 150

Feet

Niagara Falls Air Reserve Station
Niagara County, New York

Figure 2-3
FT006/FPTA No. 2/Site 11

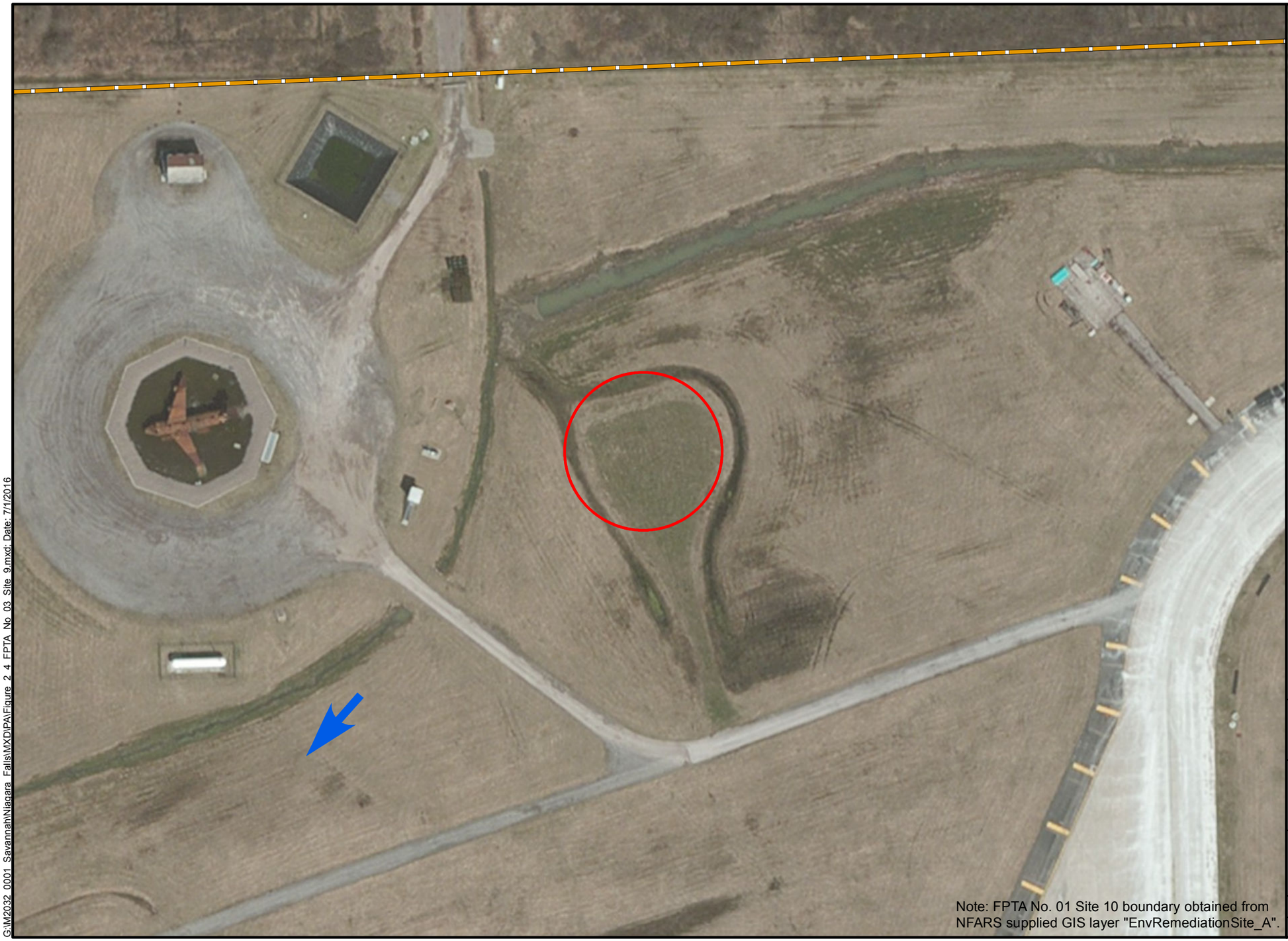
Aerostar SES LLC

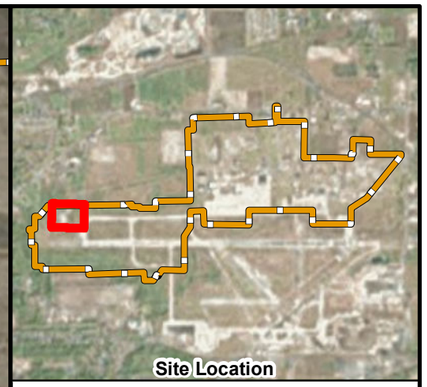
Drawn: B Baxter

Date: 7/1/2016

Service Layer Credits: Esri ArcGIS Online Aerial Photography

G:\M2032_0001_Savannah\Niagara Falls\MXD\PA\Figure 2_3 FPTA No. 02 Site 11.mxd; Date: 7/1/2016





Legend

- Presumed Groundwater Flow Direction
- Proposed AFFF Investigation Site
- Installation Boundary

N

0 50 100 150

Feet

Niagara Falls Air Reserve Station
Niagara County, New York

Figure 2-4
FT007/FPTA No. 3/ Site 9

Aerostar SES LLC

Drawn: B Baxter

Date: 7/1/2016

Service Layer Credits: Esri ArcGIS Online Aerial Photography

G:\M2032_0001_Savannah\Niagara_Falls\MXD\PA\Figure_2_4_FPTA_No_03_Site_9.mxd; Date: 7/1/2016

3. NON-FIRE TRAINING AREAS

3.1 HANGARS

Hangars have fixed foam suppression systems that are either deluge (water), AFFF or high-expansion foam (Hi Ex). The current fire chief and assistant fire chief of the NFARS Fire Department were interviewed for the types of systems that have been used historically and currently at each hangar. At NFARS, the fire department is responsible for all operational testing. Systems are either charged with foam, not charged with foam, or removed. At this time, NFARS has four hangars equipped with foam fire suppression systems; three of which are AFFF systems, and one of which is currently Hi Ex but was formerly AFFF. These systems are tested on a two-year cycle with one year consisting of a no-flow test and the other consisting of a water-only flow test.

3.1.1 Hangar 907

3.1.1.1 Description and operational history

Hangar 907 is a former Air National Guard facility located on the west end of the active aircraft apron. Hangar 907 can be accessed by turning south from Guardian Street onto an unnamed access road. The geographic coordinates of the site are 43°06’50.79” N latitude and 78°56’01.06” W longitude.

The hangar is equipped with an AFFF fire suppression system. The hangar’s mechanical room is in the northwest corner of the building and currently contains one 2000-gallon aboveground storage tank (AST) with 3 percent AFFF. Since installation, one recorded 10-gallon release occurred into the storm drain catch basin, where it was contained and properly disposed of. This spill was documented in the PA communication log (Appendix B).

3.1.1.2 Waste characteristics

Not applicable.

3.1.1.3 Pathway and environmental hazard assessment

Not applicable.

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 exposure and air pathways

Not applicable.

3.1.2 Hangar 917

3.1.2.1 Description and operational history

Hangar 917 is a former Air Guard hangar located directly south of Guardian Street and adjacent to Delta Row. Hangar 917 currently has an Hi Ex system located in a mechanical room on the northwest side of the building. Hi Ex is a firefighting foam concentrate composed of nonfluorinated polymer and hydrocarbon surfactant-based mixtures. Because Hi-Ex is a nonfluorinated compound and therefore does not contain perfluorinated compounds, facilities that use Hi-Ex and have no historical spills of AFFF are not included in this investigation. The mechanical room contains one 1,000-gallon AST of 2.75 percent Jet-X expansion foam. The geographic coordinates of Hangar 917 are 43°06’51.48” N latitude and 78°56’50.93” W longitude.

This building has historically been used for aircraft maintenance by the Air National Guard and is currently used and maintained by the USAF. According to the assistant fire chief, the building had an AFFF system installed until approximately 2000, at which time the system was changed over to Hi Ex. No details on the formerly installed AFFF system are available. In 2007, a contractor accidentally released an unknown volume of Hi Ex. This spill was recorded during interviews with the assistant fire chief.

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 exposure and air pathways

Not applicable.

3.1.3 Hangar 850

3.1.3.1 Description and operational history

Hangar 850 is a USAF aircraft maintenance hangar located south of Wagner Street, with ramp access to Delta Row. Hangar 850 currently has an AFFF system located in a mechanical room on the northwest side of the building. The mechanical room contains one 2,500-gallon AST of 3 percent AFFF with a

working capacity of 2,300 gallons. The geographic coordinates of Hangar 850 are 43°06'54.86" N latitude and 78°56'39.86" W longitude.

Hangar 850 has had multiple releases of AFFF. NFARS has maintained accurate spill records since 1984. The largest spill occurred in 2010 when a lightning strike overpowered the fire suppression system control panels. The release was approximately 48,000 gallons of AFFF concentrate and water mixed. AFFF released during this event was mostly contained inside of the hangar, though a small amount was observed to have discharged into the sanitary and storm sewers. NFARS personnel responded to the release immediately and conducted a clean up action resulting in the proper disposal of residuum. NYSDEC concurred that the spill had been properly addressed.

In 1995, approximately 10 gallons were released from the mechanical room door.

In 1996, approximately 2,100 gallons of AFFF concentrate were released into the hangar due to system overpressure. NYDEC was notified, and the spill was contained and removed with a vacuum truck. This spill was verified not to have entered the storm water system.

In 2013, during a water test of the firefighting system at Hangar 850, approximately 5,000 gallons of 0.5 percent AFFF were released. During this release, nearby storm drains were plugged and the sluice gates were closed. The hangar doors were also closed with the majority of the material being removed via vacuum truck. Very little residual foam was noted on the apron south of the hangar.

3.1.3.2 Waste characteristics

According to NFARS spill records, several spills have occurred at Hangar 850. The releases outlined in Section 3.1.3.1 create a total spill volume of approximately 2,135 gallons of AFFF concentrate caused by different triggers.

3.1.3.3 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 receptors 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 (EPA, 1989).
Database research (EDR, 2016) shows 29 daycare facilities, 13 schools, 27 hospitals, and one college within the potential migration area of 4 miles from any given potential release location of PFCs. No elementary schools or child development centers are located on base. The closest day care is located approximately 5,628 feet hydrologically cross gradient (northwest) of the location. The closest elementary school is located approximately 8,103 feet cross gradient (south) of the location.

3.1.3.3.1 Groundwater pathway

The basewide geologic and hydrogeologic settings are provided in Section 1. Groundwater use in the area of NFARS is both industrial and domestic in nature. According to the NYDEC water well locator and the

USGS National Water Information System, there are no public water wells within 4 miles of this location, although several private wells exist (EDR, 2016). The human population both on and off base primarily relies on the PWS provided by the Niagara County Water District. Drinking water for the City of Niagara Falls and the County of Niagara is obtained from the upstream west branch of the Niagara River. The thin layer of overburden covering the Lockport Dolostone that ranges from 3 feet to 18 feet contains the surficial aquifer which is of primary concern in the area. The soils throughout NFARS are moderately drained, have slow permeability in the subsoil, and a seasonally high water table of 6 to 12 inches below surface (HDR EOC, 2012). Soils in the area are saturated, ponded, or flooded long enough during the growing season to develop anaerobic conditions (HDR EOC 2012).

No previous groundwater investigations have been conducted at Building 850. Areas surrounding the building that are not paved will allow for groundwater infiltration following surface transport.
The population both on and off base within a 4-mile radius of the site primarily relies on drinking water provided by surface water intakes on the Niagara River slightly more than 8 miles to the south and upstream of the Cayuga Creek entry to the Niagara River.

3.1.3.3.2 Surface water pathway

Surface drainage originating from the majority of NFARS flows preferentially towards the Cayuga Creek that bisects the facility. Hangar 850 is located approximately 1500 feet to the north of Cayuga Creek with the aircraft apron located between. Contaminants released from Hangar 850 onto the apron will drain to the south and west reaching either Cayuga Creek or the stormwater system located east of the apron. Refer to section 1.3.3.2 for details on the migration path of surface drainage from this site, including flood plain and sensitive environment information. There are no identified surface water intakes or downstream fisheries adjacent to the surface water migration path 15 miles downstream of the site.

3.1.3.3.3 Soil exposure and air pathways

The site is a USAF aircraft maintenance hangar that is currently in use. The area in and around the hangar is paved and would preclude any fugitive dust emissions and potential exposures. Current land use does not involve any human health exposures and future land use is likely to remain unchanged.

Workers are present at the site. The nearest residential area is approximately 2,500 feet north of the site. Population details of the residential areas within a 4-mile radius are discussed in Section 2.4.3.1.

There are no schools or daycare facilities within a 200-foot radius of the site. The nearest school is Geraldine J Mann Elementary School, approximately 1.5 miles south of NFARS in a residential area.

3.1.4 Hangar 707

3.1.4.1 Description and operational history

Hangar 707 is an aircraft maintenance facility located at the intersection of Krug Avenue and Kirkbridge Drive. Immediately south of the hangar is Fox Row. The fire suppression system at Hangar 707 is an AFFF system. Currently there is one 2000 gallon AST containing 1850 gallons of 3 percent AFFF in the mechanical room on the northwest side of the building. The AFFF system has a series of bowsers located around the AFFF system that drain to a sump located in the room. The geographic coordinates of Hangar 707 are 43°06’50.69” N latitude and 78°56’13.93” W longitude.

Hangar 707 specifically addresses the maintenance needs of aircraft fuel systems. In 2003 a heat detector malfunctioned causing the system to activate. According to the NFARS Hazardous Waste representative all foam released during this incident was contained and cleaned up inside of the building. Notes recorded by ASL during the site visit documenting this interview can be found in Appendix D.

3.1.4.2 Waste characteristics

Not applicable.

3.1.4.3 Pathway and environmental hazard assessment

Not applicable.

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 706

3.1.5.1 Description and operational history

Hangar 706 is a former aircraft maintenance hangar that has been demolished. The remaining footprint of the building is immediately east of Hangar 707 along Otis Drive. Directly south of the building footprint is Fox Row. According to the building plans, the mechanical room was located on the western side of the building. No records were found regarding the size of the AFFF system. The geographic coordinates of Hangar 706 are 43°06’50.63” N latitude and 78°56’14.15” W longitude.

In 1995 there was a release of 216 gallons of AFFF mixed with water onto the ramp west of Hangar 706. No removal actions were taken at the time.

3.1.5.2 Waste characteristics

According to base spill records, only one release of AFFF occurred in 1995. This spill, consisting of 216 gallons of AFFF concentrate mixed with water, occurred due to the failure of personnel to prerinse a truck prior to an operational test. The AFFF was mixed with approximately 798 gallons of water.

3.1.5.3 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 receptors 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 (EPA, 1989).
Database research (EDR, 2016) shows twenty nine daycare facilities, thirteen schools, twenty seven hospitals, and one college within the potential migration area of 4 miles from any given potential release location of PFCs. No elementary schools or child development centers are located on base. The closest day care is located approximately 8,810 feet hydrologically cross gradient (northwest) of the location. The closest elementary school is located approximately 8,699 feet cross gradient (south) of the location.

3.1.5.3.1 Groundwater pathway

The basewide geologic and hydrogeologic settings are provided in Section 1. Groundwater use in the area of NFARS is both industrial and domestic in nature. According to the NYDEC water well locator and the USGS National Water Information System, there are no public water wells within 4 miles of this location, although several private wells exist (EDR, 2016). The human population both on and off base primarily relies on the PWS provided by the Niagara County Water District. Drinking water for the City of Niagara Falls and the County of Niagara is obtained from the upstream west branch of the Niagara River. The thin layer of overburden covering the Lockport Dolostone that ranges from 3 feet to 18 feet contains the surficial aquifer which is of primary concern in the area. The soils throughout NFARS are moderately drained, have slow permeability in the subsoil, and a seasonally high water table of 6 to 12 inches below surface (HDR EOC, 2012). Soils in the area are saturated, ponded, or flooded long enough during the growing season to develop anaerobic conditions (HDR EOC 2012).

No previous groundwater investigations have been conducted at Building 706. Areas surrounding the building that are not paved will allow for groundwater infiltration following surface transport.

The population both on and off base within a 4-mile radius of the site primarily relies on drinking water provided by surface water intakes on the Niagara River slightly more than 8 miles to the south and upstream of the Cayuga Creek entry to the Niagara River.

3.1.5.3.2 Surface water pathway

Surface drainage originating from the majority of NFARS flows preferentially towards the Cayuga Creek that bisects the facility. The majority of the area surrounding Building 706 is and has been paved with surface water being directed into the stormwater management system and running off the aircraft apron on the east and south sides. Refer to section 1.3.3.2 for details on the migration path of surface drainage from this site, including flood plain and sensitive environment information. There are no identified surface water intake or downstream fisheries adjacent to the surface water migration path 15 miles downstream of the site.

3.1.5.3.3 Soil exposure and air pathways

The site is a former aircraft maintenance hangar that has been demolished. The area surrounding the former building is paved or well vegetated and would preclude any fugitive dust emissions and potential exposures. Current land use does not involve any human health exposures and future land use is likely to remain unchanged due to the sites proximity to an active runway. The potential exists for exposure to burrowing animals.

There are no residents or workers at the site. The nearest residential area is approximately 2,500 feet north of the site. Population details of the residential areas within a 4-mile radius are discussed in Section 2.4.3.1.

There are no schools or daycare facilities within a 200-foot radius of the site. The nearest school is Geraldine J Mann Elementary School, approximately 1.65 miles south of NFARS in a residential area.

3.2 FIRE STATIONS

3.2.1 Building 821 (Current Fire Station)

3.2.1.1 Description and operational history

Building 821 is the current fire station at NFARS. The fire station began use during the years of 2005 and 2006. According to the current fire chief, immediately following activation of the building, the 1,000 gallon overhead storage tank for AFFF was overfilled and damaged. This spill was properly contained and disposed of. In 2013 a 10 gall spill on the ramp south of the building was documented. This spill was contained with absorbent material and removed from the site.

All releases that have been documented at the current fire station were cleaned up following proper spill control procedures.

3.2.1.2 Waste characteristics

Not applicable.

3.2.1.3 Pathway and environmental hazard assessment

Not applicable.

3.2.1.3.1 Groundwater pathway

Not applicable.

3.2.1.3.2 Surface water pathway

Not applicable.

3.2.1.3.3 Soil exposure and air pathways

Not applicable.

3.2.2 Building 700 (Former Fire Station)

3.2.2.1 Description and operational history

Building 700 is the former fire station that has been converted for use by the base Explosive Ordnance Disposal (EOD) unit and bioenvironmental. The building is located south of Krug Avenue and west of Franklin Drive. The building formerly housed a 1,000 gallon storage tank which is now housed at the current fire station. The geographic coordinates of the building are 43°06'50.60" N latitude and 78°56'14.12" W longitude.

In 2007 a spill of 3 to 5 gallons was documented at the south side ramp area. There is also an undocumented spray test area located in the grassy area to the south/southeast of the fire station. Records located by ASL were unclear as to the precise location; however, it was estimated to be located between the former fire station and FPTA No. 01.

3.2.2.2 Waste characteristics

Ending use in 2005 and 2006, the former fire station previously housed a 1,000 gallon AFFF tank. A small spill was recorded in 2007 on the southern ramp, and spray testing was conducted in the grassy area to the south/southeast of the building. Following occupation of the new fire station EOD and bioenvironmental engineering moved into the building.

The current fire chief, and assistant fire chief, did not have knowledge or records of the volume of AFFF released during each testing event at the undocumented spray test area, however, based on volumes released during similar tests at other facilities, it is likely that no more than 20 gallons of AFFF were released during each event (Appendix A).

3.2.2.3 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 receptors 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 (EPA, 1989).

Database research (EDR, 2016) shows twenty nine daycare facilities, thirteen schools, twenty seven hospitals, and one college within the potential migration area of 4 miles from any given potential release location of PFCs. No elementary schools or child development centers are located on base. The closest day care is located approximately 8,821 feet hydrologically cross gradient (northwest) of the location. The closest elementary school is located approximately 8,725 feet cross gradient (south) of the location.

3.2.2.3.1 Groundwater pathway

The basewide geologic and hydrogeologic settings are provided in Section 1. Groundwater use in the area of NFARS is both industrial and domestic in nature. According to the NYDEC water well locator and the USGS National Water Information System, there are no public water wells within 4 miles of this location, although several private wells exist (EDR, 2016). The human population both on and off base primarily relies on the PWS provided by the Niagara County Water District. Drinking water for the City of Niagara Falls and the County of Niagara is obtained from the upstream west branch of the Niagara River. The thin layer of overburden covering the Lockport Dolostone that ranges from 3 feet to 18 feet contains the surficial aquifer which is of primary concern in the area. The soils throughout NFARS are moderately drained, have slow permeability in the subsoil, and a seasonally high water table of 6 to 12 inches below surface (HDR EOC, 2012). Soils in the area are saturated, ponded, or flooded long enough during the growing season to develop anaerobic conditions (HDR EOC 2012).

No previous groundwater investigations have been conducted at Building 706. Areas surrounding the building that are not paved will allow for groundwater infiltration following surface transport. The undocumented spray test area to the south of the fire station has also not been investigated for groundwater contamination.

The population both on and off base within a 4-mile radius of the site primarily relies on drinking water provided by surface water intakes on the Niagara River slightly more than 8 miles to the south and upstream of the Cayuga Creek entry to the Niagara River.

3.2.2.3.2 Surface water pathway

Surface drainage originating from the majority of NFARS flows preferentially towards the Cayuga Creek that bisects the facility. Surface water from the building will flow preferentially towards the south off of the paved area. The topography in the area directs all surface water towards the Cayuga Creek. Refer to section 1.3.3.2 for details on the migration path of surface drainage from this site, including flood plain and sensitive environment information. There are no identified surface water intake or downstream fisheries adjacent to the surface water migration path 15 miles downstream of the site.

3.2.2.3.3 Soil exposure and air pathways

The site is a former fire station that has been inactive since 2005/2006 and is currently used by EOD and Bioenvironmental. The surrounding paved and well vegetated areas would preclude any fugitive dust emissions and potential exposures. Current land use does not involve any human health exposures and future land use is likely to remain unchanged. The potential exists for exposure to burrowing animals.

Workers at the site include EOD and Bioenvironmental personnel. The nearest residential area is 1,425 feet north of the site. Population details of the residential areas within a 4-mile radius are discussed in Section 2.4.3.1.

There are no schools or daycare facilities within a 200-foot radius of the site. The nearest school is Geraldine J Mann Elementary School, approximately 1.66 miles south of NFARS in a residential area.

3.3 EMERGENCY RESPONSE

3.3.1 Blue Angels Crash Site

3.3.1.1 Description and operational history

A fatal Blue Angels crash occurred on the airfield during the 1985 Western New York Air Show. The incident involved two A-4F Skyhawk's that collided midair. One of the planes crashed outside of the airfield perimeter on the eastern side of the base after the pilot ejected, while the other crashed in a grassy area just north of the main east/west runway and south of Taxiway Alpha. During the response, AFFF was used to extinguish the fire. The geographic coordinates of the crash site are 43°06'37.96" N latitude and 78°57'24.29" W longitude.

There is no record of the volume of AFFF used to suppress the fire that occurred in conjunction with this crash.

3.3.1.2 Waste characteristics

The fatal Blue Angels crash was a onetime incident involving a plane crash that resulted in a fire. During the emergency response an unknown volume of AFFF was dispensed to extinguish the resultant fire. The plane crashed in a grassy area just north of the main east/west runway south of Taxiway Alpha.

3.3.1.3 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.
- A route of intake for the contaminant into the receptors 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 (EPA, 1989).

Database research (EDR, 2016) shows twenty nine daycare facilities, thirteen schools, twenty seven hospitals, and one college within the potential migration area of 4 miles from any given potential release location of PFCs. No elementary schools or child development centers are located on base. The closest day care is located approximately 4,316 feet hydrologically cross gradient (northwest) of the location. The closest elementary school is located approximately 6,625 feet cross gradient (south) of the location.

3.3.1.3.1 Groundwater pathway

The basewide geologic and hydrogeologic settings are provided in Section 1. Groundwater use in the area of NFARS is both industrial and domestic in nature. According to the NYDEC water well locator and the USGS National Water Information System, there are no public water wells within 4 miles of this location, although several private wells exist (EDR, 2016). The human population both on and off base primarily relies on the PWS provided by the Niagara County Water District. Drinking water for the City of Niagara Falls and the County of Niagara is obtained from the upstream west branch of the Niagara River. The thin layer of overburden covering the Lockport Dolostone that ranges from 3 feet to 18 feet contains the

surficial aquifer which is of primary concern in the area. The soils throughout NFARS are moderately drained, have slow permeability in the subsoil, and a seasonally high water table of 6 to 12 inches below surface (HDR EOC, 2012). Soils in the area are saturated, ponded, or flooded long enough during the growing season to develop anaerobic conditions (HDR EOC 2012).

Groundwater investigations conducted in areas close to the crash site indicate that water levels in the shallow unconsolidated aquifer occurred at an average depth of 3.32 feet bgs. No specific groundwater flow directions are available for this area of NFARS.

The population both on and off base within a 4-mile radius of the site primarily relies on drinking water provided by surface water intakes on the Niagara River slightly more than 8 miles to the south and upstream of the Cayuga Creek entry to the Niagara River.

3.3.1.3.2 Surface Water Pathway

Surface drainage originating from the majority of NFARS flows preferentially towards the Cayuga Creek that bisects the facility. A southern bend in the Cayuga Creek occurs immediately east of the crash site, making it likely that AFFF reached the creek shortly after application to the crash site. Refer to section 1.3.3.2 for details on the migration path of surface drainage from this site, including flood plain and sensitive environment information. There are no identified surface water intake or downstream fisheries adjacent to the surface water migration path 15 miles downstream of the site.

3.3.1.3.3 Soil Exposure and Air Pathways

The site is an aircraft crash location that is located between Taxiway Alpha and the primary east/west runway on the facility. The well vegetated site would preclude any fugitive dust emissions and potential exposures. Current land use does not involve any human health exposures and future land use is likely to remain unchanged due to the sites proximity to an active runway. The potential exists for exposure to burrowing animals.

There are no residents or workers at the site. The nearest residential area is approximately 4,300 feet north of the site. Population details of the residential areas within a 4-mile radius are discussed in Section 2.4.3.1.

There are no schools or daycare facilities within a 200-foot radius of the site. The nearest school is Geraldine J Mann Elementary School, approximately 1.25 miles south of NFARS in a residential area.

3.4 OTHER SPILLS AND RELEASES

3.4.1 Tank B Dike

3.4.1.1 Description and operational history

The Tank B Dike, also known as the tank farm basin, is currently used by the NFARS Fire Department as a spray testing area. This area formerly functioned as a containment for a jet fuel storage tank. All spray testing activities are confined to the concrete basin. During the PA visit grass was observed growing in the concrete joints, however the basin was in generally good structural condition. The geographic coordinates for this location are 43°06’57.94” N latitude and 78°55’56.55” W longitude. No spills have been reported in this area.

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 exposure and air pathways

Not Applicable.

3.4.2 Fox Row/Taxiway Alpha

3.4.2.1 Description and operational history

Several release events have occurred in the Fox Row/Taxiway Alpha area. Most notably, and incorrectly reported in the spill reports according to site personnel, a fire truck departed from Fox Row in May of 2010 responding to an exercise while siphoning AFFF from an open valve. Spill records show that approximately 25 gallons were released. The NFARS Civil Engineer Services (CES) representative informed ASL personnel that the foam was left to dissipate (air pockets formed in the foam collapse and the water/foam mix returns to the liquid state. The water gradually evaporates leaving the original AFFF fluid concentrate.) in the sunlight. Following the exercise the spill response team tried to hold water back from the stormwater system by closing the sluice gate. During the time the gates were closed the water foamed up as they slowly released it to the outfalls.

Other events have occurred in the area over time originating from buildings such as Hangar 850 that border this area. These events are characterized by AFFF being released at a building and making its way out onto the taxiway before following the pathways described in previous sections.

3.4.2.2 Waste characteristics

The Fox Row/Taxiway Alpha AOC is adjacent to all of the previously mentioned buildings and in 2010 had an event in which a fire truck responded to a training event with an open valve siphoning AFFF along its path of travel. This event released approximately 25 gallons of AFFF concentrate along the route of travel.

3.4.2.3 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 receptors 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 (EPA, 1989).

Database research (EDR, 2016) shows twenty nine daycare facilities, thirteen schools, twenty seven hospitals, and one college within the potential migration area of 4 miles from any given potential release location of PFCs. No elementary schools or child development centers are located on base. The closest day care is located approximately 5,628 feet hydrologically cross gradient (northwest) of the location. The closest elementary school is located approximately 8,103 feet cross gradient (south) of the location.

3.4.2.3.1 Groundwater Pathway

The basewide geologic and hydrogeologic settings are provided in Section 1. Groundwater use in the area of NFARS is both industrial and domestic in nature. According to the NYDEC water well locator and the USGS National Water Information System, there are no public water wells within 4 miles of this location, although several private wells exist (EDR, 2016). The human population both on and off base primarily relies on the PWS provided by the Niagara County Water District. Drinking water for the City of Niagara Falls and the County of Niagara is obtained from the upstream west branch of the Niagara River. The thin layer of overburden covering the Lockport Dolostone that ranges from 3 feet to 18 feet contains the surficial aquifer which is of primary concern in the area. The soils throughout NFARS are moderately drained, have slow permeability in the subsoil, and a seasonally high water table of 6 to 12 inches below surface (HDR EOC, 2012). Soils in the area are saturated, ponded, or flooded long enough during the growing season to develop anaerobic conditions (HDR EOC 2012).

There have been no previous groundwater investigations focusing along the edge of Fox Row/Taxiway Alpha.

The population both on and off base within a 4-mile radius of the site primarily relies on drinking water provided by surface water intakes on the Niagara River slightly more than 8 miles to the south and upstream of the Cayuga Creek entry to the Niagara River.

3.4.2.3.2 Surface Water Pathway

Surface drainage originating from the majority of NFARS flows preferentially towards the Cayuga Creek that bisects the facility. Cayuga Creek parallels Fox Row/Taxiway Alpha and at its closest is only approximately 250 feet from the edge of the paved surface. The paved surface drains to the south and will direct all surface water from the paved areas to Cayuga Creek. Refer to section 1.3.3.2 for details on the migration path of surface drainage from this site, including flood plain and sensitive environment information. There are no identified surface water intake or downstream fisheries adjacent to the surface water migration path 15 miles downstream of the site.

3.4.2.3.3 Soil Exposure and Air Pathways

The site is a heavily used paved area for both vehicles and aircraft. The paved area site would preclude any fugitive dust emissions and potential exposures. Current land use does not involve any human health exposures and future land use will likely remain unchanged. The potential exists for exposure to burrowing animals on the southern edge of the paved area.

There are workers present at the site however they will typically remain on the paved areas. The nearest residential area is 5,600 feet north of the site. Population details of the residential areas within a 4-mile radius are discussed in Section 2.4.3.1.

There are no schools or daycare facilities within a 200-foot radius of the site. The nearest school is Geraldine J Mann Elementary School, approximately 1.35 miles south of NFARS in a residential area.

3.4.3 Stormwater Outfalls

3.4.3.1 Description and operational history

Outfalls 004, 005, 007, and 009 are part of the storm water management system at NFARS. These four outfalls provide drainage for all other potentially impacted sites at NFARS. The geographic coordinates of these sites are

- Outfall 004: 43°06’43.66” N latitude and 78°55’59.24” W longitude,
- Outfall 005: 43°06’43.06” N latitude and 78°56’33.26” W longitude,
- Outfall 007: 43°06’25.36” N latitude and 78°56’21.16” W longitude, and
- Outfall 009: 43°06’42.75” N latitude and 78°56’22.97” W longitude.

3.4.3.2 Waste characteristics

While no release events have occurred at the specific locations of the outfalls, these four outfalls provide stormwater drainage for all release events that have occurred at NFARS. In some cases such as the Fox Row spill or the Building 706 release, AFFF was not actively cleaned up resulting in the contaminant traversing the stormwater system. In other cases where a removal action was conducted, some material escaped through surface pathways and entered the stormwater system. These four outfalls were selected for investigation because they act as funnels for all other locations at NFARS.

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 receptors 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 (EPA, 1989).

Database research (EDR, 2016) shows twenty nine daycare facilities, thirteen schools, twenty seven hospitals, and one college within the potential migration area of 4 miles from any given potential release location of PFCs. No elementary schools or child development centers are located on base. The closest

day care is located approximately 4,800 feet hydrologically cross gradient (northwest) of Outfall 007 (the nearest outfall). The closest elementary school is located approximately 5,100 feet cross gradient (south) of Outfall 007 (the nearest outfall).

3.4.3.3.1 Groundwater pathway

The basewide geologic and hydrogeologic settings are provided in Section 1. Groundwater use in the area of NFARS is both industrial and domestic in nature. According to the NYDEC water well locator and the USGS National Water Information System, there are no public water wells within 4 miles of this location, although several private wells exist (EDR, 2016). The human population both on and off base primarily relies on the PWS provided by the Niagara County Water District. Drinking water for the City of Niagara Falls and the County of Niagara is obtained from the upstream west branch of the Niagara River. The thin layer of overburden covering the Lockport Dolostone that ranges from 3 feet to 18 feet contains the surficial aquifer which is of primary concern in the area. The soils throughout NFARS are moderately drained, have slow permeability in the subsoil, and a seasonally high water table of 6 to 12 inches below surface (HDR EOC, 2012). Soils in the area are saturated, ponded, or flooded long enough during the growing season to develop anaerobic conditions (HDR EOC, 2012).

No sampling is required for the NFARS State Pollutant Discharge Elimination System (SPDES) permit. The discharge from these outfalls is visually monitored per the requirements of the SPDES permit. Sampling has not been conducted around these outfalls.

The population both on and off base within a 4-mile radius of the site primarily relies on drinking water provided by surface water intakes on the Niagara River slightly more than 8 miles to the south and upstream of the Cayuga Creek entry to the Niagara River.

3.4.3.3.2 Surface water pathway

Surface drainage originating from the majority of NFARS flows preferentially towards the Cayuga Creek that bisects the facility. These outfalls act as the conduit for the majority of surface water on the facility to the Cayuga Creek. Refer to section 1.3.3.2 for details on the migration path of surface drainage from this site, including flood plain and sensitive environment information. There are no identified surface water intakes or downstream fisheries adjacent to the surface water migration path 15 miles downstream of the site.

3.4.3.3.3 Soil exposure and air pathways

These four outfalls are well vegetated where exposed prior to final deposition of their load into the Cayuga Creek. The pathways leading to their final destination are either concrete or steel lined or well vegetated depressions, usually with standing or flowing water and are unlikely to create fugitive dust emissions.

There are no residents or workers at the sites. The nearest residential area is 4,800 feet north of the site. Population details of the residential areas within a 4-mile radius are discussed in Section 2.4.3.1.

There are no schools or daycare facilities within a 200-foot radius of the site. The nearest school is Geraldine J. Mann Elementary School, approximately 1 mile south of NFARS in a residential area.

The adjacent, unnamed wetland areas have the potential to contain ecological receptors discussed in Section 1.3.4.

3.4.4 Hulby Street/Emergency Management Training Spill

3.4.4.1 Description and operational history

In 1987 a, 4-gallon spill of AFFF occurred on the southern side of the street, purportedly across from Building 316, the emergency management training building. ASL personnel interpreted this to mean across from the former Emergency Management Building. The former Emergency Management building has existed in this location since the time of the spill. There is an open field directly across from the building that has historically been used for training exercises. In the spill report for the event, it was reported that "burn pans were dumped on the side of the road" and the remarks section of the report notes that an exercise was being conducted. No removal action was conducted for this spill. The geographic coordinates of this site are 43°06'54.85" N latitude and 78°56'15.44" W longitude.

3.4.4.2 Waste characteristics

Few records exist about this spill, but from the spill record it seems that during training exercises conducted in the late 1980s, basins with some type of accelerant were set afire for fire crews to practice extinguishing. The spill record shows that only four gallons of AFFF were spilled at an indeterminate location. Currently the field is still unoccupied.

3.4.4.3 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 receptors 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 (EPA, 1989).

Database research (EDR, 2016) shows 29 daycare facilities, 13 schools, 27 hospitals, and one college within the potential migration area of 4 miles from any given potential release location of PFCs. No elementary schools or child development centers are located on base. The closest day care is located approximately 8,600 feet hydrologically cross gradient (northwest) of the location. The closest elementary school is located approximately 8,900 feet cross gradient (south) of the location.

3.4.4.3.1 Groundwater pathway

The basewide geologic and hydrogeologic settings are provided in Section 1. Groundwater use in the area of NFARS is both industrial and domestic in nature. According to the NYDEC water well locator and the USGS National Water Information System, there are no public water wells within 4 miles of this location, although several private wells exist (EDR, 2016). The human population both on and off base primarily relies on the PWS provided by the Niagara County Water District. Drinking water for the City of Niagara

Falls and the County of Niagara is obtained from the upstream west branch of the Niagara River. The thin layer of overburden covering the Lockport Dolostone that ranges from 3 feet to 18 feet contains the surficial aquifer which is of primary concern in the area. The soils throughout NFARS are moderately drained, have slow permeability in the subsoil, and a seasonally high water table of 6 to 12 inches below surface (HDR EOC, 2012). Soils in the area are saturated, ponded, or flooded long enough during the growing season to develop anaerobic conditions (HDR EOC, 2012).

No previous groundwater investigations have occurred in this area. The area of the spill was likely unpaved at the time of the spill and allowed for groundwater infiltration of the AFFF. Several roads exist in the area of the spill, though without a definitive location it cannot be said that the release entered the stormwater system.

The population both on and off base within a 4-mile radius of the site primarily relies on drinking water provided by surface water intakes on the Niagara River slightly more than 8 miles to the south and upstream of the Cayuga Creek entry to the Niagara River.

3.4.4.3.2 Surface water pathway

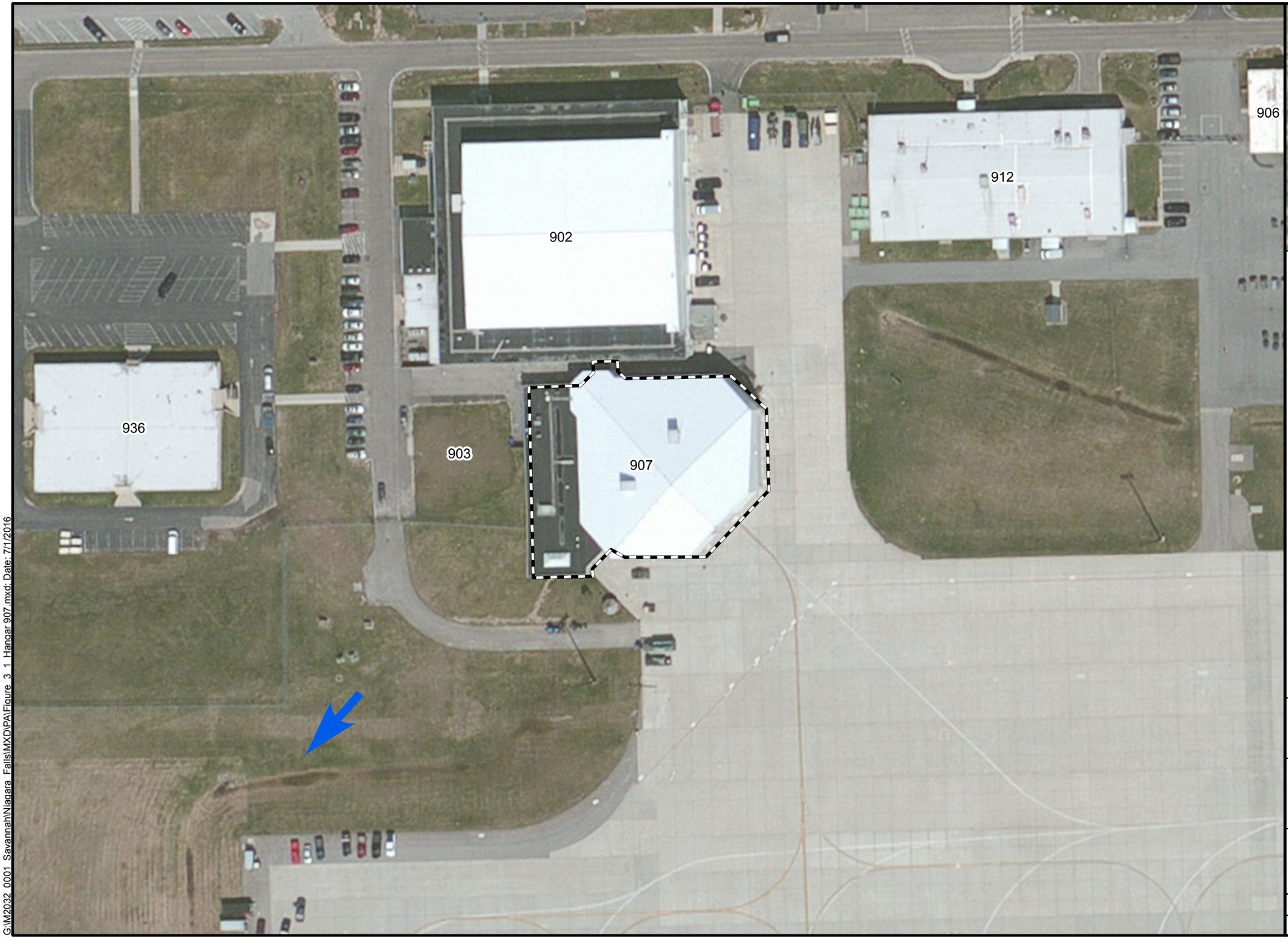
Surface drainage originating from the majority of NFARS flows preferentially towards the Cayuga Creek that bisects the facility. In instances such as the Hulby Street/emergency management training spill, the volume of the release makes it unlikely that it reached the Cayuga Creek. Refer to Section 1.3.3.2 for details on the migration path of surface drainage from this site, including flood plain and sensitive environment information. There are no identified surface water intakes or downstream fisheries adjacent to the surface water migration path 15 miles downstream of the site.

3.4.4.3.3 Soil exposure and air pathways

The site is an open field that was previously used for training activities. Currently there is new construction underway on the eastern side of the field. The well-vegetated site would preclude any fugitive dust emissions and potential exposures. Current land use does not involve any human health exposures and future land use may change. The potential exists for exposure to burrowing animals.

There are no residents or workers at the site. The nearest residential area is 8,600 feet north of the site. Population details of the residential areas within a 4-mile radius are discussed in Section 2.4.3.1.

There are no schools or daycare facilities within a 200-foot radius of the site. The nearest school is Geraldine J. Mann Elementary School, approximately 1.60 miles south of NFARS in a residential area.



Legend

- Presumed Groundwater Flow Direction
- Areas with No Additional Investigation
- Installation Boundary

N

0 50 100 150

Feet

Niagara Falls Air Reserve Station
Niagara County, New York

Figure 3-1
Hangar 907

Aerostar SES LLC

Drawn: B Baxter

Date: 7/1/2016

Service Layer Credits: Esri ArcGIS Online Aerial Photography

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Legend

- Presumed Groundwater Flow Direction
- Areas with No Additional Investigation
- Installation Boundary

N

0 50 100 150

Feet

Niagara Falls Air Reserve Station
Niagara County, New York

Figure 3-2
Hangar 917

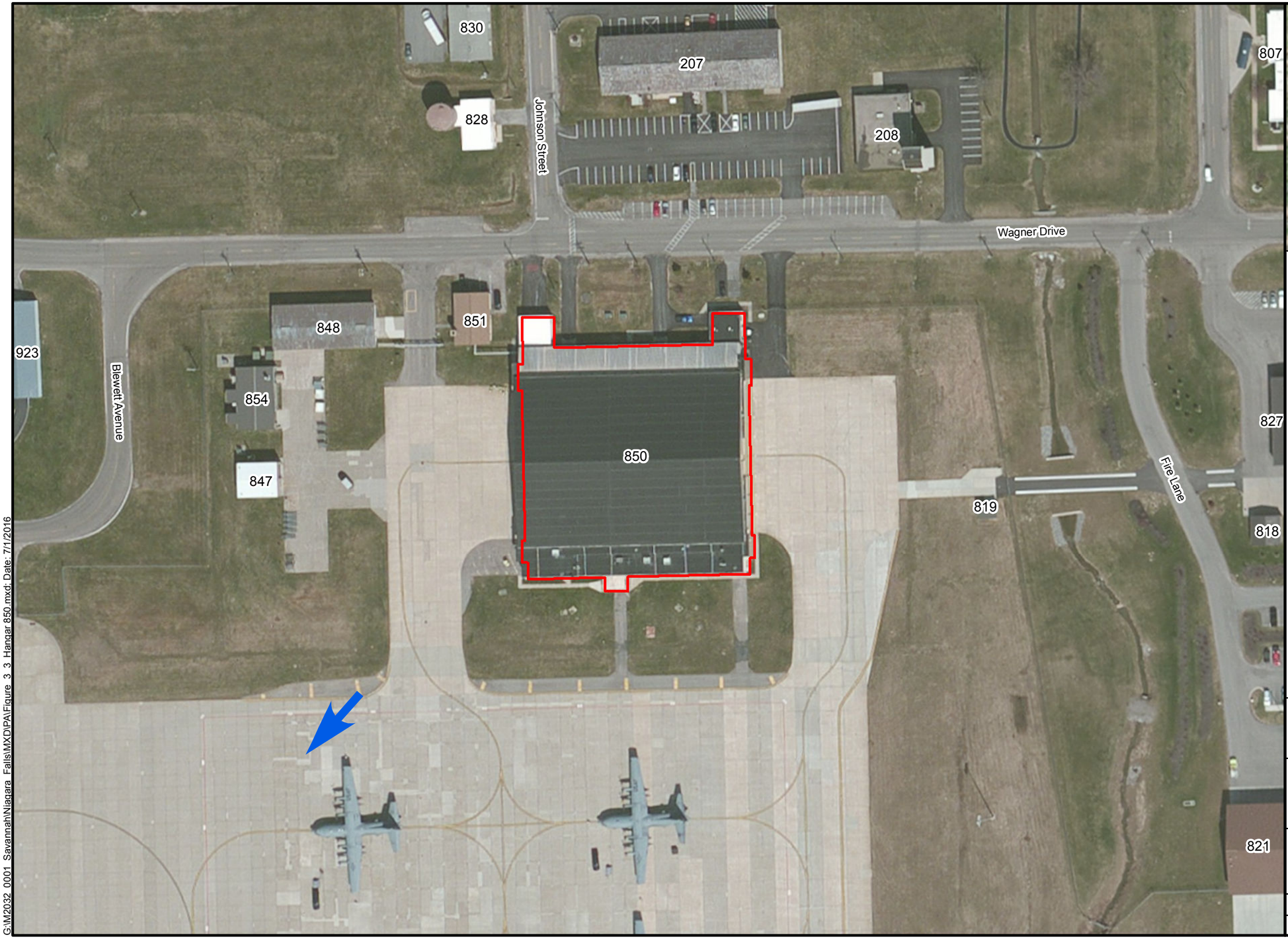
Aerostar SES LLC

Drawn: B Baxter

Date: 7/1/2016

Service Layer Credits: Esri ArcGIS Online Aerial Photography

G:\M2032_0001 Savannah\Niagara Falls\MXD\PA\Figure 3_2 Hangar 917.mxd; Date: 7/1/2016



Legend

- Presumed Groundwater Flow Direction
- Proposed AFFF Investigation Site
- Installation Boundary

N

0 50 100 150

Feet

Niagara Falls Air Reserve Station
Niagara County, New York

Figure 3-3
Hangar 850

Aerostar SES LLC

Drawn: B Baxter

Date: 7/1/2016

Service Layer Credits: Esri ArcGIS Online Aerial Photography

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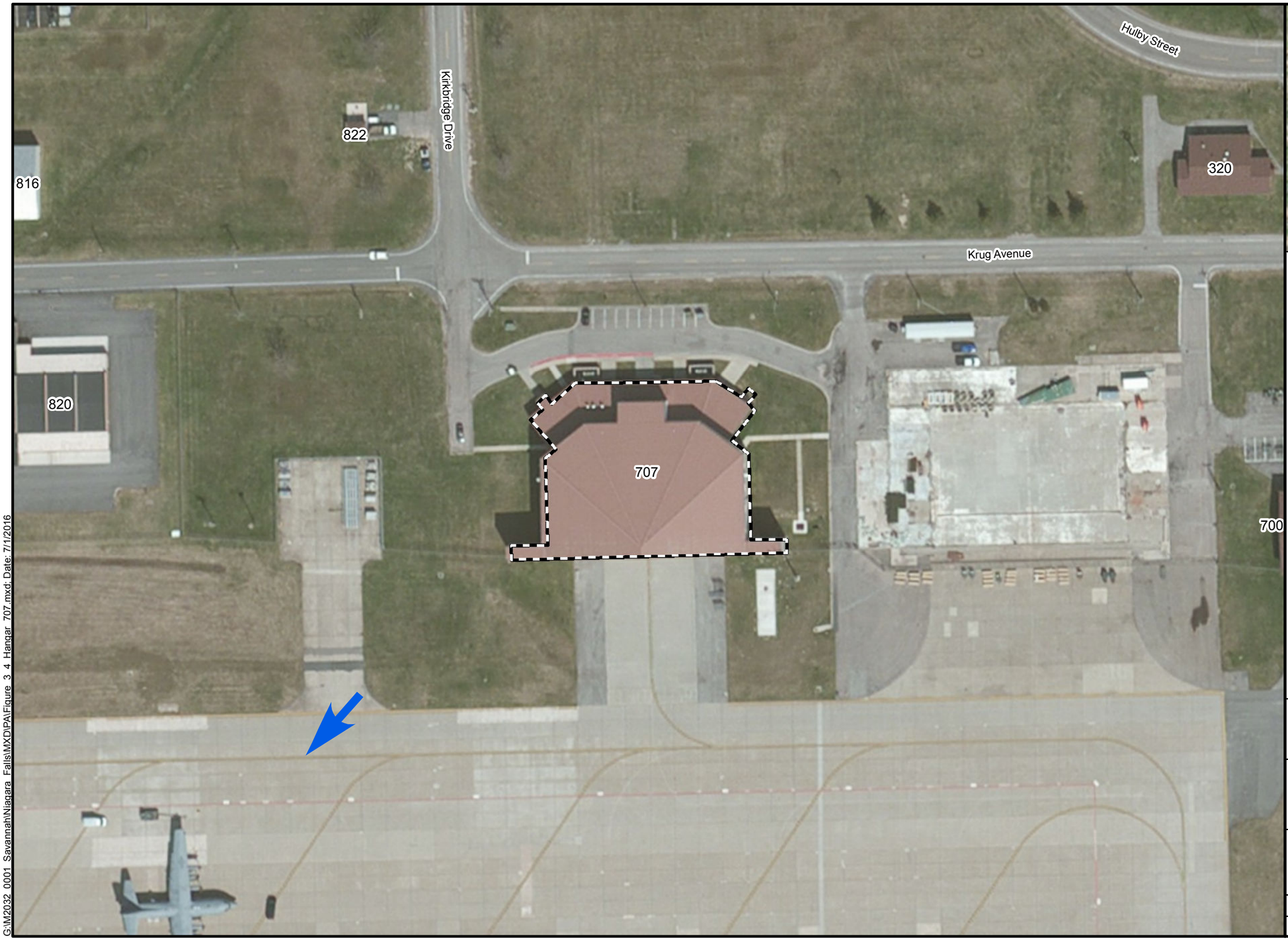

Legend

- Presumed Groundwater Flow Direction
- Areas with No Additional Investigation
- Installation Boundary

N

0 50 100 150

Feet

Niagara Falls Air Reserve Station
Niagara County, New York

Figure 3-4
Hangar 707

Aerostar SES LLC

Drawn: B Baxter

Date: 7/1/2016

Service Layer Credits: Esri ArcGIS Online Aerial Photography

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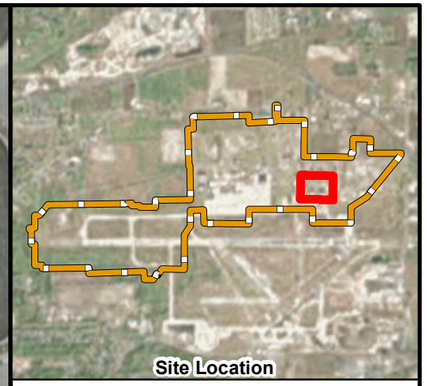

Legend

- Presumed Groundwater Flow Direction
- Proposed AFFF Investigation Site
- Installation Boundary

N

0 50 100 150

Feet

Niagara Falls Air Reserve Station
Niagara County, New York

Figure 3-5
Hangar 706

Aerostar SES LLC

Drawn: B Baxter

Date: 7/1/2016

Service Layer Credits: Esri ArcGIS Online Aerial Photography

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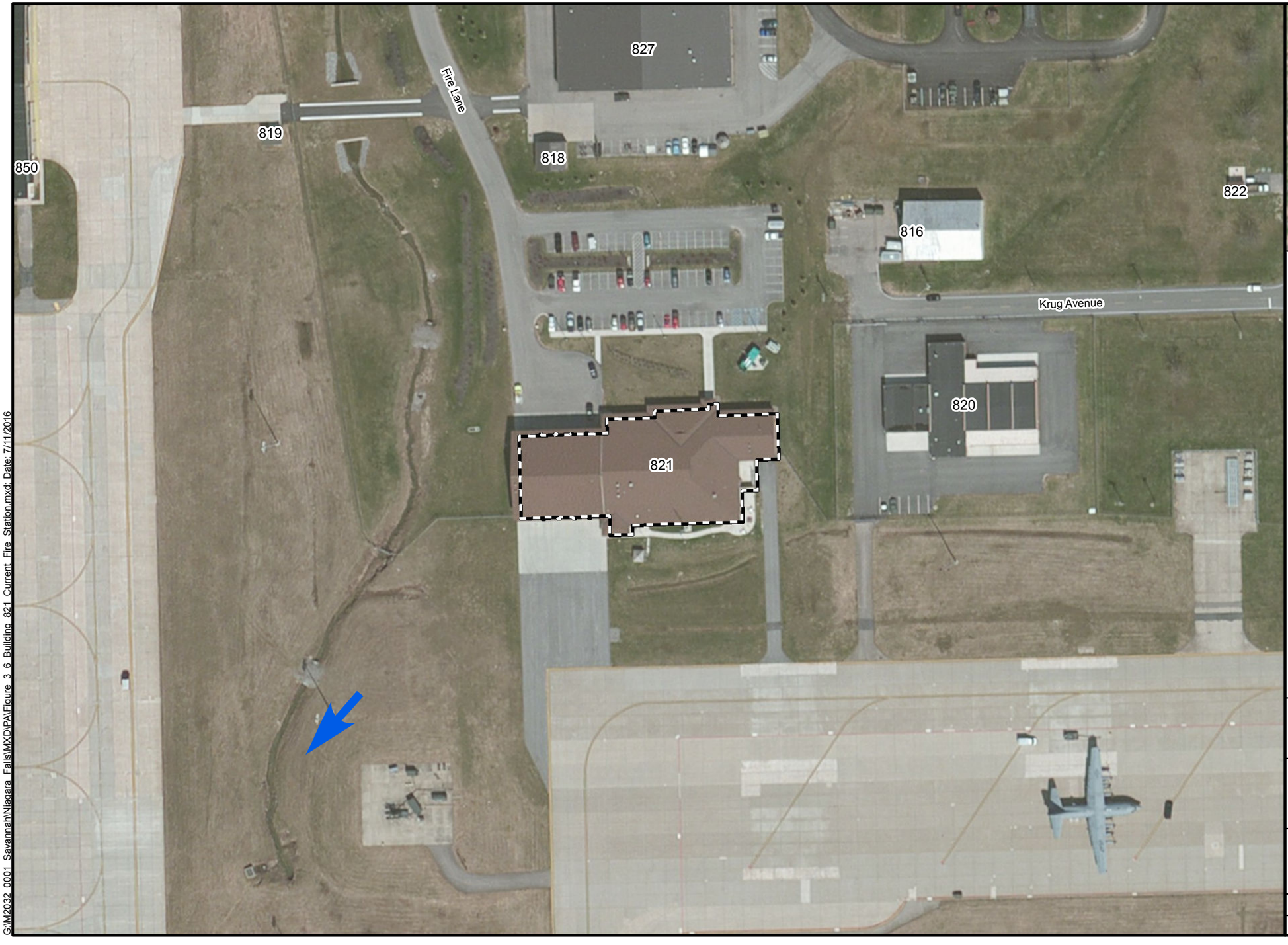
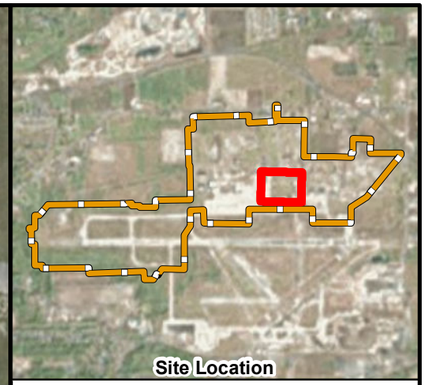




Legend

- Presumed Groundwater Flow Direction
- Areas with No Additional Investigation
- Installation Boundary

N

0 50 100 150

Feet

Niagara Falls Air Reserve Station
Niagara County, New York

Figure 3-6
Building 821 (Current Fire Station)

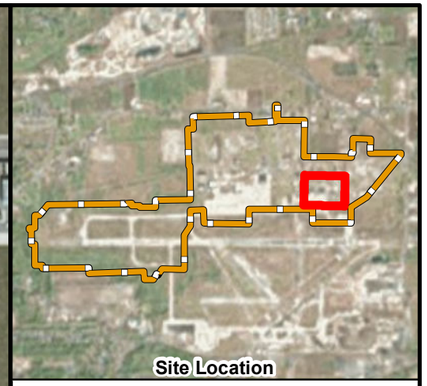
Aerostar SES LLC

Drawn: B Baxter

Date: 7/11/2016

Service Layer Credits: Esri ArcGIS Online Aerial Photography

G:\M2032_0001 Savannah\Niagara Falls\MXD\PA\Figure_3_6 Building_821_Current_Fire_Station.mxd Date: 7/11/2016



Legend

- Presumed Groundwater Flow Direction
- Proposed AFFF Investigation Site
- Installation Boundary

N

0 50 100 150

Feet

Niagara Falls Air Reserve Station
Niagara County, New York

Figure 3-7
Building 700 (Former Fire Station)

Aerostar SES LLC

Drawn: B Baxter

Date: 7/11/2016

Service Layer Credits: Esri ArcGIS Online Aerial Photography

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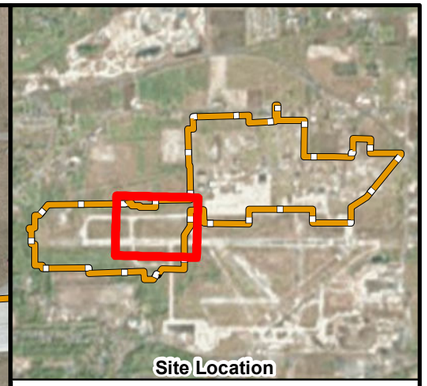


Legend

- Presumed Groundwater Flow Direction
- Proposed AFFF Investigation Site
- Installation Boundary

N

0 50 100 150 200 250

Feet

Niagara Falls Air Reserve Station
Niagara County, New York

Figure 3-8
Blue Angels Crash Site

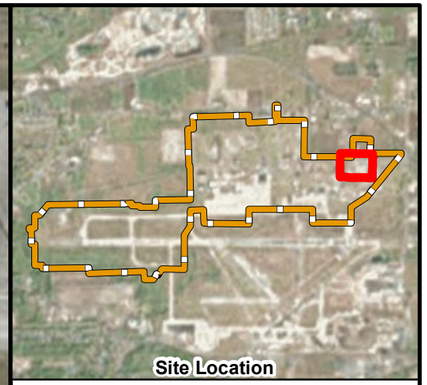
Aerostar SES LLC

Drawn: B Baxter

Date: 7/1/2016

Service Layer Credits: Esri ArcGIS Online Aerial Photography

G:\M2032_0001_SavannahNiagara_Falls\MXD\PA\Figure_3_8_Blue_Angels_Crash_Site.mxd - Date: 7/1/2016



Legend

- Presumed Groundwater Flow Direction
- Areas with No Additional Investigation
- Installation Boundary

N

0 50 100 150

Feet

Niagara Falls Air Reserve Station
Niagara County, New York

Figure 3-9
Tank B Dike

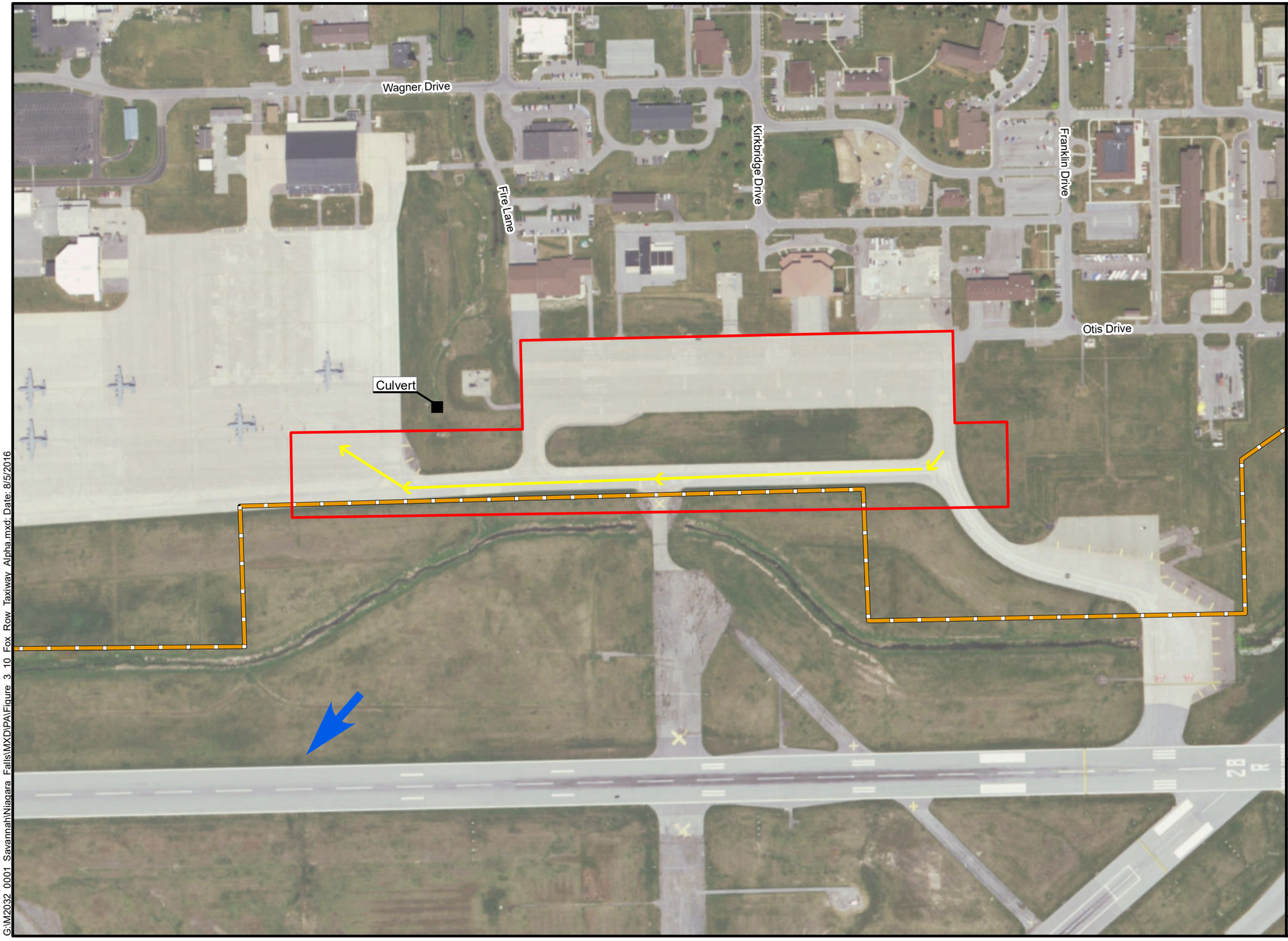
Aerostar SES LLC

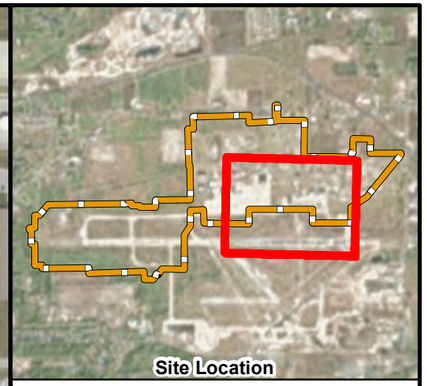
Drawn: B Baxter

Date: 7/1/2016

Service Layer Credits: Esri ArcGIS Online Aerial Photography

G:\M2032_0001_Savannah\Niagara_Falls\MXD\PA\Figure_3_9_Tank B Dike.mxd; Date: 7/1/2016





Legend

- Direction of Travel
- Presumed Groundwater Flow Direction
- Proposed AFFF Investigation Site
- Installation Boundary

N

0 100 200 300 400 500

Feet

Niagara Falls Air Reserve Station
Niagara County, New York

Figure 3-10
Fox Row/Taxiway Alpha

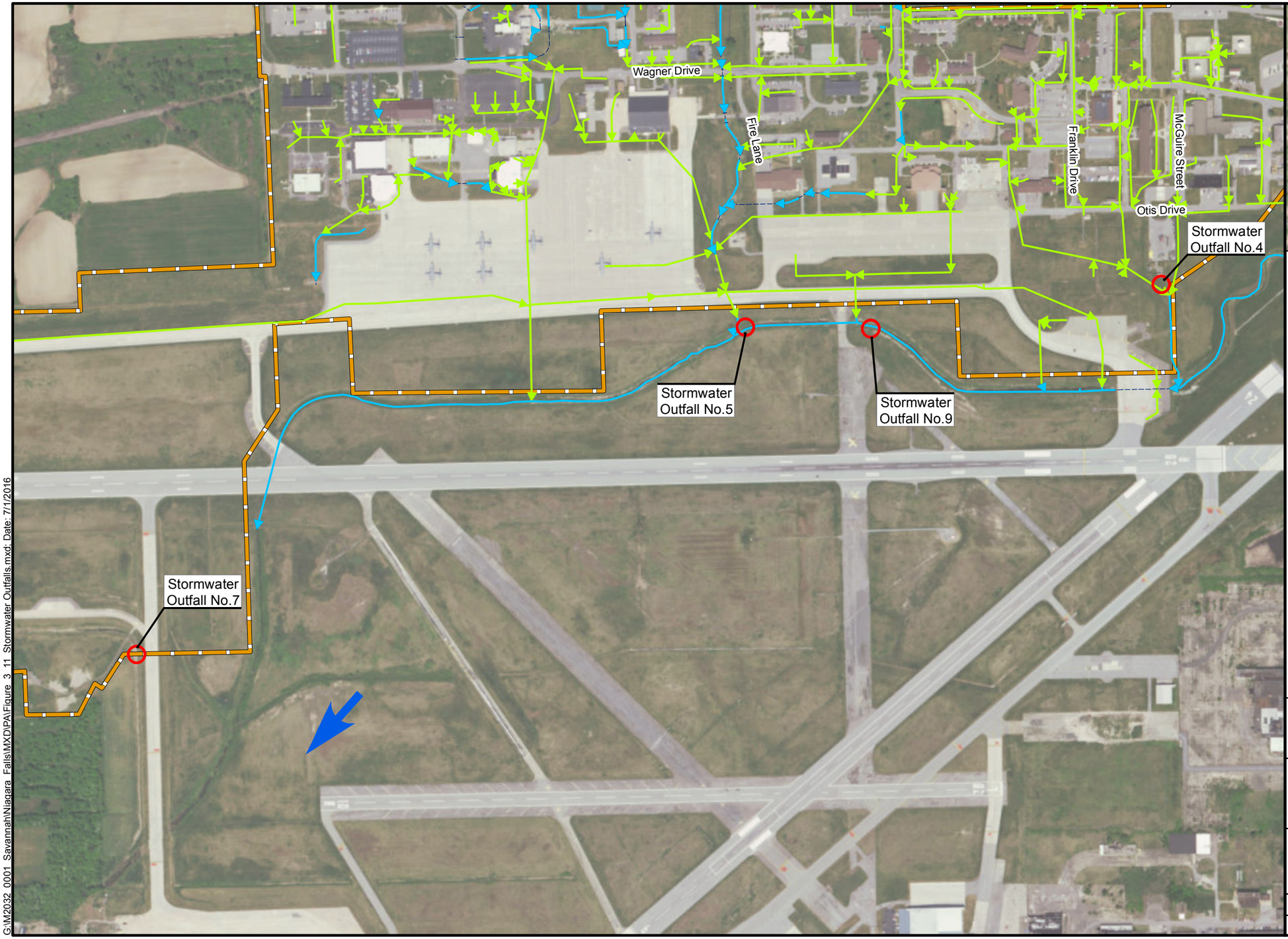
Aerostar SES LLC

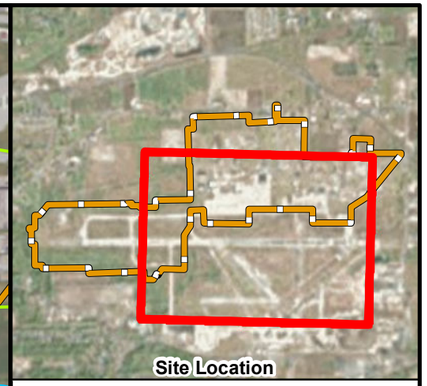
Drawn: B Baxter

Date: 8/5/2016

Service Layer Credits: Esri ArcGIS Online Aerial Photography

G:\M2032_0001_Savannah\Niagara_Falls\MXD\PA\Figure_3_10_Fox_Row_Taxiway_Alpha.mxd, Date: 8/5/2016





Legend

- Presumed Groundwater Flow Direction
- Culvert
- Open Drainage
- Gravity Line
- Proposed AFFF Investigation Site
- Installation Boundary

N

0 250 500 750

Feet

Niagara Falls Air Reserve Station
Niagara County, New York

Figure 3-11
Stormwater Outfalls

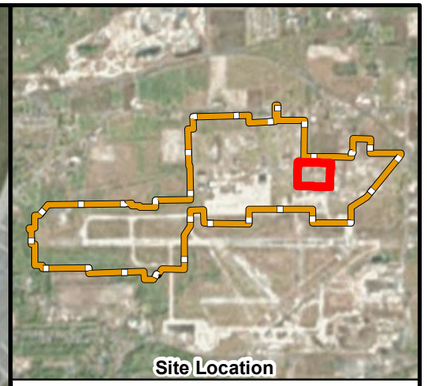
Aerostar SES LLC

Drawn: B Baxter

Date: 7/1/2016

Service Layer Credits: Esri ArcGIS Online Aerial Photography

G:\M2032 0001 SavannahNiagara Falls\MXD\PA\Figure 3_11 Stormwater Outfalls.mxd; Date: 7/1/2016



Legend

- Presumed Groundwater Flow Direction
- Proposed AFFF Investigation Site
- Installation Boundary

N

0 25 50 75 100

Feet

Niagara Falls Air Reserve Station
Niagara County, New York

Figure 3-12
Hulby Street/Emergency Management Training Spill

Aerostar SES LLC

Drawn: B Baxter

Date: 7/1/2016

Service Layer Credits: Esri ArcGIS Online Aerial Photography

G:\M2032_0001 SavannahNiagara Falls\MXD\PA\Figure 3_12 Hulby Street EMT Spill.mxd: Date: 7/1/2016

4. SUMMARY AND CONCLUSIONS

4.1 SUMMARY

4.1.1 Fire Training Areas

4.1.1.1 Fire training areas closed prior to 1970

FTAs closed prior to 1970 did not utilize AFFF for fire training activities and are not considered to have been impacted by PFOA or PFOS from AFFF use. FT005/FPTA No. 01/Site 10 and FT006/FPTA No. 02/Site 11 were closed in the 1960s and are, therefore, not anticipated to have been impacted by PFCs.

4.1.1.2 Fire training areas operational after 1970

FTAs used after 1970 may potentially contain PFOA- and PFOS-impacted media. PFOS-based AFFF is likely to have been used at FT007/FPTA No. 03/Site 9 due to its operational period.

4.1.1.3 Current fire training areas

NFARS has one operating FTA with a lined burn pit that contains a mock aircraft. The current FTA has been operational since 1997 and uses propane as a fuel source. All fire training activities are conducted using water only. The assistant fire chief reported that AFFF has never been used at this location to his knowledge and the previous fire chief had no recollection of AFFF use at this location either.

4.1.2 Non-Fire Training Areas

4.1.2.1 Hangars

Hangar 907 is a former Air National Guard facility hangar located on the west end of the active aircraft apron equipped with an AFFF fire suppression system. The hangar mechanical room is located in the northwest corner of the building and currently contains one 2,000-gallon AST with 3 percent AFFF. Since installation, one recorded 10-gallon release occurred into the storm drain catch basin, where it was contained and properly disposed of. Hangar 917 is a former Air National Guard facility adjacent to Delta Row that is currently equipped with an Hi Ex system. This building has historically been used for aircraft maintenance by the Air National Guard and is currently used and maintained by the USAF. An AFFF system was installed until approximately 2000, at which time the system was changed over to Hi Ex. No details on the formerly installed AFFF system were available. In 2007, a contractor accidentally released the Hi Ex system.

Hangar 850 is a USAF aircraft maintenance hangar with ramp access to Delta Row. Hangar 850 is currently equipped with an AFFF system. Hangar 850 has had multiple releases of AFFF. The largest spill on record occurred in 2010 when a lightning strike overpowered the fire suppression system control panels. The release was approximately 48,000 gallons of AFFF concentrate and water mixed. AFFF released during this event was mostly contained inside the hangar although a small amount was observed to have discharged into the sanitary and storm sewers. NFARS personnel responded to the release immediately and conducted a cleanup action resulting in the proper disposal of residuum. NYSDEC concurred that the spill had been properly addressed.

In 1995, approximately 10 gallons were released from the mechanical room door. In 1996, approximately 2,100 gallons of AFFF concentrate were released into the hangar due to system overpressure. NYDEC was notified, and the spill was contained and removed with a vacuum truck. This spill was verified not to have entered the storm water system. In 2013 during a water test of the firefighting system at Hangar 850, approximately 5,000 gallons of 0.5 percent AFFF were released. During this release, nearby storm drains were plugged and the sluice gates were closed. The hangar doors were also closed with the majority of the material being removed via vacuum truck. Very little residual foam was noted on the apron south of the hangar.

Hangar 707 is an aircraft maintenance facility immediately north of Fox Row. The fire suppression system at Hangar 707 is an AFFF system. Currently, there is one 2,000-gallon AST containing 1,850 gallons of 3 percent AFFF on site. Hangar 707 specifically addresses the maintenance needs of aircraft fuel systems. In 2003 a heat detector malfunctioned causing the system to activate. According to the assistant fire chief, all foam released during this incident was contained and cleaned up inside of the building.

Hangar 706 is a former aircraft maintenance hangar that has been demolished. The remaining footprint of the building is immediately east of Hangar 707. Directly south of the building footprint is Fox Row. In 1995 there was a release of 216 gallons of AFFF solution onto the ramp west of Hangar 706. No removal actions were taken at the time.

4.1.2.2 Fire stations

Building 821 is the current fire station at NFARS. The fire station began use during the years of 2005 and 2006. According to the current fire chief, immediately following activation of the building the 1,000-gallon overhead storage tank for AFFF was overfilled and damaged. This spill was properly contained and disposed of. In 2013, a 10-gallon spill on the ramp south of the building was documented. This spill was contained with absorbent material and removed from the site. All releases that have been documented at the current fire station were cleaned up following proper spill control procedures.

Building 700 is the former fire station that has been converted for use by the base EOD unit and bioenvironmental. The building formerly housed a 1,000-gallon storage tank which is now housed at the current fire station. In 2007, a spill of 3 to 5 gallons was documented at the south side ramp area. There is also an undocumented spray test area located in the grassy area to the south-southeast of the fire station. Records located by ASL were unclear as to the precise location; however, it was between the former fire station and FPTA No. 01.

4.1.3 Emergency Response

A fatal Blue Angels crash occurred on the airfield during the 1985 Western New York Air Show. The incident involved two A-4F Skyhawks that collided midair. One of the planes crashed outside of the airfield perimeter on the eastern side of the base after the pilot ejected, while the other crashed in a grassy area just north of the main east/west runway and south of Taxiway Alpha. During the response AFFF was used to extinguish the fire. There is no record of the volume of AFFF used to suppress the fire that occurred in conjunction with this crash.

4.1.3.1 Other spills and releases

The Tank B Dike is currently used by the NFARS Fire Department as a spray testing area. This area formerly functioned as a containment for a jet fuel storage tank. All spray testing activities are confined to the concrete-lined area. During the PA visit, grass was observed growing in the concrete joints; however, the basin was in generally good repair.

Several release events have occurred in the Fox Row/Taxiway Alpha area. Most notably and incorrectly reported in the spill reports according to site personnel, a fire truck departed from Fox Row in May of 2010 responding to an exercise while siphoning AFFF from an open valve. Spill records show that approximately 25 gallons were released. The NFARS CES representative informed ASL personnel that the foam was left to dissipate (air pockets formed in the foam collapse and the water/foam mix returns to the liquid state, and the water gradually evaporates leaving the original AFFF fluid concentrate) in the sunlight. Following the exercise, the spill response team tried to hold water back from the stormwater system by closing the sluice gate. During the time the gates were closed, the water foamed up as they slowly released it to the outfalls. Events originating from buildings such as Hangar 850 or Hangar 707 have occurred over time.

Outfalls 004, 005, 007, and 009 are part of the storm water management system at NFARS. These four outfalls provide drainage for all other potentially impacted sites at NFARS. While no release events have occurred at the specific locations of the outfalls, these four outfalls provide stormwater drainage for all release events that have occurred at NFARS. In cases such as the Fox Row spill or the Building 706 release, AFFF was not actively cleaned up resulting in the contaminant traversing the stormwater system. In other cases where a removal action was conducted, some material escaped through surface pathways and entered the stormwater system. These four outfalls were selected for investigation because they act as discharge points for all other locations at NFARS.

In 1987, a 4-gallon spill of AFFF occurred on the southern side of Hulby Street, purportedly across from the emergency management training building. ASL personnel interpreted this to mean across from the former Emergency Management Building. The former Emergency Management building has existed in this location since the time of the spill. There is an open field directly across from the building that has historically been used for training exercises. In the spill report for the event, it was reported that “burn pans were dumped on the side of the road” and the remarks section of the report notes that an exercise was being conducted. No removal action was conducted for this spill.

4.2 CONCLUSIONS

Table 4-1 summarizes the findings from this PA report and presents 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. In accordance with the EPA CERCLA PA 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 an RI; 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 Act is not necessary (EPA, 1991).
- Site inspection is defined as an investigation to collect and analyze waste and environmental samples to support a site evaluation (EPA, 1992).

- RI is defined as a field investigation to characterize the nature and extent of contamination at a site. The RI supports development, evaluation, and selection of the appropriate response alternative (EPA, 1991).

None of the sites investigated during this PA were identified as presenting an imminent risk to public health or the environment.

Table 4-1 Preliminary Assessment Report Summary and Findings Niagara Falls Air Reserve Station

Locations	Rationale	Recommendation
Current Fire Training Area	• The current FTA has been operational since 1997 and uses propane as a fuel source. • All fire training activities are conducted using water only. • The assistant fire chief reported that AFFF has never been used at this location to his knowledge, and the previous fire chief had no recollection of AFFF use at this location.	Close out with no additional investigation
FT005/FPTA No. 1/Site 10	• FT005/FPTA No. 1/Site 10 was closed in the 1960s, and no AFFF was ever used at this site.	Close out with no additional investigation
FT006/FPTA No. 2/Site 11	• FT006/FPTA No. 2/Site 11 was closed in the 1960s, and no AFFF was ever used at this site.	Close out with no additional investigation
FT007/FPTA No. 3/Site 9	• PFOS based AFFF has potentially been used at FT007/FPTA No. 3/Site 9.	Initiate a Site Inspection
Hangar 907	• Since installation, one recorded 10-gallon release occurred into the storm drain catch basin where it was contained and properly disposed of.	Close out with no additional investigation
Hangar 917	• An AFFF system was installed until approximately 2000, at which time the system was changed over to Hi Ex. • There are no recorded releases of AFFF	Close out with no additional investigation
Hangar 850	• This building is currently equipped with an AFFF system and has had several recorded AFFF releases. • The largest spill occurred in 2010 when a lightning strike overpowered the fire suppression system control panels. The release was approximately 48,000 gallons of AFFF concentrate and water mixed. • In 1995 approximately 10 gallons were released from the mechanical room door. • In 1996 approximately 2,100 gallons of AFFF concentrate were released into the hangar due to system overpressure. NYDEC was notified, and the spill was contained and removed with a vacuum truck. • In 2013, during a water test of the firefighting system at Hangar 850, approximately 5,000 gallons of 0.5% AFFF were released.	Initiate a Site Inspection
Hangar 707	• AFFF system on site has had only one recorded release in 2003 that was fully contained inside of the building and cleaned up.	Close out with no additional investigation
Building 706	• In 1995 there was a release of 216 gallons of AFFF solution onto the ramp west of Hangar 706. No removal actions were taken at the time.	Initiate a Site Inspection

Table 4-1 Preliminary Assessment Report Summary and Findings Niagara Falls Air Reserve Station (continued)

Locations	Rationale	Recommendation
Building 821 (Current Fire Station)	• Immediately following activation of the building the 1,000-gallon overhead storage tank for AFFF was overfilled and damaged. This spill was properly contained and disposed of. • In 2013 a 10 gallon spill on the ramp south of the building was documented. This spill was contained with absorbent material and removed from the site. • All releases that have been documented at the current fire station were cleaned up following proper spill control procedures.	Close out with no additional investigation
Building 700 (Former Fire Station)	• In 2007 a spill of 3 to 5 gallons was documented at the south side ramp area. • There is an undocumented spray test area located in the grassy area to the south/southeast of the fire station. Records located by ASL were unclear as to the precise location, however it was located between the former fire station and FPTA 01.	Initiate a Site Inspection
Blue Angels Crash Site	• Unknown volume of AFFF used to extinguish an aircraft crash related fire.	Initiate a Site Inspection
Former Tank B Dike	• Currently used for spray testing. • All spray testing activities are confined to concrete lined area.	Close out with no additional investigation
Fox Row/Taxiway Alpha	• A fire truck departed from Fox Row in May of 2010 responding to an exercise while siphoning AFFF from an open valve. Spill records show that approximately 25 gallons were released. • Other events have occurred in the area over time originating from buildings such as Hangar 850 or Hangar 707.	Initiate a Site Inspection
Outfalls 004, 005, 007, and 009	• These four outfalls act as discharge points for all other suspected release locations at NFARS.	Initiate a Site Inspection
Hulby Street	• In 1987 a, 4 gallon spill of AFFF occurred on the southern side of Hulby Street, purportedly across from Building 316, the emergency management training building.	Initiate a Site Inspection

AFFF = aqueous film forming foam
FPTA = fire protection training area
FTA = fire training area
NFARS = Niagara Falls Air Reserve Station
NYDEC = New York State Department of Environmental Conservation

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Appendix A

Niagara Falls ARS Communication Log

	Date: 02-02-16 Time: 0810	**Communication Record**
Name of Base, State: Niagara Falls ARS		
Interviewer: G Carlson, R Portman, B Oden		
Organization: ASL		Phone: 865-368-342
Position/Role on this project: PA Team		E-mail: gcarlson@specpro-env.com
Interviewee: Red Kennerson / John Schultz		Phone: 716-236-4021
Organization: Niagara ARS Fire Dept		E-mail: john.schultz@.us.af.mil
How Long at this positions: 2 yrs / 18 yrs		
How long at this base in current and previous positions: 2 yrs / 18 yrs		
Have you held similar positions at other bases: R Kennerson - Yes, several locations J Schultz - No		
Which bases:		
How Long:		

Discussion:

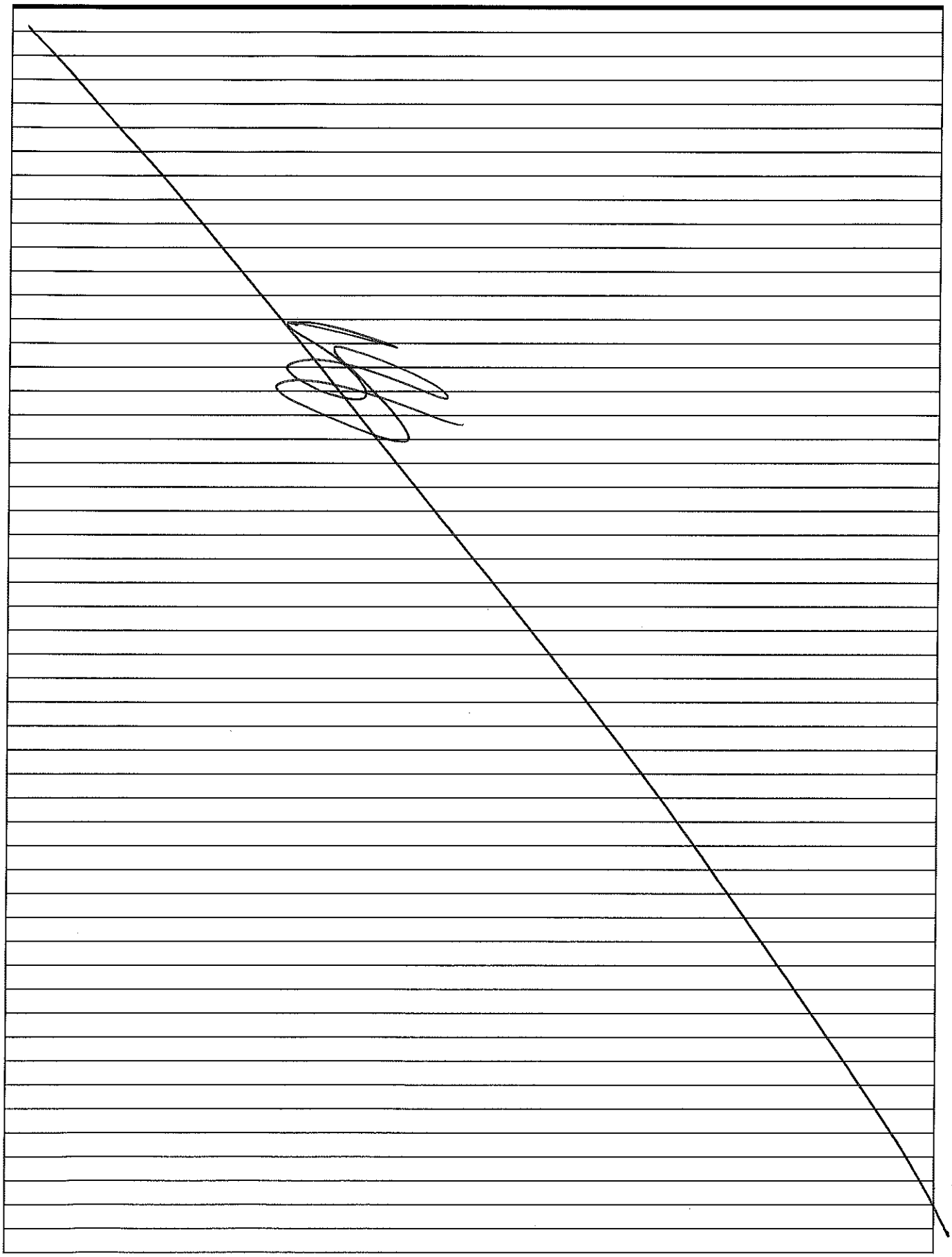
3 Releases out Hangars - Hangar 707 - AFFF
- Hangar 917 - HEF (contractor caused)
- Hangar 850 - AFFF

Building 700 - Old Fire Station - Several small releases
- Contained by sewer and cleanup?

- Fox Row Release
  - Several gallons during a training response were released due to an open value
- Response To an accidental release
  - Close Diversion Values (or open?)
  - Wash to a holding tank if the building has one
  - Close sluice gates (Stormwater system mgmt)
  - Vac up residuum
- 3 Hangars currently have AFFF systems - 707, 850, 907, 821 (Current Fire Station ←)
  - Holding / Storage Tank
- Current Fire Station (Bldg 821)
  - 1000 gal storage Tank
  - Occupied since ~2005
  - Owns on site
  - No Noticeable Spills
  - Fire Trucks
    - P-23 x2 - 300 gal - } on vehicle AFFF volume
    - P-19 x1 - 210 gal
    - VLP x1 - 400 gal
    - RIV x1 - 56 gal
    - Trailer - 750 (Actual) 1000 (Nominal)
- Truck Testing
  - At the tank farm in a lined Pit

- Current Fire Training Area
  - Concrete Lined
  - Propan Fueled
  - Use only water on site
- Previous Fire Training Areas (FPTA 03)
  - Ended use in ~1997
  - Start use unknown
- Building 917 - HEF System
  - Converted from AFFF ~2000
- Building 907 - AFFF System
  - No Recorded releases
  - One instance where system released but it was sent to the storm water system and cleared with the state as no release
- Hangar Testing
  - Conducted on a 2 year cycle
  - One year uses no flow
  - One year uses water only
- Emergency Response
  - Blue Angels crash in 1985 - midair collision
  - One plane crashed midfield, the other off base
- Recent JP-4 Spill
  - Did not use foam
  - Consult Spill Release Records for further info
  -
- No Fire Suppression systems in older buildings

- Building 706
  - Demolished appx 2000
  - May have had AFFF
- Air Gaurd Fire Dept
  - Have MOU w/AF Fire Dept
  - Co located
  - Many AF Fire Fighters are Gaurd FF
  - Jaime Aviles (T Sgt) is lead



Appendix B

Niagara Falls ARS Photo Record Log and Field Photographs

Photogragh Log

Team: G. Carlson/ B. Odom	Date: 02-02 through 02-04-16	
Project Number: M2032.0001	Observation Period: 0800-1600	
Weather: Clear morning, cloudy afternoon, 55-65°F	Start_____	Stop_____

Photo Number	Time	View Direction	Location/Description
1			Current Fire Station, Rapid Intervention Vehicle (RIV)
2			Front of RIV, 56 gallon AFFF Tank
3			Crash 4 (Left side). Model P-23. 300 Gallon AFFF Tank
4			Crash 4 (Right Side)
5			Crash 4 (Front)
6			Crash 2 (Left Side). Model p-23. 300 Gallon AFFF Tank
7			Crash 2 (Right Side)
8			Crash 9 (Left Side) VLP Model. 400 Gallon AFFF Tank
9			Crash 9 (Right Side)
10			1000 Gallon AFFF Storage tank at the current fire station (Building 821)
11			AFFF Storage tank at Building 821
12			Building 821 AFFF storage tank dispenser
13			Building 907 AFFF Dispensing system (Right side of photo)
14			Building 907 AFFF Dispensing system
15			Building 907 AFFF tank label
16			Building 907 top of AFFF tank
17			Building 907 external manifold (Internal view)
18			Building 907 External manifold (external view)
19			Building 907 AFFF Dispersion manifold
20			Building 907 Nose cannon control valve
21			Building 907 underwing cannon #1
22			Building 907 Nose cannon
23			Building 907 underwing cannon #1
24			Building 907 underwing cannon #2
25			Building 917 HEF Tank label
26			AFFF sign found on floor of Building 917, likely left from refitting the system to HEF
27			Building 907 underwing cannon #2
28			Building 917 HEF dispersion pipes
29			Building 917 HEF water supply manifold
30			Building 917 HEF over body dispersion system
31			Building 917 HEF system
32			Building 850 AFFF testing tub and manifold
33			Building 917 HEF Shipping container
34			Building 850 AFFF dispersion system
35			Building 850 AFFF tank labels
36			Building 850 AFFF tank label

Photogragh Log

Photo Number	Time	View Direction	Location/Description
37			Building 850 AFFF dispersion room
38			Building 850 external manifold
39			Building 850 fire control system
40			Building 850 hangar side AFFF dispersion system
41			Building 850 AFFF room doors
42			Drainage north of building 850
43			Building 850 fire suppression system
44			Building 850 AFFF dispensing system
45			Building 850 AFFF dispensing system
46			Building 850, interior of the hangar doors
47			Building 850 AFFF dispensing system
48			Building 850,exterior of the doors and hangar apron
49			Building 707 AFFF tank label
50			AFFF feed system in building 707
51			3% AFFF cubitainer at Building 707
52			Building 707 main water supply
53			Building 707 AFFF tank, 2000 gallons
54			Leaking flanges on the AFFFF system in Building 707, not the secondary containment booms
55			Building 707 AFFF feed system
56			Building 707 AFFF dispersion system
57		Southeast	Building 707 water supply
58		East	Fire truck testing area, note the vegetation in the cracks
59		East	Tank B Dike, spray testing area
60		East	Tank B Dike, spray testing area
61		North	FT007/FPTA 03/Site 9, from runway
62		Northwest	Marsh/Wetlands on northwest side of FT007/FPTA 03/Site 9
63		Northeast	Wetlands on side of FT007/FPTA 03/Site 9
64		Southwest	Drainage from FT007/FPTA 03/Site 9 flowing southwest
65		South	Northwest side of FT007/FPTA 03/Site 9
66		Southwest	Propane storage for the current FTA
67		West	Current FTA looking west
68		North	FT009/FPTA 02/Site 11
69		Northwest	Current FTA
70		Northwest	FT009/FPTA 02/Site 11
71		Northwest	Current FTA
72		East	FT008/FPTA 01/Site 10
73		East	Building 700 (Old fire station)
74		East	Building 700, note the drains

Photogragh Log

Photo Number	Time	View Direction	Location/Description
75		West	Building 700 (Old fire station)
76		Northeast	Building 707 Holding tank
77		Northwest	Building 700 (Old fire station)
78			Building 700 (Old fire station), non flight side drains
79		West	Building 700 (Old fire station), non flight side drains
80		Southwest	East side of Building 700, note the drains that connect to those on the runway apron
81		East	Building 700 (Old fire station), non flight side drains

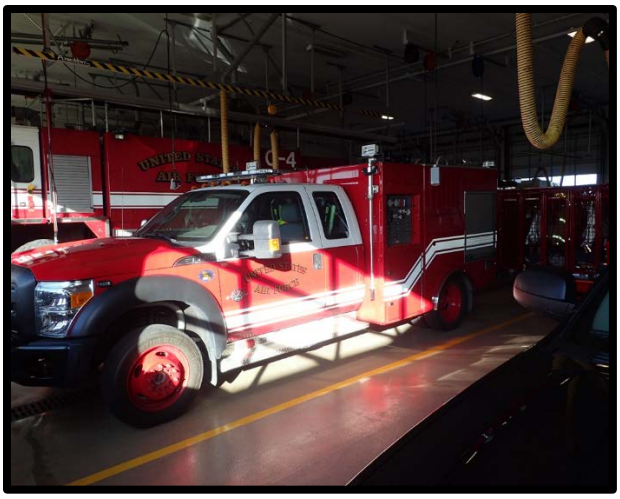


Photo 1 Rapid intervention vehicle.

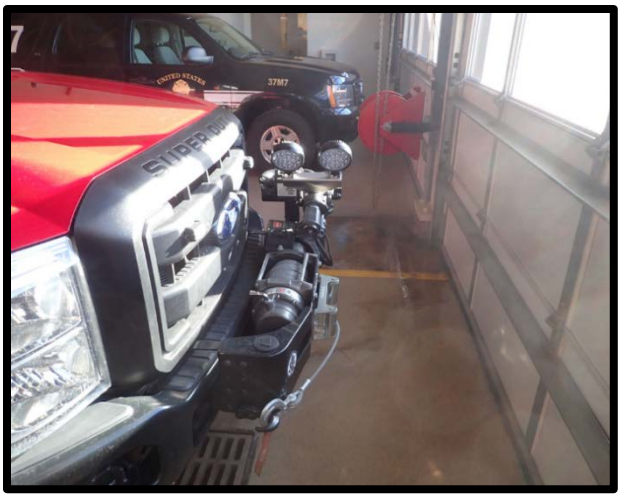


Photo 2 Front of rapid intervention vehicle, 56\- gallon AFFF tank.

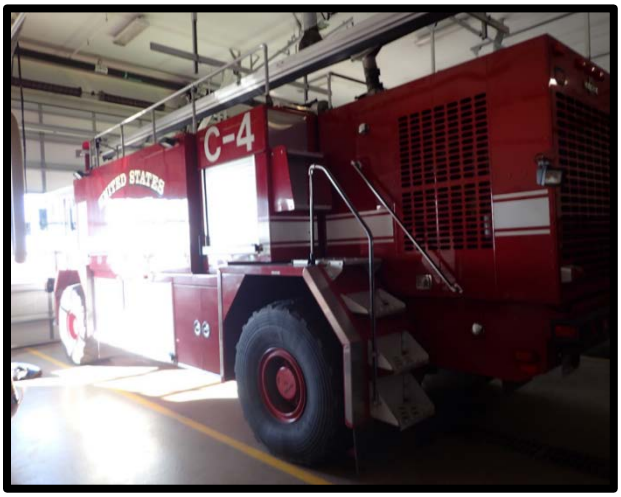


Photo 3 Model P-23, 300-gallon AFFF tank.

Photo 4 Crash 4 (right side)

Photo 5 Crash 4 (Front).

Photo 6 Crash 2 (left side), Model P-23, 300-gallon AFFF tank.

Photo 7 Crash 2 (right side)

Photo 8 VLP Model, 400-gallon AFFF tank.

Photo 9 Crash 9 (right side).

Photo 10 1,000-gallon AFFF storage tank.

Photo 11 AFFF storage tank at Building 821.

Photo 12 AFFF storage tank dispenser.

Photo 13 Building 907 AFFF dispensing system.

Photo 14 Building 907 AFFF dispensing system.

Photo 15 Building 907 AFFF tank label.

Photo 16 Building 907 top of AFFF tank.

Photo 17 Building 907 external manifold.

Photo 18 Building 907 external manifold.

Photo 19 AFFF dispersion manifold.

Photo 20 Nose cannon control valve.

Photo 21 Underwing cannon control valve #1

Photo 22 - Building 907 nose cannon.

Photo 23 - Building 907 underwing cannon #1.

Photo 24 Building 907 underwing cannon #2.

Photo 25 - Building 917 Hi Ex tank label.

Photo 26 AFFF sign found on floor of Building 917.

Photo 27 Building 907 underwing cannon #2.

Photo 28 Building 917 Hi Ex dispersion pipes.

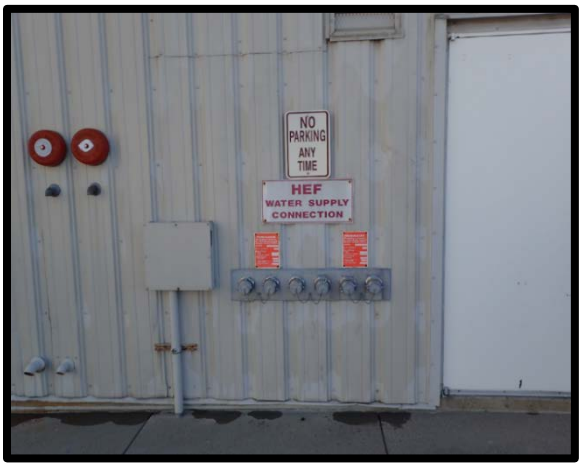


Photo 29 Hi Ex water supply manifold.

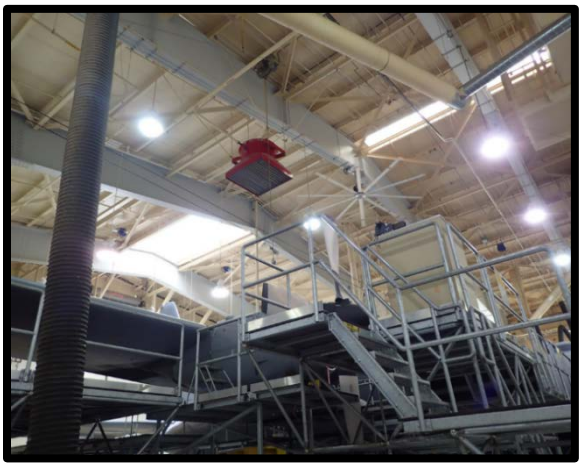


Photo 30 Hi Ex over body dispersion system.

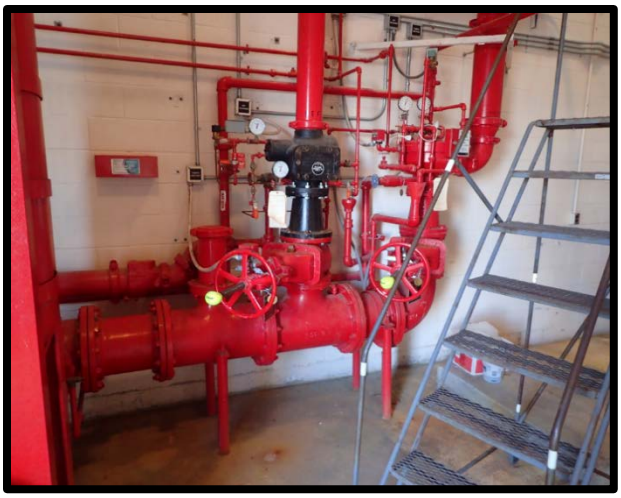


Photo 31 Building 917 Hi Ex system.

Photo 32 AFFF testing tub and manifold.

Photo 33 Building 917 Hi Ex shipping container.

Photo 34 Building 850 AFFF dispersion system.

Photo 35 Building 850 AFFF tank labels.

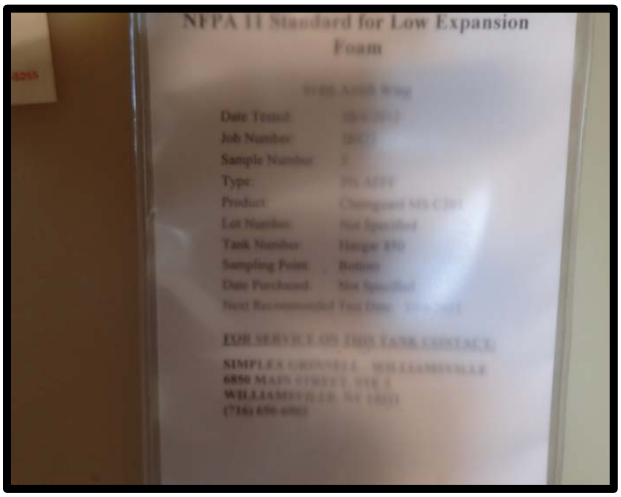


Photo 36 Building 850 AFFF tank label.

Photo 37 Building 850 AFFF dispersion room.

Photo 38 Building 850 external manifold.

Photo 39 - Building 850 fire control system.

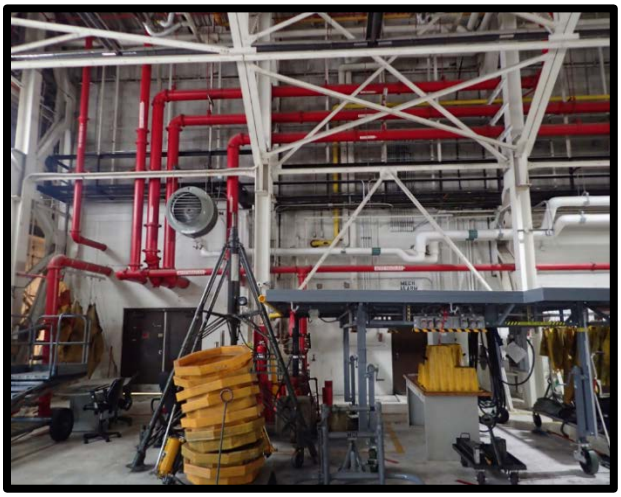


Photo 40 Building 850 hangar.

Photo 41 Building 850 AFFF room doors.

Photo 42 Drainage north of Building 850.

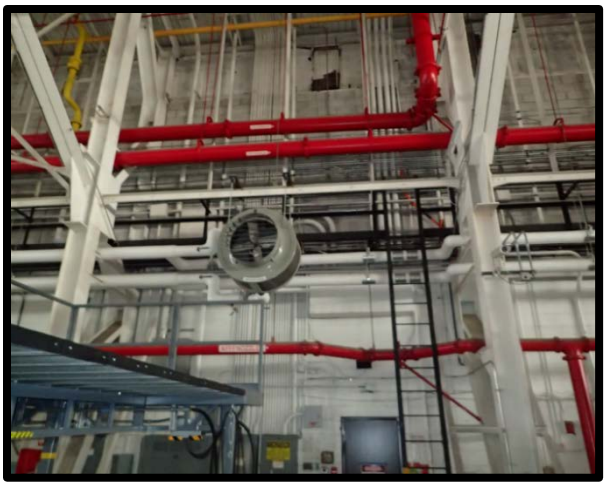


Photo 43 Building 850 fire suppression system.

Photo 44 Building 850 AFFF dispensing system.

Photo 45 Building 850 AFFF dispensing system.

Photo 46 Interior of the hangar doors.

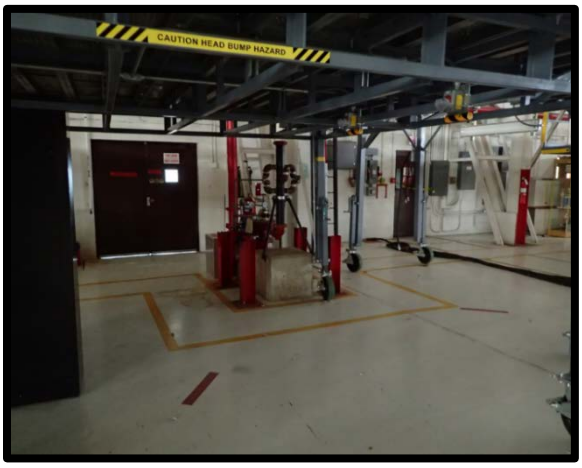


Photo 47 Building 850 AFFF dispensing system.

Photo 48 Exterior of the hangar doors.

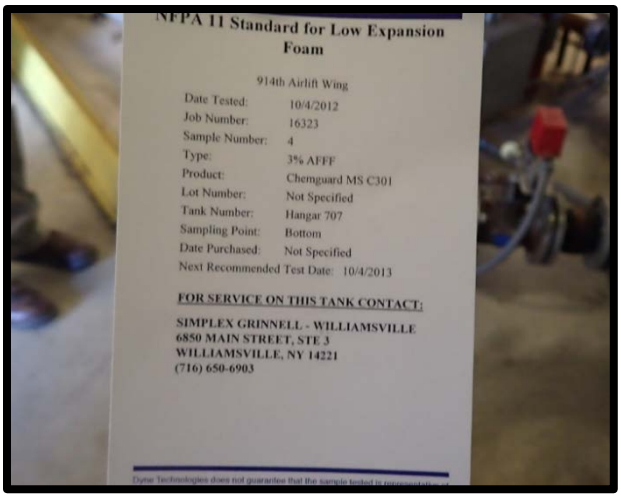


Photo 49 Building 707 AFFF tank label.

Photo 50 AFFF feed system in Building 707.

Photo 51 3 percent AFFF cubitainer at Building 707.

Photo 52 Building 707 AFFF water main supply.

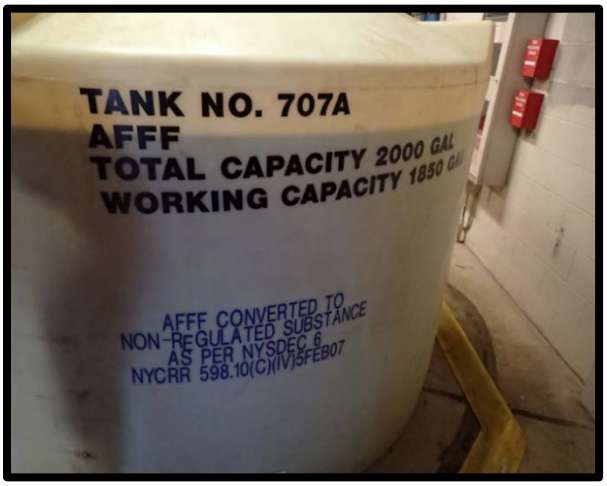


Photo 53 Building 707 AFFF tank, 2,000 gallons.

Photo 54 - Leaking flanges in Building 707.

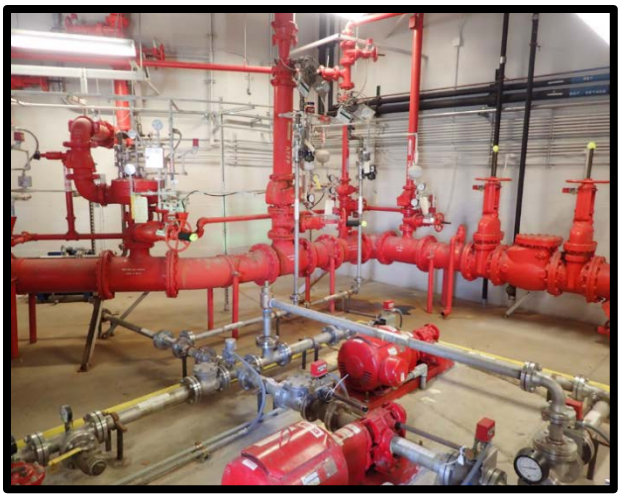


Photo 55 Building 707 AFFF feed system.

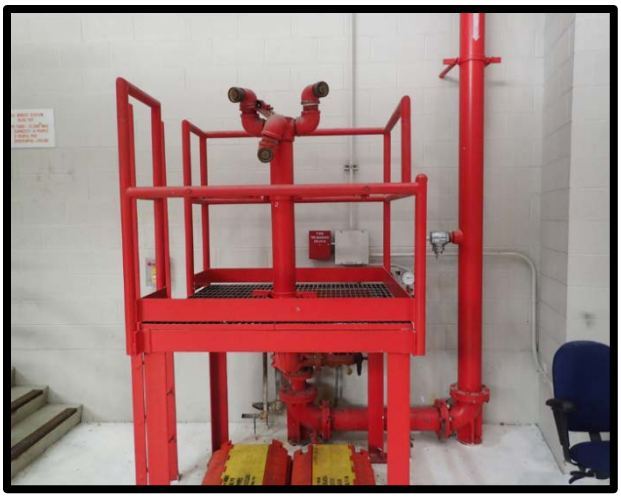


Photo 56 Building 707 AFFF dispersion system.

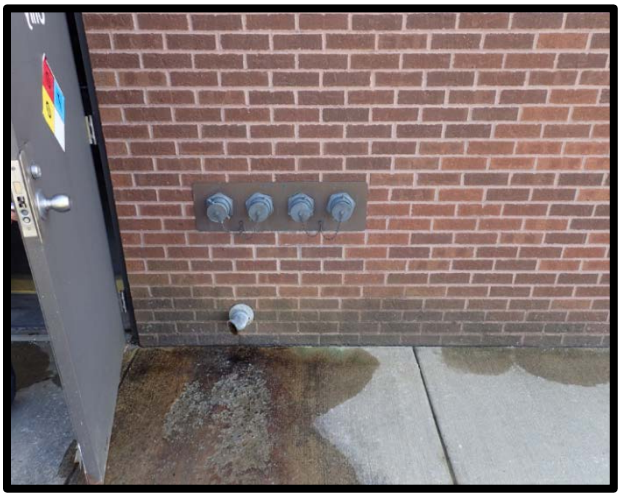


Photo 57 Building 707 water supply.

Photo 58 Fire truck testing area.

Photo 59 Tank B Dike, spray testing area.

Photo 60 Tank B Dike, spray testing area.

Photo 61 FT007, Site 9, FPTA 03, from runway.

Photo 62 Northwest side of FPTA 03.

Photo 63 Wetlands on north side of FPTA 03.

Photo 64 FPTA 03 drainage flowing southwest.

Photo 65 Northwest side of FPTA 03.

Photo 66 Propane storage for the current FTA.

Photo 67 Current FTA looking west.

Photo 68 Site 11, FPTA 02.

Photo 69 Current FTA.

Photo 70 Site 11, FPTA 02.

Photo 71 Current FTA.

Photo 72 Site 10, FPTA 01.

Photo 73 Building 700 (old fire station).

Photo 74 Building 700 (note the drains).

Photo 75 Building 700 (note the drains).

Photo 76 Building 707 holding tank.

Photo 77 Building 700 (old fire station).

Photo 78 Building 700, drains not on the flight side.

Photo 79 Building 700 (old fire station), drains not on the flight side

Photo 80 East side of Building 700 (note the drains that connect to those on the runway apron).

Photo 81 Building 700 (old fire station), drains not on the flight side.

Appendix C

Niagara Falls ARS PA Assessment Forms

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: NY | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: Niagara Falls Air Reserve Station		Street Address: 2720 Kirkbridge Drive			
City: Niagara Falls	State: NY	Zip Code: 14304-5001	County: Niagara	Co Code: 15380	Cong. Dist. NY-26
Latitude: 43° 09”08.40”N	Longitude: 78° 58’08.40”W	Approximate Area of Site: 2.11 Acres / 91,687 Sq. Ft.	Status of Site: **Active** / Inactive	Not Specified / NA (GW Plume etc.)	

Site Name: Current Fire Training Area

Site Description: Current fire training area has been active since 1997. Firepit contains an aircraft mockup, has a lined pit, and the flames are propane fueled. No AFFF has been used at this location; only water is used to extinguish the flames.

2. Owner/Operator Information

Owner: Niagara Falls Air Reserve Station			Operator: Same As Owner		
Street Address: 2720 Kirkbridge Drive			Street Address: ----		
City: Niagara Falls			City: ----		
State: New York	Zip Code:14304-5001	Telephone: N/A	State: ----	Zip Code: ----	Telephone: ----

Type of Ownership:		Type of Ownership:	
Private	County	Private	County
Federal Agency	Municipal	Federal Agency	Municipal
Name: DOD	Not Specified	Name:_____	Not Specified
State	Other: _____	State	Other: _____
Indian		Indian	

3. Site Evaluator Information

Name of Evaluator: Greg Carlson	Agency/Organization: Aerostar SES LLC		Date Prepared: 02-21-16	
Street Address: 1006 Floyd Culler Court		City: Oak Ridge	State: TN	
Name of EPA or State Agency Contact: N/A		Street Address: N/A		
City: N/A	State: N/A		Telephone: N/A	

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

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

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site:

Industrial | Mining | Other Federal
Commercial | **DOD** | Facility:_____
Residential | DOE |
Forest/Fields | DOI | Other: _____
Agriculture |

Site Setting:

Urban
Suburban
Rural

Years of Operation:

Beginning Year: 1997
Ending Year: Currently Active
Unknown

Type of Site Operations (Circle All that Apply):

Manufacturing (Must select a sub-category):
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
Electronic Equipment

Mining (Must Select a Sub-Category):
Metals
Coal
Oil and Gas
Non-Metallic Minerals

Retail
Recycling
Junk/Salvage yard
Municipal Landfill
Other Landfill
DOD
DOE
DOI
Other Federal Facility:_____

RCRA
TSDF
Large Quantity Generator
Small Quantity Generator
Subtitle D
Municipal
Industrial
"Converter"
"Protective Filer"
"Non or Late Filer"
Not Specified
Other: _____

Waste Generated:

Onsite
Offsite
Onsite and Offsite

Waste Deposition Authorized By:

Present Owner
Former Owner
Present and Former Owner
Unauthorized
Unknown

Waste Accessible to the Public:

Yes
No

Distance to Nearest Dwelling School or Workplace:

0.26 Miles

6. Waste Characteristics Information (Refer to PA Table 1 for WC Score)

Source Type (Select all that apply)	*Source Waste Quantity (Include Units)*	*Tier**
Landfill	_____	_____
Surface Impoundment	_____	_____
Drums	_____	_____
Tanks and Non Drum Containers	_____	_____
Chemical Waste Pile	_____	_____
Scrap Metal or Junk Pile	_____	_____
Tailings Pile	_____	_____
Trash Pile (open drum)	_____	_____
Land Treatment	_____	_____
Contaminated GW Plume	_____	_____
Contaminated SW/Sediment	_____	_____
Contaminated Soil	_____	_____
Other	_____	_____
No Sources	_____	_____

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

General Type of Waste (Circle all that Apply)

Metals
Organics
Inorganics
Solvents
Paints/Pigments
Laboratory/Medical Waste
Radioactive Waste
Construction/Demolition Waste
Pesticides/Herbicides
Acids/Bases
Oily Waste
Municipal Waste
Mining Waste
Explosives
Other: AFFF

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

Solid
Sludge
Powder
Liquid
Gas

7. Groundwater Pathway

Is Groundwater Used for Drinking Within 4 Miles

Yes

No

If Yes, Distance to Nearest Drinking Well

____ Miles

Type of Drinking Water Wells Within 4 Miles (Circle Each that Applies)

Municipal

Private

None

Depth to Shallowest Aquifer:

2-7 feet

Karst Terrain/Aquifer Present:

Yes

No

Is There a Suspected Release to Groundwater:

Yes

No

Have Primary Target Drinking Water Wells Been Identified:

Yes

No

If Yes, Enter Primary Target Population

____ People

Nearest Designated Wellhead Protection Area:

Underlies Site

>0-4 Miles

None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0.0-0.25 Mile	____
>0.25 - 0.5 Mile	____
>0.5 - 1.0 Mile	____
>1.0 - 2.0 Mile	____
>2.0 - 3.0 Mile	____
>3.0 - 4.0 Mile	____
Total within 4 Miles	____

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream:

Stream **River** Pond **Lake**

Bay Ocean Other _____

Shortest Overland Distance From Any Source to Surface Water:

N/A Feet

N/A Miles

Is There as Suspected Release to Surface Water:

Yes

No

Site is Located in:

Annual - 10 yr. Floodplain

>10 yr. - 100 yr. Floodplain

>100 yr. - 500 yr. Floodplain

> 500 yr. Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

Yes

No

Have Primary Target Drinking Waster Intakes Been Identified:

Yes

No

If Yes, Distance to Nearest Drinking Water Intake

8.05 Miles

If Yes, Enter Population Served By Target Intake

51,000 est. People

List All Secondary Drinking Water Intakes:

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

Total Within 15 Miles 0

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:

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
Wetlands and Waters of the US	Unknown	Unknown

Other Sensitive Environments Located Along the Surface Water Migration Path:

Migration Path

Yes

No

If Yes, Distance to Nearest Sensitive Environment: _____ Miles

Have Primary Sensitive Environments Been Identified:

Yes **No**

List All Sensitive Environments:

Water Body	Flow (cfs)	Sensitive Environment Type
----	----	----
----	----	----
----	----	----

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

Number of Workers Onsite:

None

1-100

101-1,000

>1,000

Population Within 1 Mile:

_____ People

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:

_____

_____

_____

____

10. Air Pathway

Is There A Suspected Release to Air:

Yes **No**

Enter The Population on or Within:

0.0-0.25 Mile	_____
>0.25 - 0.5 Mile	_____
>0.5 - 1.0 Mile	_____
>1.0 - 2.0 Mile	_____
>2.0 - 3.0 Mile	_____
>3.0 - 4.0 Mile	_____
Total within 4 Miles	_____

Wetlands Located within 4 Miles of the Site:

Yes If Yes, How Many Acres:

No 101 Acres

Other Sensitive Environments Located Within 4 Miles of the Site

Yes **No**

List All Sensitive Environments Within 0.5 Mile of the Site

Distance	Sensitive Environment Type/Wetlands Area (Acres)
Onsite	_____
0 - 0.25 Mile	_____
>0.25 - 0.5 Mile	_____

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: NY | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: Niagara Falls Air Reserve Station		Street Address: 2720 Kirkbridge Drive			
City: Niagara Falls	State: NY	Zip Code: 14304-5001	County: Niagara	Co Code: 15380	Cong. Dist. NY-26
Latitude: 43°06'41.86" N	Longitude: 78°56'00.00" W	Approximate Area of Site: 0.62 Acres / 26,803 Sq. Ft.	Status of Site: Active / **Inactive**	Not Specified / NA (GW Plume etc.)	

Site Name: FPTA 01/Site 10

Site Description: Former fire training area on the western side of the airfield near the former alert hangar site. Site was active from 1955-1963. Likely set flammable liquids afire and put them out using extinguishers and protein foams. Site was not active during the time AFFF was in service.

2. Owner/Operator Information

Owner: Niagara Falls Air Reserve Station			Operator: Same As Owner		
Street Address: 2720 Kirkbridge Drive			Street Address: ----		
City: Niagara Falls			City: ----		
State: New York	Zip Code:14304-5001	Telephone: N/A	State: ----	Zip Code: ----	Telephone: ----

Type of Ownership:		Type of Ownership:	
Private	County	Private	County
Federal Agency	Municipal	Federal Agency	Municipal
Name: DOD	Not Specified	Name:_____	Not Specified
State	Other: _____	State	Other: _____
Indian		Indian	

3. Site Evaluator Information

Name of Evaluator: Greg Carlson	Agency/Organization: Aerostar SES LLC	Date Prepared: 02-21-16	
Street Address: 1006 Floyd Culler Court	City: Oak Ridge	State: TN	
Name of EPA or State Agency Contact: N/A	Street Address: N/A		
City: N/A	State: N/A	Telephone: N/A	

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

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

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site:

Industrial | Mining | Other Federal
Commercial | **DOD** | Facility:_____
Residential | DOE |
Forest/Fields | DOI | Other: _____
Agriculture |

Site Setting:

Urban
Suburban
Rural

Years of Operation:

Beginning Year: 1955
Ending Year: 1963
Unknown

Type of Site Operations (Circle All that Apply):

Manufacturing (Must select a sub-category):
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
Electronic Equipment

Mining (Must Select a Sub-Category):
Metals
Coal
Oil and Gas
Non-Metallic Minerals

Retail
Recycling
Junk/Salvage yard
Municipal Landfill
Other Landfill
DOD
DOE
DOI
Other Federal Facility:_____

RCRA
TSDF
Large Quantity Generator
Small Quantity Generator
Subtitle D
Municipal
Industrial
"Converter"
"Protective Filer"
"Non or Late Filer"
Not Specified
Other: _____

Waste Generated:

Onsite
Offsite
Onsite and Offsite

Waste Deposition Authorized By:

Present Owner
Former Owner
Present and Former Owner
Unauthorized
Unknown

Waste Accessible to the Public:

Yes
No

Distance to Nearest Dwelling School or Workplace:

0.11 Miles

6. Waste Characteristics Information (Refer to PA Table 1 for WC Score)

Source Type (Select all that apply)	*Source Waste Quantity (Include Units)*	*Tier**
Landfill	_____	_____
Surface Impoundment	_____	_____
Drums	_____	_____
Tanks and Non Drum Containers	_____	_____
Chemical Waste Pile	_____	_____
Scrap Metal or Junk Pile	_____	_____
Tailings Pile	_____	_____
Trash Pile (open drum)	_____	_____
Land Treatment	_____	_____
Contaminated GW Plume	_____	_____
Contaminated SW/Sediment	_____	_____
Contaminated Soil	_____	_____
Other	_____	_____
No Sources	_____	_____

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

General Type of Waste (Circle all that Apply)

Metals
Organics
Inorganics
Solvents
Paints/Pigments
Laboratory/Medical Waste
Radioactive Waste
Construction/Demolition Waste
Pesticides/Herbicides
Acids/Bases
Oily Waste
Municipal Waste
Mining Waste
Explosives
Other: AFFF

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

Solid
Sludge
Powder
Liquid
Gas

7. Groundwater Pathway

Is Groundwater Used for Drinking Within 4 Miles

Yes
No

If Yes, Distance to Nearest Drinking Well
____ Miles

Type of Drinking Water Wells Within 4 Miles (Circle Each that Applies)
Municipal
Private
None

Depth to Shallowest Aquifer:
2-7 feet

Karst Terrain/Aquifer Present:
Yes
No

Is There a Suspected Release to Groundwater:

Yes
No

Have Primary Target Drinking Water Wells Been Identified:
Yes
No

If Yes, Enter Primary Target Population
____ People

Nearest Designated Wellhead Protection Area:
Underlies Site
>0-4 Miles
None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0.0-0.25 Mile	----
>0.25 - 0.5 Mile	----
>0.5 - 1.0 Mile	----
>1.0 - 2.0 Mile	----
>2.0 - 3.0 Mile	----
>3.0 - 4.0 Mile	----
Total within 4 Miles	----

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream:

Stream **River** Pond **Lake**
Bay Ocean Other _____

Shortest Overland Distance From Any Source to Surface Water:

N/A Feet
N/A Miles

Is There as Suspected Release to Surface Water:

Yes
No

Site is Located in:

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

Drinking Water Intake Located Along the Surface Water Migration Path:

Yes
No

Have Primary Target Drinking Waster Intakes Been Identified:
Yes
No

If Yes, Distance to Nearest Drinking Water Intake
8.06 Miles

If Yes, Enter Population Served By Target Intake
51,000 est. People

List All Secondary Drinking Water Intakes:

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

Total Within 15 Miles 0

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:

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
Wetlands and Waters of the US	Unknown	Unknown

Other Sensitive Environments Located Along the Surface Water Migration Path:

Migration Path

Yes

No

If Yes, Distance to Nearest Sensitive Environment: _____ Miles

Have Primary Sensitive Environments Been Identified:

Yes **No**

List All Sensitive Environments:

Water Body	Flow (cfs)	Sensitive Environment Type
----	----	----
----	----	----
----	----	----

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

Number of Workers Onsite:

None

1-100

101-1,000

>1,000

Population Within 1 Mile:

_____ People

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:

_____

_____

_____

____

10. Air Pathway

Is There A Suspected Release to Air:

Yes **No**

Enter The Population on or Within:

0.0-0.25 Mile	_____
>0.25 - 0.5 Mile	_____
>0.5 - 1.0 Mile	_____
>1.0 - 2.0 Mile	_____
>2.0 - 3.0 Mile	_____
>3.0 - 4.0 Mile	_____
Total within 4 Miles	_____

Wetlands Located within 4 Miles of the Site:

Yes If Yes, How Many Acres:

No 101 Acres

Other Sensitive Environments Located Within 4 Miles of the Site

Yes **No**

List All Sensitive Environments Within 0.5 Mile of the Site

Distance	Sensitive Environment Type/Wetlands Area (Acres)
Onsite	_____
0 - 0.25 Mile	_____
>0.25 - 0.5 Mile	_____

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: NY | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: Niagara Falls Air Reserve Station		Street Address: 2720 Kirkbridge Drive			
City: Niagara Falls	State: NY	Zip Code: 14304-5001	County: Niagara	Co Code: 15380	Cong. Dist. NY-26
Latitude: 43°06'07.14" N	Longitude: 78°57'07.14" W	Approximate Area of Site: 0.68 Acres / 29,691 Sq. Ft.	Status of Site: Active / **Inactive**	Not Specified / NA (GW Plume etc.)	

Site Name: FPTA 02/Site 11

Site Description: Former fire training area in the central portion of the airfield. This fire training area was active in the early 1960s concurrent with FPTA 1 though less used. No definite time span for use was given; however, it was active prior to the use of AFFF.

2. Owner/Operator Information

Owner: Niagara Falls Air Reserve Station			Operator: Same As Owner		
Street Address: 2720 Kirkbridge Drive			Street Address: ----		
City: Niagara Falls			City: ----		
State: New York	Zip Code:14304-5001	Telephone: N/A	State: ----	Zip Code: ----	Telephone: ----

Type of Ownership:		Type of Ownership:	
Private	County	Private	County
Federal Agency	Municipal	Federal Agency	Municipal
Name: DOD	Not Specified	Name:_____	Not Specified
State	Other: _____	State	Other: _____
Indian		Indian	

3. Site Evaluator Information

Name of Evaluator: Greg Carlson	Agency/Organization: Aerostar SES LLC		Date Prepared: 02-21-16	
Street Address: 1006 Floyd Culler Court		City: Oak Ridge		State: TN
Name of EPA or State Agency Contact: N/A		Street Address: N/A		
City: N/A	State: N/A		Telephone: N/A	

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

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

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site:

Industrial | Mining | Other Federal
Commercial | **DOD** | Facility:_____
Residential | DOE |
Forest/Fields | DOI | Other: _____
Agriculture |

Site Setting:

Urban
Suburban
Rural

Years of Operation:

Beginning Year: 1960
Ending Year: 1965
Unknown

Type of Site Operations (Circle All that Apply):

Manufacturing (Must select a sub-category):
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
Electronic Equipment

Mining (Must Select a Sub-Category):
Metals
Coal
Oil and Gas
Non-Metallic Minerals

Retail
Recycling
Junk/Salvage yard
Municipal Landfill
Other Landfill
DOD
DOE
DOI
Other Federal Facility:_____

RCRA
TSDF
Large Quantity Generator
Small Quantity Generator
Subtitle D
Municipal
Industrial
"Converter"
"Protective Filer"
"Non or Late Filer"
Not Specified
Other: _____

Waste Generated:

Onsite
Offsite
Onsite and Offsite

Waste Deposition Authorized By:

Present Owner
Former Owner
Present and Former Owner
Unauthorized
Unknown

Waste Accessible to the Public:

Yes
No

Distance to Nearest Dwelling School or Workplace:

0.03 Miles

6. Waste Characteristics Information (Refer to PA Table 1 for WC Score)

Source Type (Select all that apply)	*Source Waste Quantity (Include Units)*	*Tier**
Landfill	_____	_____
Surface Impoundment	_____	_____
Drums	_____	_____
Tanks and Non Drum Containers	_____	_____
Chemical Waste Pile	_____	_____
Scrap Metal or Junk Pile	_____	_____
Tailings Pile	_____	_____
Trash Pile (open drum)	_____	_____
Land Treatment	_____	_____
Contaminated GW Plume	_____	_____
Contaminated SW/Sediment	_____	_____
Contaminated Soil	_____	_____
Other	_____	_____
No Sources	_____	_____

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

General Type of Waste (Circle all that Apply)

Metals
Organics
Inorganics
Solvents
Paints/Pigments
Laboratory/Medical Waste
Radioactive Waste
Construction/Demolition Waste
Pesticides/Herbicides
Acids/Bases
Oily Waste
Municipal Waste
Mining Waste
Explosives
Other: AFFF

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

Solid
Sludge
Powder
Liquid
Gas

7. Groundwater Pathway

Is Groundwater Used for Drinking Within 4 Miles

Yes
No

If Yes, Distance to Nearest Drinking Well
____ Miles

Type of Drinking Water Wells Within 4 Miles (Circle Each that Applies)
Municipal
Private
None

Depth to Shallowest Aquifer:
2-7 feet

Karst Terrain/Aquifer Present:
Yes
No

Is There a Suspected Release to Groundwater:

Yes
No

Have Primary Target Drinking Water Wells Been Identified:
Yes
No

If Yes, Enter Primary Target Population
____ People

Nearest Designated Wellhead Protection Area:
Underlies Site
>0-4 Miles
None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0.0-0.25 Mile	----
>0.25 - 0.5 Mile	----
>0.5 - 1.0 Mile	----
>1.0 - 2.0 Mile	----
>2.0 - 3.0 Mile	----
>3.0 - 4.0 Mile	----
Total within 4 Miles	----

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream:

Stream **River** Pond **Lake**
Bay Ocean Other _____

Shortest Overland Distance From Any Source to Surface Water:

N/A Feet
N/A Miles

Is There as Suspected Release to Surface Water:

Yes
No

Site is Located in:

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

Drinking Water Intake Located Along the Surface Water Migration Path:

Yes
No

Have Primary Target Drinking Waster Intakes Been Identified:
Yes
No

If Yes, Distance to Nearest Drinking Water Intake
8.31 Miles

If Yes, Enter Population Served By Target Intake
51,000 est. People

List All Secondary Drinking Water Intakes:

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

Total Within 15 Miles 0

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:

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
Wetlands and Waters of the US	Unknown	Unknown

Other Sensitive Environments Located Along the Surface Water Migration Path:

Migration Path

Yes

No

If Yes, Distance to Nearest Sensitive Environment: _____ Miles

Have Primary Sensitive Environments Been Identified:

Yes **No**

List All Sensitive Environments:

Water Body	Flow (cfs)	Sensitive Environment Type
----	----	----
----	----	----
----	----	----

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

Number of Workers Onsite:

None

1-100

101-1,000

>1,000

Population Within 1 Mile:

_____ People

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:

_____

_____

_____

____

10. Air Pathway

Is There A Suspected Release to Air:

Yes **No**

Enter The Population on or Within:

0.0-0.25 Mile	_____
>0.25 - 0.5 Mile	_____
>0.5 - 1.0 Mile	_____
>1.0 - 2.0 Mile	_____
>2.0 - 3.0 Mile	_____
>3.0 - 4.0 Mile	_____
Total within 4 Miles	_____

Wetlands Located within 4 Miles of the Site:

Yes If Yes, How Many Acres:

No 101 Acres

Other Sensitive Environments Located Within 4 Miles of the Site

Yes **No**

List All Sensitive Environments Within 0.5 Mile of the Site

Distance	Sensitive Environment Type/Wetlands Area (Acres)
Onsite	_____
0 - 0.25 Mile	_____
>0.25 - 0.5 Mile	_____

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: NY | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: Niagara Falls Air Reserve Station		Street Address: 2720 Kirkbridge Drive			
City: Niagara Falls	State: NY	Zip Code: 14304-5001	County: Niagara	Co Code: 15380	Cong. Dist. NY-26
Latitude: 43°06'41.97" N	Longitude: 78°58'03.10" W	Approximate Area of Site: 0.42 Acres / 18,165 Sq. Ft.	Status of Site: Active / **Inactive**	Not Specified / NA (GW Plume etc.)	

Site Name: FPTA 03/Site 09

Site Description: Fire training area that was active from 1963 until the current fire training area went active. AFFF was released during training exercises and spray testing operations.

2. Owner/Operator Information

Owner: Niagara Falls Air Reserve Station			Operator: Same As Owner		
Street Address: 2720 Kirkbridge Drive			Street Address: ----		
City: Niagara Falls			City: ----		
State: New York	Zip Code:14304-5001	Telephone: N/A	State: ----	Zip Code: ----	Telephone: ----

Type of Ownership:		Type of Ownership:	
Private	County	Private	County
Federal Agency	Municipal	Federal Agency	Municipal
Name: DOD	Not Specified	Name:_____	Not Specified
State	Other: _____	State	Other: _____
Indian		Indian	

3. Site Evaluator Information

Name of Evaluator: Greg Carlson	Agency/Organization: Aerostar SES LLC		Date Prepared: 02-21-16	
Street Address: 1006 Floyd Culler Court		City: Oak Ridge	State: TN	
Name of EPA or State Agency Contact: N/A		Street Address: N/A		
City: N/A	State: N/A		Telephone: N/A	

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

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

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site:

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

Site Setting:

Urban
Suburban
Rural

Years of Operation:

Beginning Year: 1963
Ending Year: 1997 (est.)
Unknown

Type of Site Operations (Circle All that Apply):

Manufacturing (Must select a sub-category):
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
Electronic Equipment

Mining (Must Select a Sub-Category):
Metals
Coal
Oil and Gas
Non-Metallic Minerals

Retail
Recycling
Junk/Salvage yard
Municipal Landfill
Other Landfill
DOD
DOE
DOI
Other Federal Facility:_____

RCRA
TSDF
Large Quantity Generator
Small Quantity Generator
Subtitle D
Municipal
Industrial
"Converter"
"Protective Filer"
"Non or Late Filer"
Not Specified
Other: _____

Waste Generated:

Onsite
Offsite
Onsite and Offsite

Waste Deposition Authorized By:

Present Owner
Former Owner
Present and Former Owner
Unauthorized
Unknown

Waste Accessible to the Public:

Yes
No

Distance to Nearest Dwelling School or Workplace:

0.27 Miles

6. Waste Characteristics Information (Refer to PA Table 1 for WC Score)

Source Type (Select all that apply)	*Source Waste Quantity (Include Units)*	*Tier**
Landfill	_____	_____
Surface Impoundment	_____	_____
Drums	_____	_____
Tanks and Non Drum Containers	_____	_____
Chemical Waste Pile	_____	_____
Scrap Metal or Junk Pile	_____	_____
Tailings Pile	_____	_____
Trash Pile (open drum)	_____	_____
Land Treatment	_____	_____
Contaminated GW Plume	_____	_____
Contaminated SW/Sediment	_____	_____
Contaminated Soil	_____	_____
Other	_____	_____
No Sources	_____	_____

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

General Type of Waste (Circle all that Apply)

Metals
Organics
Inorganics
Solvents
Paints/Pigments
Laboratory/Medical Waste
Radioactive Waste
Construction/Demolition Waste
Pesticides/Herbicides
Acids/Bases
Oily Waste
Municipal Waste
Mining Waste
Explosives
Other: AFFF

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

Solid
Sludge
Powder
Liquid
Gas

7. Groundwater Pathway

Is Groundwater Used for Drinking Within 4 Miles

Yes
No

If Yes, Distance to Nearest Drinking Well
____ Miles

Type of Drinking Water Wells Within 4 Miles (Circle Each that Applies)
Municipal
Private
None

Depth to Shallowest Aquifer:
2-7 feet

Karst Terrain/Aquifer Present:
Yes
No

Is There a Suspected Release to Groundwater:

Yes
No

Have Primary Target Drinking Water Wells Been Identified:
Yes
No

If Yes, Enter Primary Target Population
____ People

Nearest Designated Wellhead Protection Area:
Underlies Site
>0-4 Miles
None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0.0-0.25 Mile	----
>0.25 - 0.5 Mile	----
>0.5 - 1.0 Mile	----
>1.0 - 2.0 Mile	----
>2.0 - 3.0 Mile	----
>3.0 - 4.0 Mile	----
Total within 4 Miles	----

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream:

Stream **River** Pond **Lake**
Bay Ocean Other _____

Shortest Overland Distance From Any Source to Surface Water:

20 Feet
0.01 Miles

Is There as Suspected Release to Surface Water:

Yes
No

Site is Located in:

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

Drinking Water Intake Located Along the Surface Water Migration Path:

Yes
No

Have Primary Target Drinking Waster Intakes Been Identified:
Yes
No

If Yes, Distance to Nearest Drinking Water Intake
8.18 Miles

If Yes, Enter Population Served By Target Intake
51,000 est. People

List All Secondary Drinking Water Intakes:

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

Total Within 15 Miles 0

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:

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
Wetlands and Waters of the US	Unknown	Unknown

Other Sensitive Environments Located Along the Surface Water Migration Path:

Migration Path

Yes

No

If Yes, Distance to Nearest Sensitive Environment: _____ Miles

Have Primary Sensitive Environments Been Identified:

Yes **No**

List All Sensitive Environments:

Water Body	Flow (cfs)	Sensitive Environment Type
----	----	----
----	----	----
----	----	----

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

Number of Workers Onsite:

None

1-100

101-1,000

>1,000

Population Within 1 Mile:

_____ People

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:

_____

_____

_____

____

10. Air Pathway

Is There A Suspected Release to Air:

Yes **No**

Enter The Population on or Within:

0.0-0.25 Mile	_____
>0.25 - 0.5 Mile	_____
>0.5 - 1.0 Mile	_____
>1.0 - 2.0 Mile	_____
>2.0 - 3.0 Mile	_____
>3.0 - 4.0 Mile	_____
Total within 4 Miles	_____

Wetlands Located within 4 Miles of the Site:

Yes

No

If Yes, How Many Acres:

101 Acres

Other Sensitive Environments Located Within 4 Miles of the Site

Yes **No**

List All Sensitive Environments Within 0.5 Mile of the Site

Distance	Sensitive Environment Type/Wetlands Area (Acres)
Onsite	_____
0 - 0.25 Mile	_____
>0.25 - 0.5 Mile	_____

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: NY | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: Niagara Falls Air Reserve Station		Street Address: 2720 Kirkbridge Drive			
City: Niagara Falls	State: NY	Zip Code: 14304-5001	County: Niagara	Co Code: 15380	Cong. Dist. NY-26
Latitude: 43°06'50.79" N	Longitude: 78°56'01.06" W	Approximate Area of Site: 0.72 Acres / 31,213 Sq. Ft.	Status of Site: **Active** / Inactive	Not Specified / NA (GW Plume etc.)	

Site Name: Building 907 (Hangar)

Site Description: Contractor had a 10-gallon release inside the building that was squeegeed and vac trucked out of the building. No release to the environment. The wet suppression system was dripping near the wall, but the AFFF system didn't have any leaks that could be seen. This is a former Air Guard Hangar.

2. Owner/Operator Information

Owner: Niagara Falls Air Reserve Station			Operator: Same As Owner		
Street Address: 2720 Kirkbridge Drive			Street Address: ----		
City: Niagara Falls			City: ----		
State: New York	Zip Code:14304-5001	Telephone: N/A	State: ----	Zip Code: ----	Telephone: ----

Type of Ownership:		Type of Ownership:	
Private	County	Private	County
Federal Agency	Municipal	Federal Agency	Municipal
Name: DOD	Not Specified	Name:_____	Not Specified
State	Other: _____	State	Other: _____
Indian		Indian	

3. Site Evaluator Information

Name of Evaluator: Greg Carlson	Agency/Organization: Aerostar SES LLC	Date Prepared: 02-21-16	
Street Address: 1006 Floyd Culler Court	City: Oak Ridge	State: TN	
Name of EPA or State Agency Contact: N/A	Street Address: N/A		
City: N/A	State: N/A	Telephone: N/A	

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

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

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site:

Industrial | Mining | Other Federal
Commercial | **DOD** | Facility:_____
Residential | DOE |
Forest/Fields | DOI | Other: _____
Agriculture |

Site Setting:

Urban
Suburban
Rural

Years of Operation:

Beginning Year: _____

Ending Year: _____

Unknown

Type of Site Operations (Circle All that Apply):

Manufacturing (Must select a sub-category):
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
Electronic Equipment

Mining (Must Select a Sub-Category):
Metals
Coal
Oil and Gas
Non-Metallic Minerals

Retail
Recycling
Junk/Salvage yard
Municipal Landfill
Other Landfill
DOD
DOE
DOI
Other Federal Facility:_____

RCRA
TSDF
Large Quantity Generator
Small Quantity Generator
Subtitle D
Municipal
Industrial
"Converter"
"Protective Filer"
"Non or Late Filer"
Not Specified
Other: _____

Waste Generated:

Onsite
Offsite
Onsite and Offsite

Waste Deposition Authorized By:

Present Owner
Former Owner
Present and Former Owner
Unauthorized
Unknown

Waste Accessible to the Public:

Yes
No

Distance to Nearest Dwelling School or Workplace:

0.00 Miles

6. Waste Characteristics Information (Refer to PA Table 1 for WC Score)

Source Type (Select all that apply)	*Source Waste Quantity (Include Units)*	*Tier**
Landfill	_____	_____
Surface Impoundment	_____	_____
Drums	_____	_____
Tanks and Non Drum Containers	_____	_____
Chemical Waste Pile	_____	_____
Scrap Metal or Junk Pile	_____	_____
Tailings Pile	_____	_____
Trash Pile (open drum)	_____	_____
Land Treatment	_____	_____
Contaminated GW Plume	_____	_____
Contaminated SW/Sediment	_____	_____
Contaminated Soil	_____	_____
Other	_____	_____
No Sources	_____	_____

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

General Type of Waste (Circle all that Apply)

Metals
Organics
Inorganics
Solvents
Paints/Pigments
Laboratory/Medical Waste
Radioactive Waste
Construction/Demolition Waste
Pesticides/Herbicides
Acids/Bases
Oily Waste
Municipal Waste
Mining Waste
Explosives
Other: AFFF

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

Solid
Sludge
Powder
Liquid
Gas

7. Groundwater Pathway

Is Groundwater Used for Drinking Within 4 Miles

Yes

No

If Yes, Distance to Nearest Drinking Well

____ Miles

Type of Drinking Water Wells Within 4 Miles (Circle Each that Applies)

Municipal

Private

None

Depth to Shallowest Aquifer:

2-7 feet

Karst Terrain/Aquifer Present:

Yes

No

Is There a Suspected Release to Groundwater:

Yes

No

Have Primary Target Drinking Water Wells Been Identified:

Yes

No

If Yes, Enter Primary Target Population

____ People

Nearest Designated Wellhead Protection Area:

Underlies Site

>0-4 Miles

None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0.0-0.25 Mile	____
>0.25 - 0.5 Mile	____
>0.5 - 1.0 Mile	____
>1.0 - 2.0 Mile	____
>2.0 - 3.0 Mile	____
>3.0 - 4.0 Mile	____
Total within 4 Miles	____

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream:

Stream **River** Pond **Lake**

Bay Ocean Other _____

Shortest Overland Distance From Any Source to Surface Water:

_____ Feet

_____ Miles

Is There as Suspected Release to Surface Water:

Yes

No

Site is Located in:

Annual - 10 yr. Floodplain

>10 yr. - 100 yr. Floodplain

>100 yr. - 500 yr. Floodplain

> 500 yr. Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

Yes

No

Have Primary Target Drinking Waster Intakes Been Identified:

Yes If Yes, Distance to Nearest Drinking Water Intake

No _____ Miles

If Yes, Enter Population Served By Target Intake

51,000 est. People

List All Secondary Drinking Water Intakes:

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

Total Within 15 Miles 0

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:

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
Wetlands and Waters of the US	Unknown	Unknown

Other Sensitive Environments Located Along the Surface Water Migration Path:

Migration Path

Yes

No

If Yes, Distance to Nearest Sensitive Environment: _____ Miles

Have Primary Sensitive Environments Been Identified:

Yes **No**

List All Sensitive Environments:

Water Body	Flow (cfs)	Sensitive Environment Type
----	----	----
----	----	----
----	----	----

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

Number of Workers Onsite:

None

1-100

101-1,000

>1,000

Population Within 1 Mile:

_____ People

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:

_____

_____

_____

____

10. Air Pathway

Is There A Suspected Release to Air:

Yes **No**

Enter The Population on or Within:

0.0-0.25 Mile	_____
>0.25 - 0.5 Mile	_____
>0.5 - 1.0 Mile	_____
>1.0 - 2.0 Mile	_____
>2.0 - 3.0 Mile	_____
>3.0 - 4.0 Mile	_____
Total within 4 Miles	_____

Wetlands Located within 4 Miles of the Site:

Yes If Yes, How Many Acres:

No __101__ Acres

Other Sensitive Environments Located Within 4 Miles of the Site

Yes **No**

List All Sensitive Environments Within 0.5 Mile of the Site

Distance	Sensitive Environment Type/Wetlands Area (Acres)
Onsite	_____
0 - 0.25 Mile	_____
>0.25 - 0.5 Mile	_____

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: NY | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: Niagara Falls Air Reserve Station		Street Address: 2720 Kirkbridge Drive			
City: Niagara Falls	State: NY	Zip Code: 14304-5001	County: Niagara	Co Code: 15380	Cong. Dist. NY-26
Latitude: 43°06'51.48" N	Longitude: 78°56'50.93" W	Approximate Area of Site: 0.73 Acres / 31,975 Sq. Ft.	Status of Site: **Active** / Inactive	Not Specified / NA (GW Plume etc.)	

Site Name: Building 917

Site Description: Contractor accidently dumped high expansion foam in 2007. This was formerly an AFFF system. This is a former Air Guard Hangar. No AFFF spills have been recorded.

2. Owner/Operator Information

Owner: Niagara Falls Air Reserve Station			Operator: Same As Owner		
Street Address: 2720 Kirkbridge Drive			Street Address: ----		
City: Niagara Falls			City: ----		
State: New York	Zip Code:14304-5001	Telephone: N/A	State: ----	Zip Code: ----	Telephone: ----

Type of Ownership:		Type of Ownership:	
Private	County	Private	County
Federal Agency	Municipal	Federal Agency	Municipal
Name: DOD	Not Specified	Name:_____	Not Specified
State	Other: _____	State	Other: _____
Indian		Indian	

3. Site Evaluator Information

Name of Evaluator: Greg Carlson	Agency/Organization: Aerostar SES LLC		Date Prepared: 02-21-16	
Street Address: 1006 Floyd Culler Court		City: Oak Ridge	State: TN	
Name of EPA or State Agency Contact: N/A		Street Address: N/A		
City: N/A	State: N/A		Telephone: N/A	

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

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

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site:

Industrial | Mining | Other Federal
Commercial | **DOD** | Facility:_____
Residential | DOE |
Forest/Fields | DOI | Other: _____
Agriculture |

Site Setting:

Urban
Suburban
Rural

Years of Operation:

Beginning Year: 2006

Ending Year: Current

Unknown

Type of Site Operations (Circle All that Apply):

Manufacturing (Must select a sub-category):
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
Electronic Equipment

Mining (Must Select a Sub-Category):
Metals
Coal
Oil and Gas
Non-Metallic Minerals

Retail
Recycling
Junk/Salvage yard
Municipal Landfill
Other Landfill
DOD
DOE
DOI
Other Federal Facility:_____

RCRA
TSDF
Large Quantity Generator
Small Quantity Generator
Subtitle D
Municipal
Industrial
"Converter"
"Protective Filer"
"Non or Late Filer"
Not Specified
Other: _____

Waste Generated:

Onsite
Offsite
Onsite and Offsite

Waste Deposition Authorized By:

Present Owner
Former Owner
Present and Former Owner
Unauthorized
Unknown

Waste Accessible to the Public:

Yes
No

Distance to Nearest Dwelling School or Workplace:

_____0.0_____ Miles

6. Waste Characteristics Information (Refer to PA Table 1 for WC Score)

Source Type (Select all that apply)	*Source Waste Quantity (Include Units)*	*Tier**
Landfill	_____	_____
Surface Impoundment	_____	_____
Drums	_____	_____
Tanks and Non Drum Containers	_____	_____
Chemical Waste Pile	_____	_____
Scrap Metal or Junk Pile	_____	_____
Tailings Pile	_____	_____
Trash Pile (open drum)	_____	_____
Land Treatment	_____	_____
Contaminated GW Plume	_____	_____
Contaminated SW/Sediment	_____	_____
Contaminated Soil	_____	_____
Other	_____	_____
No Sources	_____	_____

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

General Type of Waste (Circle all that Apply)

Metals | Pesticides/Herbicides
Organics | Acids/Bases
Inorganics | Oily Waste
Solvents | Municipal Waste
Paints/Pigments | Mining Waste
Laboratory/Medical Waste | Explosives
Radioactive Waste | **Other: AFFF**
Construction/Demolition Waste |

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

Solid
Sludge
Powder
Liquid
Gas

7. Groundwater Pathway

Is Groundwater Used for Drinking Within 4 Miles

Yes
No

If Yes, Distance to Nearest Drinking Well
____ Miles

Type of Drinking Water Wells Within 4 Miles (Circle Each that Applies)
Municipal
Private
None

Depth to Shallowest Aquifer:
2-7 feet

Karst Terrain/Aquifer Present:
Yes
No

Is There a Suspected Release to Groundwater:

Yes
No

Have Primary Target Drinking Water Wells Been Identified:
Yes
No

If Yes, Enter Primary Target Population
____ People

Nearest Designated Wellhead Protection Area:
Underlies Site
>0-4 Miles
None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0.0-0.25 Mile	____
>0.25 - 0.5 Mile	____
>0.5 - 1.0 Mile	____
>1.0 - 2.0 Mile	____
>2.0 - 3.0 Mile	____
>3.0 - 4.0 Mile	____
Total within 4 Miles	____

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream:

Stream **River** Pond **Lake**
Bay Ocean Other _____

Shortest Overland Distance From Any Source to Surface Water:

_____ Feet
_____ Miles

Is There as Suspected Release to Surface Water:

Yes
No

Site is Located in:

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

Drinking Water Intake Located Along the Surface Water Migration Path:

Yes
No

Have Primary Target Drinking Waster Intakes Been Identified:
Yes
No

If Yes, Distance to Nearest Drinking Water Intake
_____ Miles

If Yes, Enter Population Served By Target Intake
51,000 est. People

List All Secondary Drinking Water Intakes:

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

Total Within 15 Miles 0

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:

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
Wetlands and Waters of the US	Unknown	Unknown

Other Sensitive Environments Located Along the Surface Water Migration Path:

Migration Path

Yes

No

If Yes, Distance to Nearest Sensitive Environment: _____ Miles

Have Primary Sensitive Environments Been Identified:

Yes **No**

List All Sensitive Environments:

Water Body	Flow (cfs)	Sensitive Environment Type
----	----	----
----	----	----
----	----	----

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

Number of Workers Onsite:

None

1-100

101-1,000

>1,000

Population Within 1 Mile:

_____ People

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:

_____

_____

_____

____

10. Air Pathway

Is There A Suspected Release to Air:

Yes **No**

Enter The Population on or Within:

0.0-0.25 Mile	_____
>0.25 - 0.5 Mile	_____
>0.5 - 1.0 Mile	_____
>1.0 - 2.0 Mile	_____
>2.0 - 3.0 Mile	_____
>3.0 - 4.0 Mile	_____
Total within 4 Miles	_____

Wetlands Located within 4 Miles of the Site:

Yes

No

If Yes, How Many Acres:

101 Acres

Other Sensitive Environments Located Within 4 Miles of the Site

Yes **No**

List All Sensitive Environments Within 0.5 Mile of the Site

Distance	Sensitive Environment Type/Wetlands Area (Acres)
Onsite	_____
0 - 0.25 Mile	_____
>0.25 - 0.5 Mile	_____

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: NY | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: Niagara Falls Air Reserve Station		Street Address: 2720 Kirkbridge Drive			
City: Niagara Falls	State: NY	Zip Code: 14304-5001	County: Niagara	Co Code: 15380	Cong. Dist. NY-26
Latitude: 43°06'54.86" N	Longitude: 78°56'39.86" W	Approximate Area of Site: 1.38 Acres / 59,900 Sq. Ft.	Status of Site: **Active** / Inactive	Not Specified / NA (GW Plume etc.)	

Site Name: Building 850

Site Description: Foam dump in 2010 from a lightning strike overpowering the fire suppression system control panels. Surge protection is now in place at this building. This release was approximately 48,000 gallons mixed (2,500 gallons of concentrate left the storage tank) that entered the storm drain system. Unknown amount leaked out of the large hangar doors on the west side of the hanger during a heavy thunderstorm.

2. Owner/Operator Information

Owner: Niagara Falls Air Reserve Station			Operator: Same As Owner		
Street Address: 2720 Kirkbridge Drive			Street Address: ----		
City: Niagara Falls			City: ----		
State: New York	Zip Code:14304-5001	Telephone: N/A	State: ----	Zip Code: ----	Telephone: ----

Type of Ownership:		Type of Ownership:	
Private	County	Private	County
Federal Agency	Municipal	Federal Agency	Municipal
Name: DOD	Not Specified	Name:_____	Not Specified
State	Other: _____	State	Other: _____
Indian		Indian	

3. Site Evaluator Information

Name of Evaluator: Greg Carlson	Agency/Organization: Aerostar SES LLC		Date Prepared: 02-21-16	
Street Address: 1006 Floyd Culler Court		City: Oak Ridge		State: TN
Name of EPA or State Agency Contact: N/A		Street Address: N/A		
City: N/A	State: N/A		Telephone: N/A	

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

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

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site:

Industrial | Mining | Other Federal
Commercial | **DOD** | Facility:_____
Residential | DOE |
Forest/Fields | DOI | Other: _____
Agriculture |

Site Setting:

Urban
Suburban
Rural

Years of Operation:

Beginning Year: _____
Ending Year: _____
Unknown

Type of Site Operations (Circle All that Apply):

Manufacturing (Must select a sub-category):
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
Electronic Equipment

Mining (Must Select a Sub-Category):
Metals
Coal
Oil and Gas
Non-Metallic Minerals

Retail
Recycling
Junk/Salvage yard
Municipal Landfill
Other Landfill
DOD
DOE
DOI
Other Federal Facility:_____

RCRA
TSDF
Large Quantity Generator
Small Quantity Generator
Subtitle D
Municipal
Industrial
"Converter"
"Protective Filer"
"Non or Late Filer"
Not Specified
Other: _____

Waste Generated:

Onsite
Offsite
Onsite and Offsite

Waste Deposition Authorized By:

Present Owner
Former Owner
Present and Former Owner
Unauthorized
Unknown

Waste Accessible to the Public:

Yes
No

Distance to Nearest Dwelling School or Workplace:

_____0.0_____ Miles

6. Waste Characteristics Information (Refer to PA Table 1 for WC Score)

Source Type (Select all that apply)	*Source Waste Quantity (Include Units)*	*Tier**
Landfill	_____	_____
Surface Impoundment	_____	_____
Drums	_____	_____
Tanks and Non Drum Containers	_____	_____
Chemical Waste Pile	_____	_____
Scrap Metal or Junk Pile	_____	_____
Tailings Pile	_____	_____
Trash Pile (open drum)	_____	_____
Land Treatment	_____	_____
Contaminated GW Plume	_____	_____
Contaminated SW/Sediment	_____	_____
Contaminated Soil	_____	_____
Other	_____	_____
No Sources	_____	_____

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

General Type of Waste (Circle all that Apply)

Metals
Organics
Inorganics
Solvents
Paints/Pigments
Laboratory/Medical Waste
Radioactive Waste
Construction/Demolition Waste
Pesticides/Herbicides
Acids/Bases
Oily Waste
Municipal Waste
Mining Waste
Explosives
Other: AFFF

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

Solid
Sludge
Powder
Liquid
Gas

7. Groundwater Pathway

Is Groundwater Used for Drinking Within 4 Miles

Yes
No

If Yes, Distance to Nearest Drinking Well
____ Miles

Type of Drinking Water Wells Within 4 Miles (Circle Each that Applies)
Municipal
Private
None

Depth to Shallowest Aquifer:
2-7 feet

Karst Terrain/Aquifer Present:
Yes
No

Is There a Suspected Release to Groundwater:

Yes
No

Have Primary Target Drinking Water Wells Been Identified:
Yes
No

If Yes, Enter Primary Target Population
____ People

Nearest Designated Wellhead Protection Area:
Underlies Site
>0-4 Miles
None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0.0-0.25 Mile	----
>0.25 - 0.5 Mile	----
>0.5 - 1.0 Mile	----
>1.0 - 2.0 Mile	----
>2.0 - 3.0 Mile	----
>3.0 - 4.0 Mile	----
Total within 4 Miles	----

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream:

Stream **River** Pond **Lake**
Bay Ocean Other _____

Shortest Overland Distance From Any Source to Surface Water:

1,360 Feet
0.26 Miles

Is There as Suspected Release to Surface Water:

Yes
No

Site is Located in:

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

Drinking Water Intake Located Along the Surface Water Migration Path:

Yes
No

Have Primary Target Drinking Waster Intakes Been Identified:
Yes
No

If Yes, Distance to Nearest Drinking Water Intake
8.29 Miles

If Yes, Enter Population Served By Target Intake
51,000 est. People

List All Secondary Drinking Water Intakes:

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

Total Within 15 Miles 0

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:

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
Wetlands and Waters of the US	Unknown	Unknown

Other Sensitive Environments Located Along the Surface Water Migration Path:

Migration Path

Yes

No

If Yes, Distance to Nearest Sensitive Environment: _____ Miles

Have Primary Sensitive Environments Been Identified:

Yes **No**

List All Sensitive Environments:

Water Body	Flow (cfs)	Sensitive Environment Type
----	----	----
----	----	----
----	----	----

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

Number of Workers Onsite:

None

1-100

101-1,000

>1,000

Population Within 1 Mile:

_____ People

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:

_____

_____

_____

____

10. Air Pathway

Is There A Suspected Release to Air:

Yes **No**

Enter The Population on or Within:

0.0-0.25 Mile	_____
>0.25 - 0.5 Mile	_____
>0.5 - 1.0 Mile	_____
>1.0 - 2.0 Mile	_____
>2.0 - 3.0 Mile	_____
>3.0 - 4.0 Mile	_____
Total within 4 Miles	_____

Wetlands Located within 4 Miles of the Site:

Yes

No

If Yes, How Many Acres:

101 Acres

Other Sensitive Environments Located Within 4 Miles of the Site

Yes **No**

List All Sensitive Environments Within 0.5 Mile of the Site

Distance	Sensitive Environment Type/Wetlands Area (Acres)
Onsite	_____
0 - 0.25 Mile	_____
>0.25 - 0.5 Mile	_____

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: NY | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: Niagara Falls Air Reserve Station		Street Address: 2720 Kirkbridge Drive			
City: Niagara Falls	State: NY	Zip Code: 14304-5001	County: Niagara	Co Code: 15380	Cong. Dist. NY-26
Latitude: 43°06'50.69" N	Longitude: 78°56'13.93" W	Approximate Area of Site: 0.60 Acres / 26,112 Sq. Ft.	Status of Site: **Active** / Inactive	Not Specified / NA (GW Plume etc.)	

Site Name: Building 707

Site Description: Foam dump in 2003 from a heat detector malfunction. All of the foam was contained inside the building and cleaned up.

2. Owner/Operator Information

Owner: Niagara Falls Air Reserve Station			Operator: Same As Owner		
Street Address: 2720 Kirkbridge Drive			Street Address: ----		
City: Niagara Falls			City: ----		
State: New York	Zip Code:14304-5001	Telephone: N/A	State: ----	Zip Code: ----	Telephone: ----

Type of Ownership:		Type of Ownership:	
Private	County	Private	County
Federal Agency	Municipal	Federal Agency	Municipal
Name: DOD	Not Specified	Name:_____	Not Specified
State	Other: _____	State	Other: _____
Indian		Indian	

3. Site Evaluator Information

Name of Evaluator: Greg Carlson	Agency/Organization: Aerostar SES LLC		Date Prepared: 02-21-16	
Street Address: 1006 Floyd Culler Court		City: Oak Ridge	State: TN	
Name of EPA or State Agency Contact: N/A		Street Address: N/A		
City: N/A	State: N/A		Telephone: N/A	

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

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

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site:

Industrial | Mining | Other Federal
Commercial | **DOD** | Facility:_____
Residential | DOE |
Forest/Fields | DOI | Other: _____
Agriculture |

Site Setting:

Urban
Suburban
Rural

Years of Operation:

Beginning Year: 2006

Ending Year: Current

Unknown

Type of Site Operations (Circle All that Apply):

Manufacturing (Must select a sub-category):
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
Electronic Equipment

Mining (Must Select a Sub-Category):
Metals
Coal
Oil and Gas
Non-Metallic Minerals

Retail
Recycling
Junk/Salvage yard
Municipal Landfill
Other Landfill
DOD
DOE
DOI
Other Federal Facility:_____

RCRA
TSDF
Large Quantity Generator
Small Quantity Generator
Subtitle D
Municipal
Industrial
"Converter"
"Protective Filer"
"Non or Late Filer"
Not Specified
Other: _____

Waste Generated:

Onsite
Offsite
Onsite and Offsite

Waste Deposition Authorized By:

Present Owner
Former Owner
Present and Former Owner
Unauthorized
Unknown

Waste Accessible to the Public:

Yes
No

Distance to Nearest Dwelling School or Workplace:

_____0.0____ Miles

6. Waste Characteristics Information (Refer to PA Table 1 for WC Score)

Source Type (Select all that apply)	*Source Waste Quantity (Include Units)*	*Tier**
Landfill	_____	_____
Surface Impoundment	_____	_____
Drums	_____	_____
Tanks and Non Drum Containers	_____	_____
Chemical Waste Pile	_____	_____
Scrap Metal or Junk Pile	_____	_____
Tailings Pile	_____	_____
Trash Pile (open drum)	_____	_____
Land Treatment	_____	_____
Contaminated GW Plume	_____	_____
Contaminated SW/Sediment	_____	_____
Contaminated Soil	_____	_____
Other	_____	_____
No Sources	_____	_____

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

General Type of Waste (Circle all that Apply)

Metals | Pesticides/Herbicides
Organics | Acids/Bases
Inorganics | Oily Waste
Solvents | Municipal Waste
Paints/Pigments | Mining Waste
Laboratory/Medical Waste | Explosives
Radioactive Waste | **Other: AFFF**
Construction/Demolition Waste |

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

Solid
Sludge
Powder
Liquid
Gas

7. Groundwater Pathway

Is Groundwater Used for Drinking Within 4 Miles

Yes
No

If Yes, Distance to Nearest Drinking Well
____ Miles

Type of Drinking Water Wells Within 4 Miles (Circle Each that Applies)
Municipal
Private
None

Depth to Shallowest Aquifer:
2-7 feet

Karst Terrain/Aquifer Present:
Yes
No

Is There a Suspected Release to Groundwater:

Yes
No

Have Primary Target Drinking Water Wells Been Identified:
Yes
No

If Yes, Enter Primary Target Population
____ People

Nearest Designated Wellhead Protection Area:
Underlies Site
>0-4 Miles
None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0.0-0.25 Mile	----
>0.25 - 0.5 Mile	----
>0.5 - 1.0 Mile	----
>1.0 - 2.0 Mile	----
>2.0 - 3.0 Mile	----
>3.0 - 4.0 Mile	----
Total within 4 Miles	----

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream:

Stream **River** Pond **Lake**
Bay Ocean Other _____

Shortest Overland Distance From Any Source to Surface Water:

_____ Feet
_____ Miles

Is There as Suspected Release to Surface Water:

Yes
No

Site is Located in:

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

Drinking Water Intake Located Along the Surface Water Migration Path:

Yes
No

Have Primary Target Drinking Waster Intakes Been Identified:
Yes
No

If Yes, Distance to Nearest Drinking Water Intake
_____ Miles

If Yes, Enter Population Served By Target Intake
51,000 est. People

List All Secondary Drinking Water Intakes:

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

Total Within 15 Miles 0

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:

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
Wetlands and Waters of the US	Unknown	Unknown

Other Sensitive Environments Located Along the Surface Water Migration Path:

Migration Path

Yes

No

If Yes, Distance to Nearest Sensitive Environment: _____ Miles

Have Primary Sensitive Environments Been Identified:

Yes **No**

List All Sensitive Environments:

Water Body	Flow (cfs)	Sensitive Environment Type
----	----	----
----	----	----
----	----	----

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

Number of Workers Onsite:

None

1-100

101-1,000

>1,000

Population Within 1 Mile:

_____ People

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:

_____

_____

_____

____

10. Air Pathway

Is There A Suspected Release to Air:

Yes **No**

Enter The Population on or Within:

0.0-0.25 Mile	_____
>0.25 - 0.5 Mile	_____
>0.5 - 1.0 Mile	_____
>1.0 - 2.0 Mile	_____
>2.0 - 3.0 Mile	_____
>3.0 - 4.0 Mile	_____
Total within 4 Miles	_____

Wetlands Located within 4 Miles of the Site:

Yes

No

If Yes, How Many Acres:

101 Acres

Other Sensitive Environments Located Within 4 Miles of the Site

Yes **No**

List All Sensitive Environments Within 0.5 Mile of the Site

Distance	Sensitive Environment Type/Wetlands Area (Acres)
Onsite	_____
0 - 0.25 Mile	_____
>0.25 - 0.5 Mile	_____

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: NY | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: Niagara Falls Air Reserve Station		Street Address: 2720 Kirkbridge Drive			
City: Niagara Falls	State: NY	Zip Code: 14304-5001	County: Niagara	Co Code: 15380	Cong. Dist. NY-26
Latitude: 43°06'50.63" N	Longitude: 78°56'14.15" W	Approximate Area of Site: 0.95 Acres / 41,295 Sq. Ft.	Status of Site: Active / **Inactive**	Not Specified / NA (GW Plume etc.)	

Site Name: Building 706

Site Description: Building 706 is a former hanger that is now only a foundation. There was a release of 216 gallons on the ramp west of Building 706 in 1995. Building as-builts were obtained during the PA site visit.

2. Owner/Operator Information

Owner: Niagara Falls Air Reserve Station			Operator: Same As Owner		
Street Address: 2720 Kirkbridge Drive			Street Address: ----		
City: Niagara Falls			City: ----		
State: New York	Zip Code: 14304-5001	Telephone: N/A	State: ----	Zip Code: ----	Telephone: ----

Type of Ownership:		Type of Ownership:	
Private	County	Private	County
Federal Agency	Municipal	Federal Agency	Municipal
Name: DOD	Not Specified	Name:_____	Not Specified
State	Other: _____	State	Other: _____
Indian		Indian	

3. Site Evaluator Information

Name of Evaluator: Greg Carlson	Agency/Organization: Aerostar SES LLC		Date Prepared: 02-21-16	
Street Address: 1006 Floyd Culler Court		City: Oak Ridge	State: TN	
Name of EPA or State Agency Contact: N/A		Street Address: N/A		
City: N/A	State: N/A		Telephone: N/A	

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

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

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site:

Industrial | Mining | Other Federal
Commercial | **DOD** | Facility:_____
Residential | DOE |
Forest/Fields | DOI | Other: _____
Agriculture |

Site Setting:

Urban
Suburban
Rural

Years of Operation:

Beginning Year: _____

Ending Year: _____

Unknown

Type of Site Operations (Circle All that Apply):

Manufacturing (Must select a sub-category):
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
Electronic Equipment

Mining (Must Select a Sub-Category):
Metals
Coal
Oil and Gas
Non-Metallic Minerals

Retail
Recycling
Junk/Salvage yard
Municipal Landfill
Other Landfill
DOD
DOE
DOI
Other Federal Facility:_____

RCRA
TSDF
Large Quantity Generator
Small Quantity Generator
Subtitle D
Municipal
Industrial
"Converter"
"Protective Filer"
"Non or Late Filer"
Not Specified
Other: _____

Waste Generated:

Onsite
Offsite
Onsite and Offsite

Waste Deposition Authorized By:

Present Owner
Former Owner
Present and Former Owner
Unauthorized
Unknown

Waste Accessible to the Public:

Yes
No

Distance to Nearest Dwelling School or Workplace:

0.02 Miles

6. Waste Characteristics Information (Refer to PA Table 1 for WC Score)

Source Type (Select all that apply)	*Source Waste Quantity (Include Units)*	*Tier**
Landfill	_____	_____
Surface Impoundment	_____	_____
Drums	_____	_____
Tanks and Non Drum Containers	_____	_____
Chemical Waste Pile	_____	_____
Scrap Metal or Junk Pile	_____	_____
Tailings Pile	_____	_____
Trash Pile (open drum)	_____	_____
Land Treatment	_____	_____
Contaminated GW Plume	_____	_____
Contaminated SW/Sediment	_____	_____
Contaminated Soil	_____	_____
Other	_____	_____
No Sources	_____	_____

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

General Type of Waste (Circle all that Apply)

Metals | Pesticides/Herbicides
Organics | Acids/Bases
Inorganics | Oily Waste
Solvents | Municipal Waste
Paints/Pigments | Mining Waste
Laboratory/Medical Waste | Explosives
Radioactive Waste | **Other: AFFF**
Construction/Demolition Waste |

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

Solid
Sludge
Powder
Liquid
Gas

7. Groundwater Pathway

Is Groundwater Used for Drinking Within 4 Miles

Yes
No

If Yes, Distance to Nearest Drinking Well
____ Miles

Type of Drinking Water Wells Within 4 Miles (Circle Each that Applies)
Municipal
Private
None

Depth to Shallowest Aquifer:
2-7 feet

Karst Terrain/Aquifer Present:
Yes
No

Is There a Suspected Release to Groundwater:

Yes
No

Have Primary Target Drinking Water Wells Been Identified:
Yes
No

If Yes, Enter Primary Target Population
____ People

Nearest Designated Wellhead Protection Area:
Underlies Site
>0-4 Miles
None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0.0-0.25 Mile	----
>0.25 - 0.5 Mile	----
>0.5 - 1.0 Mile	----
>1.0 - 2.0 Mile	----
>2.0 - 3.0 Mile	----
>3.0 - 4.0 Mile	----
Total within 4 Miles	----

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream:

Stream **River** Pond **Lake**
Bay Ocean Other _____

Shortest Overland Distance From Any Source to Surface Water:

1,000 Feet
0.19 Miles

Is There as Suspected Release to Surface Water:

Yes
No

Site is Located in:

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

Drinking Water Intake Located Along the Surface Water Migration Path:

Yes
No

Have Primary Target Drinking Waster Intakes Been Identified:
Yes
No

If Yes, Distance to Nearest Drinking Water Intake
8.20 Miles

If Yes, Enter Population Served By Target Intake
51,000 est. People

List All Secondary Drinking Water Intakes:

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

Total Within 15 Miles 0

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:

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
Wetlands and Waters of the US	Unknown	Unknown

Other Sensitive Environments Located Along the Surface Water Migration Path:

Migration Path

Yes

No

If Yes, Distance to Nearest Sensitive Environment: _____ Miles

Have Primary Sensitive Environments Been Identified:

Yes **No**

List All Sensitive Environments:

Water Body	Flow (cfs)	Sensitive Environment Type
----	----	----
----	----	----
----	----	----

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

Number of Workers Onsite:

None

1-100

101-1,000

>1,000

Population Within 1 Mile:

_____ People

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:

_____

_____

_____

____

10. Air Pathway

Is There A Suspected Release to Air:

Yes **No**

Enter The Population on or Within:

0.0-0.25 Mile	_____
>0.25 - 0.5 Mile	_____
>0.5 - 1.0 Mile	_____
>1.0 - 2.0 Mile	_____
>2.0 - 3.0 Mile	_____
>3.0 - 4.0 Mile	_____
Total within 4 Miles	_____

Wetlands Located within 4 Miles of the Site:

Yes

No

If Yes, How Many Acres:

101 Acres

Other Sensitive Environments Located Within 4 Miles of the Site

Yes **No**

List All Sensitive Environments Within 0.5 Mile of the Site

Distance	Sensitive Environment Type/Wetlands Area (Acres)
Onsite	_____
0 - 0.25 Mile	_____
>0.25 - 0.5 Mile	_____

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: NY | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: Niagara Falls Air Reserve Station		Street Address: 2720 Kirkbridge Drive			
City: Niagara Falls	State: NY	Zip Code: 14304-5001	County: Niagara	Co Code: 15380	Cong. Dist. NY-26
Latitude: 43°06'50.80" N	Longitude: 78°56'29.06" W	Approximate Area of Site: 0.79 Acres / 34,200 Sq. Ft.	Status of Site: **Active** / Inactive	Not Specified / NA (GW Plume etc.)	

Site Name: Building 821 (Current Fire Station)

Site Description: Current Fire Station from 2006 to present. Chief Kennerson told us that they overfilled and damaged the overhead AFFF tank as soon as they moved into the building. This spill was contained. A 10-gallon spill is documented on the ramp south of the building in 2013. The spill was contained with absorbent material and removed.

2. Owner/Operator Information

Owner: Niagara Falls Air Reserve Station			Operator: Same As Owner		
Street Address: 2720 Kirkbridge Drive			Street Address: ----		
City: Niagara Falls			City: ----		
State: New York	Zip Code:14304-5001	Telephone: N/A	State: ----	Zip Code: ----	Telephone: ----

Type of Ownership:		Type of Ownership:	
Private	County	Private	County
Federal Agency	Municipal	Federal Agency	Municipal
Name: DOD	Not Specified	Name:_____	Not Specified
State	Other: _____	State	Other: _____
Indian		Indian	

3. Site Evaluator Information

Name of Evaluator: Greg Carlson	Agency/Organization: Aerostar SES LLC	Date Prepared: 02-21-16	
Street Address: 1006 Floyd Culler Court	City: Oak Ridge	State: TN	
Name of EPA or State Agency Contact: N/A	Street Address: N/A		
City: N/A	State: N/A	Telephone: N/A	

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

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

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site:

Industrial | Mining | Other Federal
Commercial | **DOD** | Facility:_____
Residential | DOE |
Forest/Fields | DOI | Other: _____
Agriculture |

Site Setting:

Urban
Suburban
Rural

Years of Operation:

Beginning Year: 2006

Ending Year: Current

Unknown

Type of Site Operations (Circle All that Apply):

Manufacturing (Must select a sub-category):
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
Electronic Equipment

Mining (Must Select a Sub-Category):
Metals
Coal
Oil and Gas
Non-Metallic Minerals

Retail
Recycling
Junk/Salvage yard
Municipal Landfill
Other Landfill
DOD
DOE
DOI
Other Federal Facility:_____

RCRA
TSDF
Large Quantity Generator
Small Quantity Generator
Subtitle D
Municipal
Industrial
"Converter"
"Protective Filer"
"Non or Late Filer"
Not Specified
Other: _____

Waste Generated:

Onsite
Offsite
Onsite and Offsite

Waste Deposition Authorized By:

Present Owner
Former Owner
Present and Former Owner
Unauthorized
Unknown

Waste Accessible to the Public:

Yes
No

Distance to Nearest Dwelling School or Workplace:

_____0.0____ Miles

6. Waste Characteristics Information (Refer to PA Table 1 for WC Score)

Source Type (Select all that apply)	*Source Waste Quantity (Include Units)*	*Tier**
Landfill	_____	_____
Surface Impoundment	_____	_____
Drums	_____	_____
Tanks and Non Drum Containers	_____	_____
Chemical Waste Pile	_____	_____
Scrap Metal or Junk Pile	_____	_____
Tailings Pile	_____	_____
Trash Pile (open drum)	_____	_____
Land Treatment	_____	_____
Contaminated GW Plume	_____	_____
Contaminated SW/Sediment	_____	_____
Contaminated Soil	_____	_____
Other	_____	_____
No Sources	_____	_____

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

General Type of Waste (Circle all that Apply)

Metals
Organics
Inorganics
Solvents
Paints/Pigments
Laboratory/Medical Waste
Radioactive Waste
Construction/Demolition Waste
Pesticides/Herbicides
Acids/Bases
Oily Waste
Municipal Waste
Mining Waste
Explosives
Other: AFFF

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

Solid
Sludge
Powder
Liquid
Gas

7. Groundwater Pathway

Is Groundwater Used for Drinking Within 4 Miles

Yes
No

If Yes, Distance to Nearest Drinking Well
____ Miles

Type of Drinking Water Wells Within 4 Miles (Circle Each that Applies)
Municipal
Private
None

Depth to Shallowest Aquifer:
2-7 feet

Karst Terrain/Aquifer Present:
Yes
No

Is There a Suspected Release to Groundwater:

Yes
No

Have Primary Target Drinking Water Wells Been Identified:
Yes
No

If Yes, Enter Primary Target Population
____ People

Nearest Designated Wellhead Protection Area:
Underlies Site
>0-4 Miles
None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0.0-0.25 Mile	____
>0.25 - 0.5 Mile	____
>0.5 - 1.0 Mile	____
>1.0 - 2.0 Mile	____
>2.0 - 3.0 Mile	____
>3.0 - 4.0 Mile	____
Total within 4 Miles	____

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream:

Stream **River** Pond **Lake**
Bay Ocean Other _____

Shortest Overland Distance From Any Source to Surface Water:

_____ Feet
_____ Miles

Is There as Suspected Release to Surface Water:

Yes
No

Site is Located in:

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

Drinking Water Intake Located Along the Surface Water Migration Path:

Yes
No

Have Primary Target Drinking Waster Intakes Been Identified:
Yes
No

If Yes, Distance to Nearest Drinking Water Intake
_____ Miles

If Yes, Enter Population Served By Target Intake
51,000 est. People

List All Secondary Drinking Water Intakes:

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

Total Within 15 Miles 0

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:

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
Wetlands and Waters of the US	Unknown	Unknown

Other Sensitive Environments Located Along the Surface Water Migration Path:

Migration Path

Yes

No

If Yes, Distance to Nearest Sensitive Environment: _____ Miles

Have Primary Sensitive Environments Been Identified:

Yes **No**

List All Sensitive Environments:

Water Body	Flow (cfs)	Sensitive Environment Type
----	----	----
----	----	----
----	----	----

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

Number of Workers Onsite:

None

1-100

101-1,000

>1,000

Population Within 1 Mile:

_____ People

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:

_____

_____

_____

____

10. Air Pathway

Is There A Suspected Release to Air:

Yes **No**

Enter The Population on or Within:

0.0-0.25 Mile	_____
>0.25 - 0.5 Mile	_____
>0.5 - 1.0 Mile	_____
>1.0 - 2.0 Mile	_____
>2.0 - 3.0 Mile	_____
>3.0 - 4.0 Mile	_____
Total within 4 Miles	_____

Wetlands Located within 4 Miles of the Site:

Yes If Yes, How Many Acres:

No 101 Acres

Other Sensitive Environments Located Within 4 Miles of the Site

Yes **No**

List All Sensitive Environments Within 0.5 Mile of the Site

Distance	Sensitive Environment Type/Wetlands Area (Acres)
Onsite	_____
0 - 0.25 Mile	_____
>0.25 - 0.5 Mile	_____

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: NY | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: Niagara Falls Air Reserve Station		Street Address: 2720 Kirkbridge Drive			
City: Niagara Falls	State: NY	Zip Code: 14304-5001	County: Niagara	Co Code: 15380	Cong. Dist. NY-26
Latitude: 43°06'50.60" N	Longitude: 78°56'14.12" W	Approximate Area of Site: 0.44 Acres / 19,240 Sq. Ft.	Status of Site: **Active** / Inactive	Not Specified / NA (GW Plume etc.)	

Site Name: Building 700

Site Description: This is the former fire station, which is now EOD and bioenvironmental. The building housed an overhead tank where equipment was filled with AFFF. Documented spill of 3 to 5 gallons at the south side ramp area of building in 2007.

2. Owner/Operator Information

Owner	Operator
Street Address: 2720 Kirkbridge Drive	Street Address: ----
City: Niagara Falls	City: ----
State: New York / Zip Code: 14304-5001 / Telephone: N/A	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: Greg Carlson	Agency/Organization: Aerostar SES LLC	Date Prepared: 02-21-16
Street Address: 1006 Floyd Culler Court	City: Oak Ridge	State: TN
Name of EPA or State Agency Contact: N/A	Street Address: N/A	
City: N/A	State: N/A	Telephone: N/A

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:

Industrial | Mining | Other Federal
Commercial | **DOD** | Facility:_____
Residential | DOE |
Forest/Fields | DOI | Other: _____
Agriculture |

Site Setting:

Urban
Suburban
Rural

Years of Operation:

Beginning Year: _____
Ending Year: _____
Unknown

Type of Site Operations (Circle All that Apply):

Manufacturing (Must select a sub-category):
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
Electronic Equipment

Mining (Must Select a Sub-Category):
Metals
Coal
Oil and Gas
Non-Metallic Minerals

Retail
Recycling
Junk/Salvage yard
Municipal Landfill
Other Landfill
DOD
DOE
DOI
Other Federal Facility:_____

RCRA
TSDF
Large Quantity Generator
Small Quantity Generator
Subtitle D
Municipal
Industrial
"Converter"
"Protective Filer"
"Non or Late Filer"
Not Specified
Other: _____

Waste Generated:

Onsite
Offsite
Onsite and Offsite

Waste Deposition Authorized By:

Present Owner
Former Owner
Present and Former Owner
Unauthorized
Unknown

Waste Accessible to the Public:

Yes
No

Distance to Nearest Dwelling School or Workplace:

_____0.0_____ Miles

6. Waste Characteristics Information (Refer to PA Table 1 for WC Score)

Source Type (Select all that apply)	*Source Waste Quantity (Include Units)*	*Tier**
Landfill	_____	_____
Surface Impoundment	_____	_____
Drums	_____	_____
Tanks and Non Drum Containers	_____	_____
Chemical Waste Pile	_____	_____
Scrap Metal or Junk Pile	_____	_____
Tailings Pile	_____	_____
Trash Pile (open drum)	_____	_____
Land Treatment	_____	_____
Contaminated GW Plume	_____	_____
Contaminated SW/Sediment	_____	_____
Contaminated Soil	_____	_____
Other	_____	_____
No Sources	_____	_____

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

General Type of Waste (Circle all that Apply)

Metals
Organics
Inorganics
Solvents
Paints/Pigments
Laboratory/Medical Waste
Radioactive Waste
Construction/Demolition Waste
Pesticides/Herbicides
Acids/Bases
Oily Waste
Municipal Waste
Mining Waste
Explosives
Other: AFFF

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

Solid
Sludge
Powder
Liquid
Gas

7. Groundwater Pathway

Is Groundwater Used for Drinking Within 4 Miles

Yes
No

If Yes, Distance to Nearest Drinking Well
____ Miles

Type of Drinking Water Wells Within 4 Miles (Circle Each that Applies)
Municipal
Private
None

Depth to Shallowest Aquifer:
2-7 feet

Karst Terrain/Aquifer Present:
Yes
No

Is There a Suspected Release to Groundwater:

Yes
No

Have Primary Target Drinking Water Wells Been Identified:
Yes
No

If Yes, Enter Primary Target Population
____ People

Nearest Designated Wellhead Protection Area:
Underlies Site
>0-4 Miles
None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0.0-0.25 Mile	----
>0.25 - 0.5 Mile	----
>0.5 - 1.0 Mile	----
>1.0 - 2.0 Mile	----
>2.0 - 3.0 Mile	----
>3.0 - 4.0 Mile	----
Total within 4 Miles	----

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream:

Stream **River** Pond **Lake**
Bay Ocean Other _____

Shortest Overland Distance From Any Source to Surface Water:

1,170 Feet
0.22 Miles

Is There as Suspected Release to Surface Water:

Yes
No

Site is Located in:

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

Drinking Water Intake Located Along the Surface Water Migration Path:

Yes
No

Have Primary Target Drinking Waster Intakes Been Identified:
Yes
No

If Yes, Distance to Nearest Drinking Water Intake
8.18 Miles

If Yes, Enter Population Served By Target Intake
51,000 est. People

List All Secondary Drinking Water Intakes:

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

Total Within 15 Miles 0

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:

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
Wetlands and Waters of the US	Unknown	Unknown

Other Sensitive Environments Located Along the Surface Water Migration Path:

Migration Path

Yes

No

If Yes, Distance to Nearest Sensitive Environment: _____ Miles

Have Primary Sensitive Environments Been Identified:

Yes **No**

List All Sensitive Environments:

Water Body	Flow (cfs)	Sensitive Environment Type
----	----	----
----	----	----
----	----	----

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

Number of Workers Onsite:

None

1-100

101-1,000

>1,000

Population Within 1 Mile:

_____ People

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:

_____

_____

_____

____

10. Air Pathway

Is There A Suspected Release to Air:

Yes **No**

Enter The Population on or Within:

0.0-0.25 Mile	_____
>0.25 - 0.5 Mile	_____
>0.5 - 1.0 Mile	_____
>1.0 - 2.0 Mile	_____
>2.0 - 3.0 Mile	_____
>3.0 - 4.0 Mile	_____
Total within 4 Miles	_____

Wetlands Located within 4 Miles of the Site:

Yes

No

If Yes, How Many Acres:

101 Acres

Other Sensitive Environments Located Within 4 Miles of the Site

Yes **No**

List All Sensitive Environments Within 0.5 Mile of the Site

Distance	Sensitive Environment Type/Wetlands Area (Acres)
Onsite	_____
0 - 0.25 Mile	_____
>0.25 - 0.5 Mile	_____

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: NY | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: Niagara Falls Air Reserve Station		Street Address: 2720 Kirkbridge Drive			
City: Niagara Falls	State: NY	Zip Code: 14304-5001	County: Niagara	Co Code: 15380	Cong. Dist. NY-26
Latitude: 43°06'37.96" N	Longitude: 78°57'24.29" W	Approximate Area of Site: 25 Acres; 1,089,195 Sq. Ft.	Status of Site: Active / Not Specified; **Inactive** / NA (GW Plume etc.)		

Site Name: Blue Angels Crash Site

Site Description: 1985 Fatal Blue Angel A-4F Skyhawk crash on the airfield after midair collision with another Blue Angel A-4F aircraft during the Western New York International Air Show. AFFF was used to extinguish the fire. The other plane crashed off base after the pilot ejected.

2. Owner/Operator Information

Owner: Niagara Falls Air Reserve Station			Operator: Same As Owner		
Street Address: 2720 Kirkbridge Drive			Street Address: ----		
City: Niagara Falls			City: ----		
State: New York	Zip Code:14304-5001	Telephone: N/A	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: Greg Carlson	Agency/Organization: Aerostar SES LLC		Date Prepared: 02-21-16	
Street Address: 1006 Floyd Culler Court		City: Oak Ridge	State: TN	
Name of EPA or State Agency Contact: N/A		Street Address: N/A		
City: N/A	State: N/A		Telephone: N/A	

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:

Industrial | Mining | Other Federal
Commercial | **DOD** | Facility:_____
Residential | DOE |
Forest/Fields | DOI | Other: _____
Agriculture |

Site Setting:

Urban
Suburban
Rural

Years of Operation:

Beginning Year: 1985

Ending Year: 1985

Unknown

Type of Site Operations (Circle All that Apply):

Manufacturing (Must select a sub-category):
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
Electronic Equipment

Mining (Must Select a Sub-Category):
Metals
Coal
Oil and Gas
Non-Metallic Minerals

Retail
Recycling
Junk/Salvage yard
Municipal Landfill
Other Landfill
DOD
DOE
DOI
Other Federal Facility:_____

RCRA
TSDF
Large Quantity Generator
Small Quantity Generator
Subtitle D
Municipal
Industrial
"Converter"
"Protective Filer"
"Non or Late Filer"
Not Specified
Other: _____

Waste Generated:

Onsite
Offsite
Onsite and Offsite

Waste Deposition Authorized By:

Present Owner
Former Owner
Present and Former Owner
Unauthorized
Unknown

Waste Accessible to the Public:

Yes
No

Distance to Nearest Dwelling School or Workplace:

0.34 Miles

6. Waste Characteristics Information (Refer to PA Table 1 for WC Score)

Source Type (Select all that apply)	*Source Waste Quantity (Include Units)*	*Tier**
Landfill	_____	_____
Surface Impoundment	_____	_____
Drums	_____	_____
Tanks and Non Drum Containers	_____	_____
Chemical Waste Pile	_____	_____
Scrap Metal or Junk Pile	_____	_____
Tailings Pile	_____	_____
Trash Pile (open drum)	_____	_____
Land Treatment	_____	_____
Contaminated GW Plume	_____	_____
Contaminated SW/Sediment	_____	_____
Contaminated Soil	_____	_____
Other	_____	_____
No Sources	_____	_____

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

General Type of Waste (Circle all that Apply)

Metals
Organics
Inorganics
Solvents
Paints/Pigments
Laboratory/Medical Waste
Radioactive Waste
Construction/Demolition Waste
Pesticides/Herbicides
Acids/Bases
Oily Waste
Municipal Waste
Mining Waste
Explosives
Other: AFFF

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

Solid
Sludge
Powder
Liquid
Gas

7. Groundwater Pathway

Is Groundwater Used for Drinking Within 4 Miles	Is There a Suspected Release to Groundwater:	List Secondary Target Population Served by Ground Water Withdrawn From:	
Yes	**Yes**		
No	No	0.0-0.25 Mile	----
If Yes, Distance to Nearest Drinking Well ---- Miles	Have Primary Target Drinking Water Wells Been Identified:	>0.25 - 0.5 Mile	----
	Yes	>0.5 - 1.0 Mile	----
Type of Drinking Water Wells Within 4 Miles (Circle Each that Applies)	**No**	>1.0 - 2.0 Mile	----
Municipal	If Yes, Enter Primary Target Population		
Private	---- People	>2.0 - 3.0 Mile	----
None		>3.0 - 4.0 Mile	----
Depth to Shallowest Aquifer: 2-7 feet	Nearest Designated Wellhead Protection Area:		
	Underlies Site	Total within 4 Miles	----
Karst Terrain/Aquifer Present:	>0-4 Miles		
Yes	**None Within 4 Miles**		
No			

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream:	Shortest Overland Distance From Any Source to Surface Water:
Stream **River** Pond **Lake**	0.0 Feet
Bay Ocean Other _____	0.0 Miles
Is There as Suspected Release to Surface Water:	Site is Located in:
Yes	Annual - 10 yr. Floodplain
No	**>10 yr. - 100 yr. Floodplain**
	>100 yr. - 500 yr. Floodplain
	> 500 yr. Floodplain
Drinking Water Intake Located Along the Surface Water Migration Path:	List All Secondary Drinking Water Intakes:
Yes	
No	
Have Primary Target Drinking Waster Intakes Been Identified:	
Yes If Yes, Distance to Nearest Drinking Water Intake	
No 8.03 Miles	
If Yes, Enter Population Served By Target Intake	
51,000 est. People	
Fisheries Located Along the Surface Water Migration Path:	List All Secondary Target Fisheries:
Yes **No** If Yes, Distance to Nearest Fishery:	
_____ Miles	
Have Primary Target Fisheries Been Identified:	
Yes **No**	

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

Total Within 15 Miles 0

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
Wetlands and Waters of the US	Unknown	Unknown

Other Sensitive Environments Located Along the Surface Water Migration Path:

Migration Path

Yes

No

If Yes, Distance to Nearest Sensitive Environment: _____ Miles

Have Primary Sensitive Environments Been Identified:

Yes **No**

List All Sensitive Environments:

Water Body	Flow (cfs)	Sensitive Environment Type
----	----	----
----	----	----
----	----	----

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

Number of Workers Onsite:

None

1-100

101-1,000

>1,000

Population Within 1 Mile:

_____ People

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:

_____

_____

_____

____

10. Air Pathway

Is There A Suspected Release to Air:

Yes **No**

Enter The Population on or Within:

0.0-0.25 Mile	_____
>0.25 - 0.5 Mile	_____
>0.5 - 1.0 Mile	_____
>1.0 - 2.0 Mile	_____
>2.0 - 3.0 Mile	_____
>3.0 - 4.0 Mile	_____
Total within 4 Miles	_____

Wetlands Located within 4 Miles of the Site:

Yes

No

If Yes, How Many Acres:

101 Acres

Other Sensitive Environments Located Within 4 Miles of the Site

Yes **No**

List All Sensitive Environments Within 0.5 Mile of the Site

Distance	Sensitive Environment Type/Wetlands Area (Acres)
Onsite	_____
0 - 0.25 Mile	_____
>0.25 - 0.5 Mile	_____

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: NY | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: Niagara Falls Air Reserve Station		Street Address: 2720 Kirkbridge Drive			
City: Niagara Falls	State: NY	Zip Code: 14304-5001	County: Niagara	Co Code: 15380	Cong. Dist. NY-26
Latitude: 43°06'57.94" N	Longitude: 78°55'56.55" W	Approximate Area of Site: 0.29 Acres / 12,677 Sq. Ft.	Status of Site: **Active** / Inactive	Not Specified / NA (GW Plume etc.)	

Site Name: Former Tank B Dike

Site Description: The former Tank B dike is used for spray testing of AFFF by the fire department. All AFFF is contained within the dike. Grass is growing in the expansion cracks.

2. Owner/Operator Information

Owner: Niagara Falls Air Reserve Station			Operator: Same As Owner		
Street Address: 2720 Kirkbridge Drive			Street Address: ----		
City: Niagara Falls			City: ----		
State: New York	Zip Code:14304-5001	Telephone: N/A	State: ----	Zip Code: ----	Telephone: ----

Type of Ownership:		Type of Ownership:	
Private	County	Private	County
Federal Agency	Municipal	Federal Agency	Municipal
Name: DOD	Not Specified	Name:_____	Not Specified
State	Other: _____	State	Other: _____
Indian		Indian	

3. Site Evaluator Information

Name of Evaluator: Greg Carlson	Agency/Organization: Aerostar SES LLC	Date Prepared: 02-21-16	
Street Address: 1006 Floyd Culler Court	City: Oak Ridge	State: TN	
Name of EPA or State Agency Contact: N/A	Street Address: N/A		
City: N/A	State: N/A	Telephone: N/A	

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

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

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site:

Industrial | Mining | Other Federal
Commercial | **DOD** | Facility:_____
Residential | DOE |
Forest/Fields | DOI | Other: _____
Agriculture |

Site Setting:

Urban
Suburban
Rural

Years of Operation:

Beginning Year: _____

Ending Year: _____

Unknown

Type of Site Operations (Circle All that Apply):

Manufacturing (Must select a sub-category):

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
Electronic Equipment

Mining (Must Select a Sub-Category):

Metals
Coal
Oil and Gas
Non-Metallic Minerals

Retail
Recycling
Junk/Salvage yard
Municipal Landfill
Other Landfill
DOD
DOE
DOI
Other Federal Facility:_____

RCRA

TSDF
Large Quantity Generator
Small Quantity Generator
Subtitle D
Municipal
Industrial
"Converter"
"Protective Filer"
"Non or Late Filer"
Not Specified
Other: _____

Waste Generated:

Onsite
Offsite
Onsite and Offsite

Waste Deposition Authorized By:

Present Owner
Former Owner
Present and Former Owner
Unauthorized
Unknown

Waste Accessible to the Public:

Yes
No

Distance to Nearest Dwelling School or Workplace:

0.06 Miles

6. Waste Characteristics Information (Refer to PA Table 1 for WC Score)

Source Type (Select all that apply)	*Source Waste Quantity (Include Units)*	*Tier**
Landfill	_____	_____
Surface Impoundment	_____	_____
Drums	_____	_____
Tanks and Non Drum Containers	_____	_____
Chemical Waste Pile	_____	_____
Scrap Metal or Junk Pile	_____	_____
Tailings Pile	_____	_____
Trash Pile (open drum)	_____	_____
Land Treatment	_____	_____
Contaminated GW Plume	_____	_____
Contaminated SW/Sediment	_____	_____
Contaminated Soil	_____	_____
Other	_____	_____
No Sources	_____	_____

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

General Type of Waste (Circle all that Apply)

Metals | Pesticides/Herbicides
Organics | Acids/Bases
Inorganics | Oily Waste
Solvents | Municipal Waste
Paints/Pigments | Mining Waste
Laboratory/Medical Waste | Explosives
Radioactive Waste | **Other: AFFF**
Construction/Demolition Waste |

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

Solid
Sludge
Powder
Liquid
Gas

7. Groundwater Pathway

Is Groundwater Used for Drinking Within 4 Miles

Yes
No

If Yes, Distance to Nearest Drinking Well
____ Miles

Type of Drinking Water Wells Within 4 Miles (Circle Each that Applies)
Municipal
Private
None

Depth to Shallowest Aquifer:
2-7 feet

Karst Terrain/Aquifer Present:
Yes
No

Is There a Suspected Release to Groundwater:

Yes
No

Have Primary Target Drinking Water Wells Been Identified:
Yes
No

If Yes, Enter Primary Target Population
____ People

Nearest Designated Wellhead Protection Area:
Underlies Site
>0-4 Miles
None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0.0-0.25 Mile	____
>0.25 - 0.5 Mile	____
>0.5 - 1.0 Mile	____
>1.0 - 2.0 Mile	____
>2.0 - 3.0 Mile	____
>3.0 - 4.0 Mile	____
Total within 4 Miles	____

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream:

Stream **River** Pond **Lake**
Bay Ocean Other _____

Shortest Overland Distance From Any Source to Surface Water:

_____ Feet
_____ Miles

Is There as Suspected Release to Surface Water:

Yes
No

Site is Located in:

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

Drinking Water Intake Located Along the Surface Water Migration Path:

Yes
No

Have Primary Target Drinking Waster Intakes Been Identified:
Yes
No

If Yes, Distance to Nearest Drinking Water Intake
_____ Miles

If Yes, Enter Population Served By Target Intake
51,000 est. People

List All Secondary Drinking Water Intakes:

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

Total Within 15 Miles 0

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:

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
Wetlands and Waters of the US	Unknown	Unknown

Other Sensitive Environments Located Along the Surface Water Migration Path:

Migration Path

Yes

No

If Yes, Distance to Nearest Sensitive Environment: _____ Miles

Have Primary Sensitive Environments Been Identified:

Yes **No**

List All Sensitive Environments:

Water Body	Flow (cfs)	Sensitive Environment Type
----	----	----
----	----	----
----	----	----

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

Number of Workers Onsite:

None

1-100

101-1,000

>1,000

Population Within 1 Mile:

_____ People

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:

_____

_____

_____

____

10. Air Pathway

Is There A Suspected Release to Air:

Yes **No**

Enter The Population on or Within:

0.0-0.25 Mile	_____
>0.25 - 0.5 Mile	_____
>0.5 - 1.0 Mile	_____
>1.0 - 2.0 Mile	_____
>2.0 - 3.0 Mile	_____
>3.0 - 4.0 Mile	_____
Total within 4 Miles	_____

Wetlands Located within 4 Miles of the Site:

Yes

No

If Yes, How Many Acres:

101 Acres

Other Sensitive Environments Located Within 4 Miles of the Site

Yes **No**

List All Sensitive Environments Within 0.5 Mile of the Site

Distance	Sensitive Environment Type/Wetlands Area (Acres)
Onsite	_____
0 - 0.25 Mile	_____
>0.25 - 0.5 Mile	_____

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: NY | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: Niagara Falls Air Reserve Station		Street Address: 2720 Kirkbridge Drive			
City: Niagara Falls	State: NY	Zip Code: 14304-5001	County: Niagara	Co Code: 15380	Cong. Dist. NY-26
Latitude: 43°06'48.13" N	Longitude: 78°56'25.60" W	Approximate Area of Site: 8.71 Acres / 379,405 Sq. Ft.	Status of Site: **Active** / Inactive	Not Specified / NA (GW Plume etc.)	

Site Name: Fox Row/Taxiway A/Delta Row Spill

Site Description:A fire truck was siphoning out AFFF while responding to an exercise on Echo and Delta Row from the old fire station (Building 700). Spill records show 25 gallons were released. Jim Nagelhout told us that they left it to dissipate in the sunlight. They later tried to hold back the water used during the exercise in the sluice gate and saw the water foam up while they were slowly releasing it to Outfall 5.

2. Owner/Operator Information

Owner: Niagara Falls Air Reserve Station			Operator: Same As Owner		
Street Address: 10405 Lockport Road			Street Address: ----		
City: Niagara Falls			City: ----		
State: New York	Zip Code:14304-5001	Telephone: N/A	State: ----	Zip Code: ----	Telephone: ----

Type of Ownership:		Type of Ownership:	
Private	County	Private	County
Federal Agency	Municipal	Federal Agency	Municipal
Name: DOD	Not Specified	Name:_____	Not Specified
State	Other: _____	State	Other: _____
Indian		Indian	

3. Site Evaluator Information

Name of Evaluator: Greg Carlson	Agency/Organization: Aerostar SES LLC	Date Prepared: 02-21-16	
Street Address: 1006 Floyd Culler Court	City: Oak Ridge	State: TN	
Name of EPA or State Agency Contact: N/A	Street Address: N/A		
City: N/A	State: N/A	Telephone: N/A	

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

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

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site:

Industrial | Mining | Other Federal
Commercial | **DOD** | Facility:_____
Residential | DOE |
Forest/Fields | DOI | Other: _____
Agriculture |

Site Setting:

Urban
Suburban
Rural

Years of Operation:

Beginning Year: _____

Ending Year: _____

Unknown

Type of Site Operations (Circle All that Apply):

Manufacturing (Must select a sub-category):

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
Electronic Equipment

Mining (Must Select a Sub-Category):

Metals
Coal
Oil and Gas
Non-Metallic Minerals

Retail
Recycling
Junk/Salvage yard
Municipal Landfill
Other Landfill
DOD
DOE
DOI
Other Federal Facility:_____

RCRA

TSDF
Large Quantity Generator
Small Quantity Generator
Subtitle D
Municipal
Industrial
"Converter"
"Protective Filer"
"Non or Late Filer"
Not Specified
Other: _____

Waste Generated:

Onsite
Offsite
Onsite and Offsite

Waste Deposition Authorized By:

Present Owner
Former Owner
Present and Former Owner
Unauthorized
Unknown

Waste Accessible to the Public:

Yes
No

Distance to Nearest Dwelling School or Workplace:

0.04 Miles

6. Waste Characteristics Information (Refer to PA Table 1 for WC Score)

Source Type (Select all that apply)	*Source Waste Quantity (Include Units)*	*Tier**
Landfill	_____	_____
Surface Impoundment	_____	_____
Drums	_____	_____
Tanks and Non Drum Containers	_____	_____
Chemical Waste Pile	_____	_____
Scrap Metal or Junk Pile	_____	_____
Tailings Pile	_____	_____
Trash Pile (open drum)	_____	_____
Land Treatment	_____	_____
Contaminated GW Plume	_____	_____
Contaminated SW/Sediment	_____	_____
Contaminated Soil	_____	_____
Other	_____	_____
No Sources	_____	_____

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

General Type of Waste (Circle all that Apply)

Metals | Pesticides/Herbicides
Organics | Acids/Bases
Inorganics | Oily Waste
Solvents | Municipal Waste
Paints/Pigments | Mining Waste
Laboratory/Medical Waste | Explosives
Radioactive Waste | **Other: AFFF**
Construction/Demolition Waste |

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

Solid
Sludge
Powder
Liquid
Gas

7. Groundwater Pathway

Is Groundwater Used for Drinking Within 4 Miles

Yes
No

If Yes, Distance to Nearest Drinking Well
____ Miles

Type of Drinking Water Wells Within 4 Miles (Circle Each that Applies)
Municipal
Private
None

Depth to Shallowest Aquifer:
2-7 feet

Karst Terrain/Aquifer Present:
Yes
No

Is There a Suspected Release to Groundwater:

Yes
No

Have Primary Target Drinking Water Wells Been Identified:
Yes
No

If Yes, Enter Primary Target Population
____ People

Nearest Designated Wellhead Protection Area:
Underlies Site
>0-4 Miles
None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0.0-0.25 Mile	----
>0.25 - 0.5 Mile	----
>0.5 - 1.0 Mile	----
>1.0 - 2.0 Mile	----
>2.0 - 3.0 Mile	----
>3.0 - 4.0 Mile	----
Total within 4 Miles	----

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream:

Stream **River** Pond **Lake**
Bay Ocean Other _____

Shortest Overland Distance From Any Source to Surface Water:

150 Feet
0.04 Miles

Is There as Suspected Release to Surface Water:

Yes
No

Site is Located in:

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

Drinking Water Intake Located Along the Surface Water Migration Path:

Yes
No

Have Primary Target Drinking Waster Intakes Been Identified:
Yes
No

If Yes, Distance to Nearest Drinking Water Intake
8.08 Miles

If Yes, Enter Population Served By Target Intake
51,000 est. People

List All Secondary Drinking Water Intakes:

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

Total Within 15 Miles 0

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:

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
Wetlands and Waters of the US	Unknown	Unknown

Other Sensitive Environments Located Along the Surface Water Migration Path:

Migration Path

Yes

No

If Yes, Distance to Nearest Sensitive Environment: _____ Miles

Have Primary Sensitive Environments Been Identified:

Yes **No**

List All Sensitive Environments:

Water Body	Flow (cfs)	Sensitive Environment Type
----	----	----
----	----	----
----	----	----

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

Number of Workers Onsite:

None

1-100

101-1,000

>1,000

Population Within 1 Mile:

_____ People

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:

_____

_____

_____

____

10. Air Pathway

Is There A Suspected Release to Air:

Yes **No**

Enter The Population on or Within:

0.0-0.25 Mile	_____
>0.25 - 0.5 Mile	_____
>0.5 - 1.0 Mile	_____
>1.0 - 2.0 Mile	_____
>2.0 - 3.0 Mile	_____
>3.0 - 4.0 Mile	_____
Total within 4 Miles	_____

Wetlands Located within 4 Miles of the Site:

Yes

No

If Yes, How Many Acres:

101 Acres

Other Sensitive Environments Located Within 4 Miles of the Site

Yes **No**

List All Sensitive Environments Within 0.5 Mile of the Site

Distance	Sensitive Environment Type/Wetlands Area (Acres)
Onsite	_____
0 - 0.25 Mile	_____
>0.25 - 0.5 Mile	_____

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: NY | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: Niagara Falls Air Reserve Station		Street Address: 2720 Kirkbridge Drive			
City: Niagara Falls	State: NY	Zip Code: 14304-5001	County: Niagara	Co Code: 15380	Cong. Dist. NY-26

Latitude:	Longitude:	Approximate Area of Site:	Status of Site:
Outfall 004: 43°06'43.66" N	Outfall 004: 78°55'59.24" W	---- Acres	**Active** Not Specified
Outfall 005: 43°06'43.06" N	Outfall 005: 78°56'33.26" W		
Outfall 007: 43°06'25.36" N	Outfall 007: 78°56'21.16" W		
Outfall 009: 43°06'42.75" N	Outfall 009: 78°56'22.97" W	---- Sq. Ft.	Inactive NA (GW Plume etc.)

Site Name: Various Stormwater Outfalls (004, 005, 007, 009)

Site Description: 4 stormwater outfalls were determined to drain from all potential AFFF release locations throughout Niagara ARS. They were outfalls 004, 005, 007 and 009.

2. Owner/Operator Information

Owner: Niagara Falls Air Reserve Station			Operator: Same As Owner		
Street Address: 2720 Kirkbridge Drive			Street Address: ----		
City: Niagara Falls			City: ----		
State: New York	Zip Code:14304-5001	Telephone: N/A	State: ----	Zip Code: ----	Telephone: ----

Type of Ownership:		Type of Ownership:	
Private	County	Private	County
Federal Agency	Municipal	Federal Agency	Municipal
Name: DOD	Not Specified	Name:_____	Not Specified
State	Other: _____	State	Other: _____
Indian		Indian	

3. Site Evaluator Information

Name of Evaluator: Greg Carlson	Agency/Organization: Aerostar SES LLC	Date Prepared: 02-21-16
Street Address: 1006 Floyd Culler Court	City: Oak Ridge	State: TN
Name of EPA or State Agency Contact: N/A	Street Address: N/A	
City: N/A	State: N/A	Telephone: N/A

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

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

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site:

Industrial | Mining | Other Federal
Commercial | **DOD** | Facility:_____
Residential | DOE |
Forest/Fields | DOI | Other: _____
Agriculture |

Site Setting:

Urban
Suburban
Rural

Years of Operation:

Beginning Year: _____

Ending Year: _____

Unknown

Type of Site Operations (Circle All that Apply):

Manufacturing (Must select a sub-category):

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
Electronic Equipment

Mining (Must Select a Sub-Category):

Metals
Coal
Oil and Gas
Non-Metallic Minerals

Retail
Recycling
Junk/Salvage yard
Municipal Landfill
Other Landfill
DOD
DOE
DOI
Other Federal Facility:_____

RCRA

TSDF
Large Quantity Generator
Small Quantity Generator
Subtitle D
Municipal
Industrial
"Converter"
"Protective Filer"
"Non or Late Filer"
Not Specified
Other: _____

Waste Generated:

Onsite
Offsite
Onsite and Offsite

Waste Deposition Authorized By:

Present Owner
Former Owner
Present and Former Owner
Unauthorized
Unknown

Waste Accessible to the Public:

Yes
No

Distance to Nearest Dwelling School or Workplace:

_____N/A_____ Miles

6. Waste Characteristics Information (Refer to PA Table 1 for WC Score)

Source Type (Select all that apply)	*Source Waste Quantity (Include Units)*	*Tier**
Landfill	_____	_____
Surface Impoundment	_____	_____
Drums	_____	_____
Tanks and Non Drum Containers	_____	_____
Chemical Waste Pile	_____	_____
Scrap Metal or Junk Pile	_____	_____
Tailings Pile	_____	_____
Trash Pile (open drum)	_____	_____
Land Treatment	_____	_____
Contaminated GW Plume	_____	_____
Contaminated SW/Sediment	_____	_____
Contaminated Soil	_____	_____
Other	_____	_____
No Sources	_____	_____

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

General Type of Waste (Circle all that Apply)

Metals
Organics
Inorganics
Solvents
Paints/Pigments
Laboratory/Medical Waste
Radioactive Waste
Construction/Demolition Waste
Pesticides/Herbicides
Acids/Bases
Oily Waste
Municipal Waste
Mining Waste
Explosives
Other: AFFF

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

Solid
Sludge
Powder
Liquid
Gas

7. Groundwater Pathway

Is Groundwater Used for Drinking Within 4 Miles

Yes

No

If Yes, Distance to Nearest Drinking Well

__----_ Miles

Type of Drinking Water Wells Within 4 Miles (Circle Each that Applies)

Municipal

Private

None

Depth to Shallowest Aquifer:

2-7 feet

Karst Terrain/Aquifer Present:

Yes

No

Is There a Suspected Release to Groundwater:

Yes

No

Have Primary Target Drinking Water Wells Been Identified:

Yes

No

If Yes, Enter Primary Target Population

____----__ People

Nearest Designated Wellhead Protection Area:

Underlies Site

>0-4 Miles

None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0.0-0.25 Mile	-----
>0.25 - 0.5 Mile	-----
>0.5 - 1.0 Mile	-----
>1.0 - 2.0 Mile	-----
>2.0 - 3.0 Mile	-----
>3.0 - 4.0 Mile	-----
Total within 4 Miles	-----

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream:

Stream **River** Pond **Lake**

Bay Ocean Other _____

Shortest Overland Distance From Any Source to Surface Water:

__0__ Feet

__0__ Miles

Is There as Suspected Release to Surface Water:

Yes

No

Site is Located in:

Annual - 10 yr. Floodplain

>10 yr. - 100 yr. Floodplain

>100 yr. - 500 yr. Floodplain

> 500 yr. Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:

Yes

No

Have Primary Target Drinking Waster Intakes Been Identified:

Yes

No

If Yes, Distance to Nearest Drinking Water Intake

__+/-8.00__ Miles

If Yes, Enter Population Served By Target Intake

__51,000 est._ People

List All Secondary Drinking Water Intakes:

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

Total Within 15 Miles _____0_____

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:

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
Wetlands and Waters of the US	Unknown	Unknown

Other Sensitive Environments Located Along the Surface Water Migration Path:

Migration Path

Yes

No

If Yes, Distance to Nearest Sensitive Environment: _____ Miles

Have Primary Sensitive Environments Been Identified:

Yes **No**

List All Sensitive Environments:

Water Body	Flow (cfs)	Sensitive Environment Type
----	----	----
----	----	----
----	----	----

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

Number of Workers Onsite:

None

1-100

101-1,000

>1,000

Population Within 1 Mile:

_____ People

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:

_____

_____

_____

____

10. Air Pathway

Is There A Suspected Release to Air:

Yes **No**

Enter The Population on or Within:

0.0-0.25 Mile	_____
>0.25 - 0.5 Mile	_____
>0.5 - 1.0 Mile	_____
>1.0 - 2.0 Mile	_____
>2.0 - 3.0 Mile	_____
>3.0 - 4.0 Mile	_____
Total within 4 Miles	_____

Wetlands Located within 4 Miles of the Site:

Yes

No

If Yes, How Many Acres:

101 Acres

Other Sensitive Environments Located Within 4 Miles of the Site

Yes **No**

List All Sensitive Environments Within 0.5 Mile of the Site

Distance	Sensitive Environment Type/Wetlands Area (Acres)
Onsite	_____
0 - 0.25 Mile	_____
>0.25 - 0.5 Mile	_____

Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: NY | CERCLIS #:

CERCLIS Discovery Date:

1. General Site Information

Name: Niagara Falls Air Reserve Station		Street Address: 2720 Kirkbridge Drive			
City: Niagara Falls	State: NY	Zip Code: 14304-5001	County: Niagara	Co Code: 15380	Cong. Dist. NY-26
Latitude: 43°06'54.85" N	Longitude: 78°56'15.44" W	Approximate Area of Site: 0.26 Acres / 11,432 Sq. Ft.	Status of Site: Active / **Inactive**	Not Specified / NA (GW Plume etc.)	

Site Name: Hulby Street

Site Description: The actual area of the release will be much smaller than that shown here; however, the precise location of the release was not determined. A 4-gallon release was documented during an exercise in 1987. Spill records show it as Emergency Management Training and Hulby Street. There is an open field across from the former Emergency Management building that was used for training sometimes that could be the release location.

2. Owner/Operator Information

Owner: Niagara Falls Air Reserve Station			Operator: Same As Owner		
Street Address: 2720 Kirkbridge Drive			Street Address: ----		
City: Niagara Falls			City: ----		
State: New York	Zip Code:14304-5001	Telephone: N/A	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: Greg Carlson	Agency/Organization: Aerostar SES LLC		Date Prepared: 02-21-16	
Street Address: 1006 Floyd Culler Court		City: Oak Ridge	State: TN	
Name of EPA or State Agency Contact: N/A		Street Address: N/A		
City: N/A	State: N/A		Telephone: N/A	

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:

Industrial | Mining | Other Federal
Commercial | **DOD** | Facility:_____
Residential | DOE |
Forest/Fields | DOI | Other: _____
Agriculture |

Site Setting:

Urban
Suburban
Rural

Years of Operation:

Beginning Year: _____

Ending Year: _____

Unknown

Type of Site Operations (Circle All that Apply):

Manufacturing (Must select a sub-category):

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
Electronic Equipment

Mining (Must Select a Sub-Category):

Metals
Coal
Oil and Gas
Non-Metallic Minerals

Retail
Recycling
Junk/Salvage yard
Municipal Landfill
Other Landfill
DOD
DOE
DOI
Other Federal Facility:_____

RCRA

TSDF
Large Quantity Generator
Small Quantity Generator
Subtitle D
Municipal
Industrial
"Converter"
"Protective Filer"
"Non or Late Filer"
Not Specified
Other: _____

Waste Generated:

Onsite
Offsite
Onsite and Offsite

Waste Deposition Authorized By:

Present Owner
Former Owner
Present and Former Owner
Unauthorized
Unknown

Waste Accessible to the Public:

Yes
No

Distance to Nearest Dwelling School or Workplace:

0.04 Miles

6. Waste Characteristics Information (Refer to PA Table 1 for WC Score)

Source Type (Select all that apply)	*Source Waste Quantity (Include Units)*	*Tier**
Landfill	_____	_____
Surface Impoundment	_____	_____
Drums	_____	_____
Tanks and Non Drum Containers	_____	_____
Chemical Waste Pile	_____	_____
Scrap Metal or Junk Pile	_____	_____
Tailings Pile	_____	_____
Trash Pile (open drum)	_____	_____
Land Treatment	_____	_____
Contaminated GW Plume	_____	_____
Contaminated SW/Sediment	_____	_____
Contaminated Soil	_____	_____
Other	_____	_____
No Sources	_____	_____

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

General Type of Waste (Circle all that Apply)

Metals | Pesticides/Herbicides
Organics | Acids/Bases
Inorganics | Oily Waste
Solvents | Municipal Waste
Paints/Pigments | Mining Waste
Laboratory/Medical Waste | Explosives
Radioactive Waste | **Other: AFFF**
Construction/Demolition Waste |

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

Solid
Sludge
Powder
Liquid
Gas

7. Groundwater Pathway

Is Groundwater Used for Drinking Within 4 Miles

Yes
No

If Yes, Distance to Nearest Drinking Well
____ Miles

Type of Drinking Water Wells Within 4 Miles (Circle Each that Applies)
Municipal
Private
None

Depth to Shallowest Aquifer:
2-7 feet

Karst Terrain/Aquifer Present:
Yes
No

Is There a Suspected Release to Groundwater:

Yes
No

Have Primary Target Drinking Water Wells Been Identified:
Yes
No

If Yes, Enter Primary Target Population
____ People

Nearest Designated Wellhead Protection Area:
Underlies Site
>0-4 Miles
None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0.0-0.25 Mile	----
>0.25 - 0.5 Mile	----
>0.5 - 1.0 Mile	----
>1.0 - 2.0 Mile	----
>2.0 - 3.0 Mile	----
>3.0 - 4.0 Mile	----
Total within 4 Miles	----

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream:

Stream **River** Pond **Lake**
Bay Ocean Other _____

Shortest Overland Distance From Any Source to Surface Water:

1,650 Feet
0.31 Miles

Is There as Suspected Release to Surface Water:

Yes
No

Site is Located in:

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

Drinking Water Intake Located Along the Surface Water Migration Path:

Yes
No

Have Primary Target Drinking Waster Intakes Been Identified:
Yes
No

If Yes, Distance to Nearest Drinking Water Intake
8.35 Miles

If Yes, Enter Population Served By Target Intake
51,000 est. People

List All Secondary Drinking Water Intakes:

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

Total Within 15 Miles 0

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:

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
Wetlands and Waters of the US	Unknown	Unknown

Other Sensitive Environments Located Along the Surface Water Migration Path:

Migration Path

Yes

No

If Yes, Distance to Nearest Sensitive Environment: _____ Miles

Have Primary Sensitive Environments Been Identified:

Yes **No**

List All Sensitive Environments:

Water Body	Flow (cfs)	Sensitive Environment Type
----	----	----
----	----	----
----	----	----

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

Number of Workers Onsite:

None

1-100

101-1,000

>1,000

Population Within 1 Mile:

_____ People

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:

_____

_____

_____

____

10. Air Pathway

Is There A Suspected Release to Air:

Yes **No**

Enter The Population on or Within:

0.0-0.25 Mile	_____
>0.25 - 0.5 Mile	_____
>0.5 - 1.0 Mile	_____
>1.0 - 2.0 Mile	_____
>2.0 - 3.0 Mile	_____
>3.0 - 4.0 Mile	_____
Total within 4 Miles	_____

Wetlands Located within 4 Miles of the Site:

Yes

No

If Yes, How Many Acres:

101 Acres

Other Sensitive Environments Located Within 4 Miles of the Site

Yes **No**

List All Sensitive Environments Within 0.5 Mile of the Site

Distance	Sensitive Environment Type/Wetlands Area (Acres)
Onsite	_____
0 - 0.25 Mile	_____
>0.25 - 0.5 Mile	_____

Appendix D

ASL February 2016 Site Visit Notes

Niagara Falls Air Reserve Station Site Visit

Spoke to the following Niagara Falls Air Reserve Station (NFARS) Personnel:
Current Base personnel:

- Kim Powell (716) 236-3123
  Stormwater, Industrial Water, and IRP

- Ellen Marien (716) 236-3126
  Environmental Flight Chief

- Jim Nagelhout (716) 236-3124
  Hazardous Waste

- Andy Salisbury (716) 236-3122
  HAZMAT, Air, Tanks, Spills

- Rich (Red) Kennerson
  Fire Chief

- John Schultz (716) 236-4021
  Assistant Fire Chief

Former Base Personnel:

- Ed McDonald
  Former Fire Chief 1997-2013 – Spoke to by phone

Potential Site Information Gained during the Visit

1985 Fatal Blue Angel A-4F Skyhawk crash on the airfield after mid-air collision with another Blue Angel A-4F aircraft during the Western New York International Air Show. AFFF was used to extinguish the fire. The other plane crashed off base after the pilot ejected.
http://www.nytimes.com/1986/03/16/nyregion/report-cites-pilot-error-in-blue-angels-crash.html
http://www.cnn.com/US/9910/28/missing.angel.03/index.html?_s=PM:US
http://www.nytimes.com/1985/07/14/nyregion/pilot-killed-as-2-jets-collide-at-air-show.html
http://www.blueangels-usn.org/accident_history.html

Hangar 707 – Foam dump in 2003 from a heat detector malfunction. All foam was contained inside the building and cleaned up.

Hangar 850 – Foam dump in 2010 from a lightning strike overpowering the fire suppression system control panels. Surge protection is now in place at this building. This release was ~48,000 gallons mixed (2,500 gallons of concentrate left the storage tank) that entered the storm drain system. Unknown amount leaked out of the large hangar doors on the west side of the hanger during a heavy thunderstorm.

Hangar 917 – Contractor accidently dumped high expansion foam in 2007. This was formerly an AFFF system. This is a former Air Guard Hangar.

Building 700 – This is the former fire station that is now EOD and bioenvironmental. The building housed an overhead tank where equipment was filled with AFFF. Documented spill of 3 to 5 gallons at the south side ramp area of building in 2007.

Building 821 – Current Fire Station since 2006. Chief Kennerson told us that they overfilled and damaged the overhead AFFF tank as soon as they moved into the building. This spill was contained. A 10 gallon spill is documented on the ramp south of the building in 2013. The spill was contained with absorbent material and removed.

The former Tank B dike is used for spray testing of AFFF by the fire department. All AFFF is contained within the dike. Grass is growing in the expansion cracks.

Building 907 – Contractor had a 10 gallon release inside the building that was squeegeed and vac trucked out of the building. No release to the environment. The wet suppression system was dripping near the wall, but the AFFF system didn't have any leaks that could be seen. This is a former Air Guard Hangar.

Building 706 – Former Hanger that is now only a foundation. There was a release of 216 gallons on the ramp west of Building 706 in 1995. We have building as-builts.

Fox Row/Taxiway A/Echo Row/Delta Row Spill – A fire truck was siphoning out AFFF while responding to an exercise on Echo and Delta Row. Spill records show 25 gallons were released. Jim Nagelhout told us that they left it to dissipate in the sunlight. They later tried to hold back the water used during the exercise in the sluice gate and saw the water foam up while they were slowly releasing it to Outfall 5.

Hulby Street – A 4-gallon release was documented during an exercise in 1987. Spill records show it as Emergency Management Training and Hulby Street. There is an open field across from the former Emergency Management building that was used for training sometimes that could be the release location.

Fire Training Area 1 – In service from 1955 to 1963.

Fire Training Area 2 – Early 1960s.

Fire Training Area 3 – 1963 until the current fire training area was constructed. AFFF was released during training and spray testing.

Current Fire Training Area – Since 1997.

Outfalls 004, 005, 007, and 009 drain all of the potential AFFF release locations.

Sites that Will Potentially Move on to the SI Phase

1. Hangar 850
2. Fox Row/Taxiway A
3. Former Hangar 706
4. Building 700
5. Fire Training Area 3
6. Blue Angel Crash Site
7. Hulby Street
8. Outfalls 004, 005, 007, and 009.