

**FINAL
PRELIMINARY ASSESSMENT REPORT
FOR PERFLUORINATED COMPOUNDS
AT
VOLK FIELD COMBAT READINESS TRAINING CENTER
CAMP DOUGLAS, WISCONSIN**

Prepared for:



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

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

June 2015

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June 2015

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This is a Preliminary Assessment Report of sites or locations at Volk Field CRTC, Wisconsin, where perfluorinated compounds may have been released to the environment through the use or discharge of aqueous film-forming foam.				
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Appendix B	Field Documentation
Appendix C	Records of Communication

LIST OF ACRONYMS AND ABBREVIATIONS

AFCEC	Air Force Civil Engineer Center
AFFF	aqueous film-forming foam
ANG	Air National Guard
Base	Volk Field Combat Readiness Training Center
bgs	below ground surface
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CRTC	Combat Readiness Training Center
EDR	Environmental Data Resources, Inc.
FTA	Fire Training Area
HGL	HydroGeoLogic, Inc.
PA	preliminary assessment
PFC	perfluorinated compound
PFOA	perfluorooctanoic acid
PFOS	perfluorooctane sulfonate
PWS	public water supply
RI	Remedial Investigation
SI	Site Inspection
USAF	U.S. Air Force
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
WWTP	wastewater treatment plant

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CAMP DOUGLAS, WISCONSIN**

1.0 INTRODUCTION

The Air Force Civil Engineer Center (AFCEC) contracted with HydroGeoLogic, Inc. (HGL) and subcontractor CH2M HILL (the HGL Team) to perform preliminary assessment (PA) activities at multiple U.S. Air Force (Air Force or USAF) and Air National Guard (ANG) Fire Training Areas (FTAs) to determine probable environmental release of perfluorinated compounds (PFCs). Specifically, HGL is completing PA activities consistent with the U.S. Environmental Protection Agency (USEPA) Guidance for Preparing Preliminary Assessments under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) (USEPA, 1991) to determine potential releases of PFCs at 82 Air Force and ANG installations from FTAs and other known and suspected PFCs or aqueous film-forming foam (AFFF) usage or storage areas. The work is being performed by HGL and its team subcontractor, CH2M HILL, under the existing 4P Architecture and Engineering Contract, Contract Number FA8903-08-D-8772, Task Order 0065.

Under authority of CERCLA and the Superfund Amendments and Reauthorization Act of 1986, CH2M HILL conducted a PA visit at Volk Field Combat Readiness Training Center (CRTC or Base) on March 2 and 3, 2015. Volk Field CRTC is an active Air National Guard Base located in the city of Camp Douglas in Juneau County, Wisconsin. The location of Volk Field CRTC and the locations identified on Volk Field CRTC during this PA visit are shown on Figure 1.1.

1.1 BACKGROUND

PFCs are compounds used in the formulation of AFFF, which the Air Force has used in fire training exercises, suppressing aircraft and other vehicle fires, and in aircraft hangar fire suppression systems. Although PFCs are not regulated under CERCLA or the Resource Conservation and Recovery Act, there is evidence that perfluorooctane sulfonate (PFOS) (and less so perfluorooctanoic acid [PFOA]) is a possible environmental contaminant following AFFF release. Both compounds may present potential, non-carcinogenic risks to human health and the environment (Chang et al., 2014; Porter, 2011; Rak and Vogel, 2009; USAF, 2012).

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

- Military Specification for AFFF (MIL-F-24385), formally issued in 1969
- General Accounting Office determination on sole source award protest to provide AFFF to the Navy in December 1969
- A History of USAF Fire Protection Training at Chanute Air Force Base, 1964-1976 (Coates, 1977)

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

1.2 PURPOSE AND OBJECTIVES

The objective of this PA Report is to identify locations at Volk Field CRTC where PFCs may have been released into the environment and to provide an initial assessment of possible migration pathways and receptors of potential contamination. In 1991, the Air Force began a program to replace existing, non-engineered FTAs with new, engineered FTAs that use propane fuel. At Volk Field CRTC, the current engineered FTA was constructed in 1996 to use only propane fuel. The engineered FTA includes an asphalt pad surrounding a concrete berm sloped upward toward a gravel pit with an aircraft mockup. The gravel pit contains the propane fuel tank and the discharge location where all excess materials enter the sanitary sewer system. The gravel pit is lined with vinyl (Davies, 2015, personal communication; Appendix C).

This PA Report documents the 2 known FTAs, as well as 10 additional locations where AFFF may have been released into the environment at Volk Field CRTC (Table 1.1). The purpose of the PA is to determine the potential environmental release of PFCs specifically from AFFF usage and storage. This PA Report differentiates locations that pose little or no potential threat to human health and the environment from locations that warrant further investigation.

**Table 1.1
Fire Training Areas and Non-Fire Training Areas Identified
for Potential AFFF Releases, Volk Field CRTC, Wisconsin**

Fire Training Areas
Site 1 – Former FTA
Current FTA (Building 630)
Non-Fire Training Areas
Fire Stations
Current Fire Station (Building 510)
Former Fire Station (Building 517)
Emergency Response
Site 5 – 1978 KC97 Crash Location
Site 8 – 1964 F84 Crash Location
Other Spills and Releases
Spray Nozzle Test Area (Primary Location)
Spray Nozzle Test Area (Alternate Location)
Oil-Water Separator (Building 510)
Current Wastewater Treatment Plant (WWTP) (Building 650)
Former Primary and Secondary Wastewater Settling Ponds
Base Supply Building (Building 10)

1.3 BASEWIDE ENVIRONMENTAL SETTING

A detailed description of the topography, soil types, and surface water is provided in the Installation Restoration Program Final Technical Memorandum for Volk Field CRTC (Montgomery Watson, 1998), and summarized from the report in the sections below.

1.3.1 Geology

Volk Field CRTC is within the Wisconsin Central Plains physiographic province, a subsection of the Central lowlands physiographic province of the United States. This part of the Central Plains is characterized by flat or gently undulating topography. Relief is generally low except for the sandstone buttes located in the southeast portion of Volk Field CRTC near the Base entrance. These buttes rise 100 to 300 feet above the surrounding lowlands.

This area is characterized by mature dissected plateaus and lowlands invaded by glacial outwash. The geomorphology of Volk Field CRTC is the result of Pleistocene glaciation. During glacial retreat from the area, large inland lakes were formed near the perimeters of the receding glaciers. Streams and rivers deposited sand, silt, and clay into these lakes. Volk Field CRTC is located in one of these ancient lake beds, which is now referred to as Lake Wisconsin. The thickness of the sediments is estimated to be between 100 to 150 feet. Bedrock beneath these sediments consists of the Cambrian-aged Wonewoc Sandstone. The Wonewoc Sandstone is a well-sorted quartz sandstone, approximately 100 to 400 feet thick (Montgomery Watson, 1998).

The geologic formations that directly underlie Volk Field CRTC are predominantly fine to coarse-grained sandstones with interbedded shales overlain by unconsolidated sand, silt, and a minor amount of clay. The Quaternary deposits vary in thickness from less than 40 feet in the vicinity of Volk Field CRTC due to their location within the boundary of the 1,800-square-mile Pleistocene lake referred to as Lake Wisconsin (Montgomery Watson, 1998). Volk Field CRTC is located near the western boundary of this ancient lake bed (Hazardous Materials Technical Center, 1984).

The unconsolidated materials are typically yellowish, fine to very fine quartz sand with a trace of silt-sized particles. At some locations, a clay or silty clay less than 5 feet in thickness was encountered and interpreted as lake bed deposits. The unconsolidated sands are underlain by a poorly cemented, friable sandstone (Engineering-Science, Inc., 1993).

1.3.2 Hydrogeologic Setting

Groundwater is an important resource throughout Wisconsin. Water exists in both the unconsolidated Pleistocene deposits and the underlying Cambrian sandstone units and, presumably, in the Precambrian metamorphic and igneous rocks that underlie the sedimentary sequence. In Juneau County, groundwater movement generally follows topography and discharges into major drainage features. Groundwater flow in the vicinity of Volk Field CRTC is generally toward the Lemonweir River, toward the northeast direction (Montgomery Watson, 1998).

In the area of Volk Field CRTC, the major aquifers are the Pleistocene glacial deposits and the underlying Cambrian sandstones. Most of the groundwater is derived from the deeper Cambrian sandstones, as the majority of the municipal wells in the area are screened within this formation. Water is also obtained from the glacial deposits that are generally less than 40 feet thick.

The absence of any laterally extensive, low permeability materials near the contact between the glacial deposits and the sandstone suggests that the two geologic formations are hydraulically connected. In this situation, water is free to move vertically depending on the gradient at a particular location. The initial depth to groundwater from the surface is approximately 5 to 10 feet below ground surface (bgs). Groundwater horizontal gradients in the vicinity of Volk Field CRTC range from 0.0004 to 0.005 foot/foot (Montgomery Watson, 1998).

Based on aquifer pumping tests conducted by Engineering-Science, Inc. at Site 1 – Former FTA, the estimated hydraulic conductivity is 800 gallons per day per foot squared or 107 feet per day (approximately 4×10^2 centimeters per second). Using an average hydraulic gradient of 0.002 foot/foot and an effective porosity of 0.20 (Bouwer, 1978), the average groundwater flow velocity estimated for Volk Field CRTC is 1.07 feet per day (Montgomery Watson, 1998).

1.3.3 Hydrologic Setting

Volk Field CRTC is located within the drainage basin of the Lemonweir and Little Lemonweir Rivers. The Lemonweir River flows from northwest to southeast and is located approximately 3,700 feet northeast of the Volk Field CRTC boundary. The Little Lemonweir River is approximately 1.4 miles south of the Volk Field CRTC boundary and flows from west to east. The Little Lemonweir joins the Lemonweir River 4.5 miles southeast of Volk Field CRTC, at the town of New Lisbon. New Lisbon and Mauston are the only major communities on the Lemonweir River downstream of Volk Field CRTC. Neither of these towns uses surface water for municipal water supplies (Montgomery Watson, 1998).

Volk Field CRTC surface runoff is facilitated by a system of ditches separated by a bluff. The runoff on the north side of the bluff drains towards the north east and the runoff south of the bluff drains toward the south east. These drainage ditches lead directly to either the Lemonweir River or the Little Lemonweir River.

Freshwater emergent, freshwater forested/shrub wetlands, and freshwater ponds are present on the north and east portions of Volk Field CRTC, based on the National Inventory Wetlands database.

1.3.4 Ecological Receptors

An officially designated federal wilderness area/wildlife preserve encompasses Volk Field CRTC (Environmental Data Resources, Inc. [EDR], 2015). The following endangered species are known to inhabit Juneau and Monroe Counties:

- Bald Eagle – Bird
- Butterfly, Karner Blue – Insect
- Monkshood, Northern Wild – Plant

The bald eagle has been delisted and is no longer found within the boundaries of Volk Field CRTC. The Karner Blue Butterfly has been surveyed on the base since 1995. It was determined that none are present currently at Volk CRTC. It is possible that Northern Wild Monkshood may be found within the boundaries of Volk Field CRTC, but surveys have not been able to identify this plant to date.

1.4 PRELIMINARY ASSESSMENT METHODS

This PA Report was prepared in accordance with the following guidance:

- CERCLA Guidance (USEPA, 1991)
- Interim Air Force Guidance (USAF, 2012)
- U.S. Fish and Wildlife Service (USFWS) Guidance (USFWS, 2015)

The performance of this PA included the following activities:

- Reviewing information and reports in the Administrative Record.

- Reviewing documents related to Air Force use of AFFF.
- Conducting a 2-day visit to Volk Field CRTC.
- Conducting interviews with government personnel in Environmental Management, the Volk Field CRTC Fire Department, Utility Supervisors, and other Base personnel.
- Visiting and photographing locations where AFFF has or may have been used.
- Performing an environmental data records search to document nearby populations and recording water supply well information and wetlands information.

1.5 REPORT ORGANIZATION

This PA Report is organized as follows:

- Section 1.0, Introduction, provides a project overview and describes the methods used to conduct the PA.
- Section 2.0, Fire Training Areas, describes the FTAs identified during the visit.
- Section 3.0, Non-Fire Training Areas, describes the non-FTAs identified during the visit.
- Section 4.0, Summary and Conclusions, summarizes and provides conclusions for both FTAs and non-FTAs.
- Section 5.0, References, lists the references cited in this report.

In addition, the following support information is appended to this report:

- Appendix A, Photo Documentation
- Appendix B, Field Documentation
- Appendix C, Records of Communication

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FIGURE

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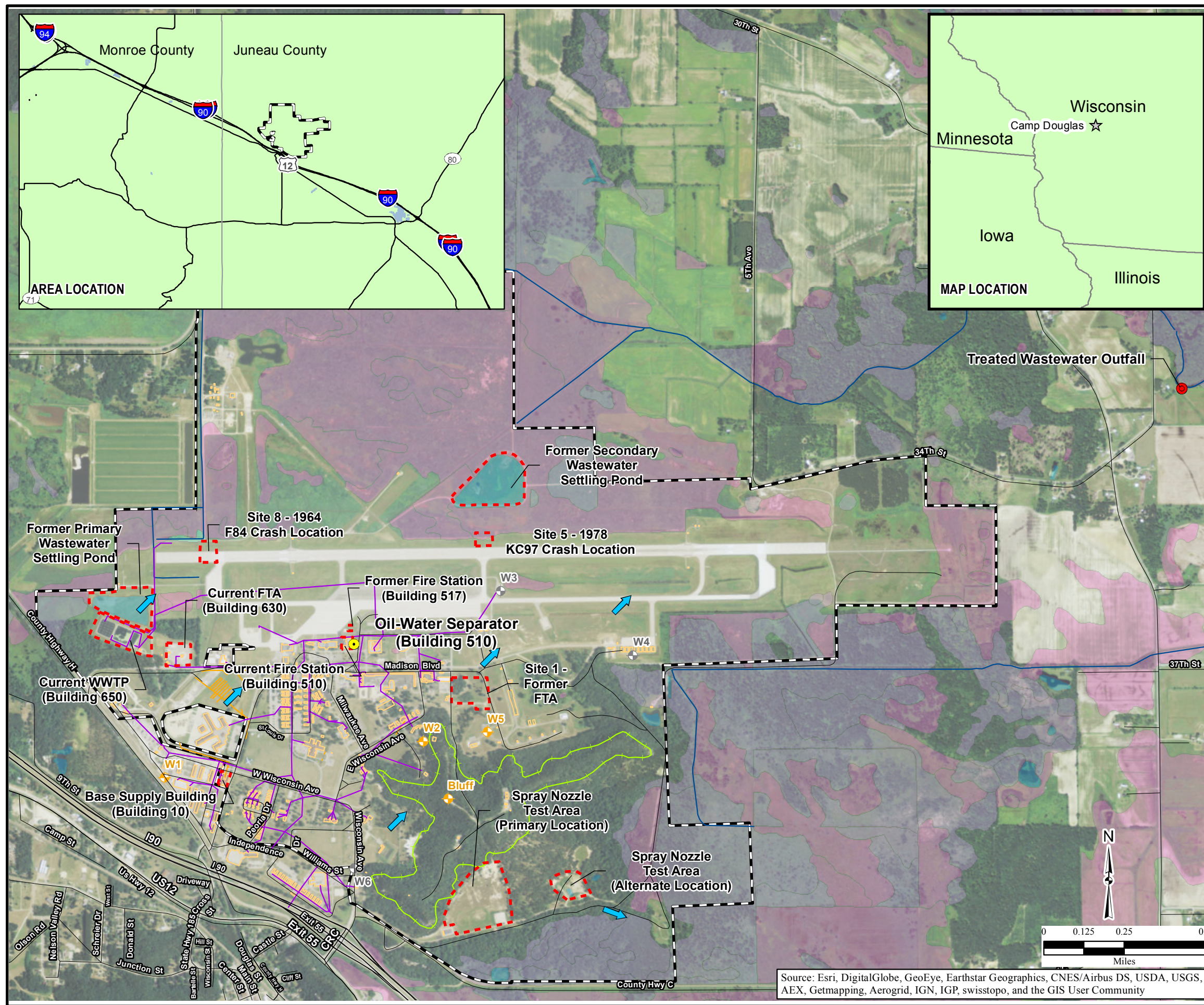
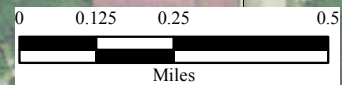


Figure 1.1
All Identified Locations,
Volk Field CRTC,
Wisconsin

- Legend**
- Treated Wastewater Outfall
 - ⊕ Abandoned Production Well
 - ⊕ Production Well
 - Oil-Water Separator
 - ↑ Approximate Groundwater Flow Direction (Nov 1990)
 - Sanitary Sewer
 - Storm Drain
 - Road
 - National Hydrography Dataset Stream
 - Approximate Bluff Line
 - Building
 - Approximate Location
 - Installation Boundary
 - Freshwater Emergent Wetland
 - Freshwater Forested/Shrub Wetland
 - Freshwater Pond
 - Lake
 - Riverine
- Notes:**
 FTA = fire training area
 WWTP = wastewater treatment plant

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 Source: Wetland, National Wetlands Inventory - Wetland Polygons, Published September 2012, U.S. Fish and Wildlife Service, Division of Habitat and Resource Conservation, Washington, D.C.
<http://www.fws.gov/wetlands/>



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

2.0 FIRE TRAINING AREAS

2.1 SITE 1 – FORMER FIRE TRAINING AREA

2.1.1 Description and Operational History

Site 1 – Former FTA is a flat grass-covered lot covered with various trees located approximately 600 feet southeast of the intersection of Madison Boulevard and Bluff Road. Site 1 – Former FTA is bordered to the north, east, and south by grassy areas and to the west by a building and associated parking. The geographic coordinates are 43°55'58.49"N and 90°15'15.87"W. The location of Site 1 – Former FTA is shown on Figures 1.1 and 2.1.

Beginning in the 1940s until 1980, fire training activities occurred on Base at Site 1 – Former FTA (Walter, 2015, personal communication; Appendix C). Site 1 – Former FTA was used for fire training exercises and for refueling vehicles and routinely servicing equipment (Engineering-Science, Inc., 1993). It is not known whether AFFF was used during the training exercises. Site 1 – Former FTA is an Installation Restoration Program site for Volk Field CRTC with a status of site closed, no further action at this time. Fire training exercises impacted the site with fuel-related contaminants. Concrete burn pits and other associated building materials associated with the FTA have been removed. Remediation activities included product removal from groundwater monitoring wells and phytoremediation. A full description of the site and operational history are in previous investigation documents.

2.1.2 Waste Characteristics

The current Fire Chief does not have knowledge or record logs of the quantity of AFFF used/released, if any, during fire training exercises (Davies, 2015, personal communication; Appendix C). Based on the operational history of the site and the historical usage of AFFF within the Air Force and ANG during these years, the potential for PFCs released to the environment is high.

2.1.3 Pathway and Environmental Hazard Assessment

A complete exposure pathway typically includes the following components: a source of contamination (an environmental medium contaminated at the source or a release mechanism by which chemicals are released from a source medium and transported), an exposure medium by which a receptor comes into contact, and a route of intake for the contaminant into the receptor's body at the exposure point. If any of these elements are missing, the pathway is incomplete. Other release mechanisms resulting in exposure media for receptors may include the uptake of soil contaminants by plants and animals and the emission of soil contaminants into the air in association with dust particles (USEPA, 1989).

Database research (EDR, 2015) shows one day care facility and one elementary school within the potential migration area of 4 miles from any potential PFC release location. No schools or day care facilities are located on Base (Gonnering, 2015, personal communication; Appendix C). The day care facility is located approximately 6,800 feet hydrologically upgradient of Site 1 – Former FTA.

2.1.3.1 Groundwater Pathway and Targets

The primary drinking water source for Volk Field CRTC is the Sandstone aquifer. Production wells on Base pump water from the Sandstone aquifer at depths ranging from 250 to 305 feet bgs (Zanter, 2015, personal communication; Appendix C). The Sandstone aquifer underlying Volk Field CRTC is unconfined and highly permeable.

The Volk Field CRTC population within a 4-mile radius of the location relies on drinking water from the Sandstone aquifer through onsite production wells (Gonnering, 2015, personal communication; Appendix C). The nearest production well (W-5) from the Base is located approximately 374 feet to the south and hydrologically cross-gradient of Site 1 – Former FTA. No residents are at Volk Field CRTC (Gonnering, 2015, personal communication; Appendix C). The nearest off-Base public water supply (PWS) well is located at Camp Douglas Waterworks, approximately 5,810 feet southwest and hydrologically cross-gradient of Site 1 – Former FTA (EDR, 2015). This active well serves a population of approximately 640 (EDR, 2015). Ingestion exposure is a potential pathway for local populations.

The majority of the off-Base population within a 4-mile radius of Site 1 – Former FTA relies on municipal water taken from the Sandstone aquifer. The off-Base population within 4 miles of the location is approximately 1,340 people (EDR, 2015). The closest downgradient residential area is more than 4 miles from the location.

2.1.3.2 Surface Water Pathway and Targets

Surface drainage originating from most of Volk Field CRTC drains to the Lemonweir River. The surface water drainage from Site 1 – Former FTA mostly penetrates the ground through the porous sands and soil onsite because the area is flat. The potential migration of surface water into groundwater is likely, based on the hydraulically connected aquifers and porous soils, which could provide a complete pathway for exposures, such as dermal and ingestion exposure to humans. Dermal contact and ingestion by aquatic or other animals is also a potential pathway for ecological receptors.

The location is not located within any floodplains. The nearest body of water is a small unnamed pond on Base, also known as Green Pond, located approximately 2,510 feet east and downgradient of the location. Any surface water that does not penetrate the porous soils will continue to flow east in an unnamed tributary and discharge into the Lemonweir River approximately 3.3 miles downstream.

There are no identified downstream fisheries or other ecologically sensitive environments adjacent to the surface water migration path 15 miles downstream of the location (EDR, 2015; USFWS, 2015). Several wetlands are along the surface water migration path 15 miles downstream of the location (EDR, 2015). Local waterways are used for recreational fishing by residents of nearby communities.

2.1.3.3 Soil and Air Exposure Pathways and Targets

Site 1 – Former FTA is a former FTA that has been inactive since 1980 and is currently a grass-covered area with trees. The well-vegetated area would preclude any fugitive dust emissions and

potential exposures. Current land use does not involve any human health exposures and future land use is unknown. The potential exists for soil exposure to burrowing animals.

No residents or workers are onsite. The nearest residential area is approximately 4,500 feet southwest of the location. Population details of the residential areas within a 4-mile radius are discussed in Section 2.1.3.1.

No schools or day care facilities are within a 200-foot radius of the location. The nearest school is Camp Douglas Elementary, located approximately 1.4 miles off Base to the southwest of the location (EDR, 2015). The nearest day care facility is Laugh and Learn Child Care, located approximately 1.3 miles to the southwest (EDR, 2015).

2.2 CURRENT FIRE TRAINING AREA (BUILDING 630)

2.2.1 Description and Operational History

The current FTA (Building 630) is located in the northwest area of Volk Field CRTC. Constructed in 1996, the area is covered by asphalt with a concrete berm sloped upward toward a vinyl-lined gravel pit with an aircraft mockup. Since the construction of the current FTA (Building 630), fire training exercises are performed at this location using only water to extinguish fires (Davies, 2015, personal communication; Appendix C). The location is bordered on all sides by wooded and grassy areas (Walter, 2015, personal communication; Appendix C). The geographic coordinates are 43°56'4.48"N and 90°16'20.84"W. The location of the current FTA (Building 630) is shown on Figures 1.1 and 2.2.

Accidental discharges of AFFF that have occurred at the training area include approximately six discharges of less than 1 gallon each and one discharge that was approximately 30 to 40 gallons (Davies, 2015, personal communication; Appendix C). However, all discharges were captured in the vinyl-lined gravel pit. Also, all liquid materials captured in the gravel pit are routed to the sanitary sewer system through piping and discharged to the WWTP located on Base. Based on the operational history of the location and engineering controls at the location, it is unlikely that PFCs were released into the environment.

2.2.2 Waste Characteristics

Not applicable.

2.2.3 Pathway and Environmental Hazard Assessment

Not applicable.

2.2.3.1 Groundwater Pathway and Targets

Not applicable.

2.2.3.2 Surface Water Pathway and Targets

Not applicable.

2.2.3.3 Soil and Air Exposure Pathways and Targets

Not applicable.

FIGURES

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Note:
FTA = fire training area

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

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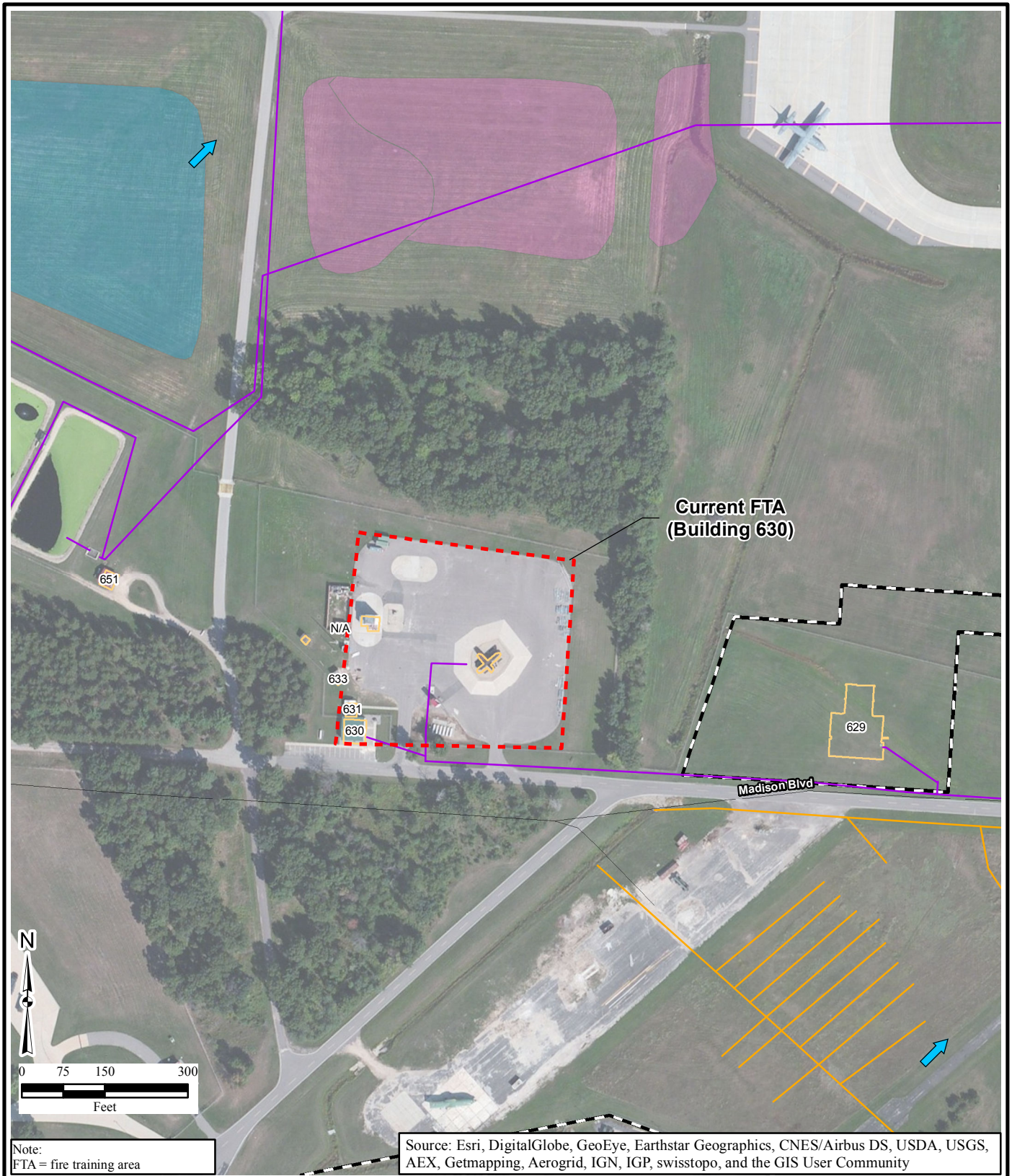
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Legend

- Production Well
- Monitoring Well
- Sanitary Sewer
- Road
- Approximate Bluff Line
- Building
- Approximate Location
- Approximate Groundwater Flow Direction (Nov 1990)

Figure 2.1
Location of Former FTA,
Volk Field CRTc,
Wisconsin

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 Figure 2.2\fig2_2.mxd
 Figure 2.2
 4/16/2015 SA
 Source: Wetlands, National Wetlands Inventory - Wetland Polygons, Published
 September 2012, U.S. Fish and Wildlife Service, Division of Habitat
 and Resources Conservation, Washington, D.C.
 http://www.fws.gov/wetlands/

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Legend

Sanitary Sewer	Installation Boundary
Storm Drain	Approximate Groundwater Flow Direction (Nov 1990)
Road	Freshwater Emergent Wetland
Building	Freshwater Pond
Approximate Location	

**Figure 2.2
Location of
Current FTA,
Volk Field CRTC,
Wisconsin**

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3.0 NON-FIRE TRAINING AREAS

3.1 HANGARS

No hangars are operated by the ANG at Volk Field CRTC.

3.2 FIRE STATIONS

3.2.1 Current Fire Station (Building 510)

3.2.1.1 Description and Operational History

The current fire station (Building 510) was constructed in 1987 and is still in operation, housing five fire engines (Walter, 2015, personal communication; Appendix C). The geographic coordinates are 43°56'6.49"N and 90°15'43.25"W. The location of the building is shown on Figures 1.1 and 3.1. In the current fire station (Building 510), AFFF is stored in an approximately 1,000-gallon, single large bulk storage tank; in 5-gallon buckets; and on fire trucks. Approximately 1,300 gallons of AFFF are stored in 5-gallon buckets and less than 500 gallons of AFFF are stored in the bulk storage container. Transfer of AFFF from the bulk storage container or buckets is performed through a pump system that connects directly to the fire engines. The fire engines are also washed and cleaned inside the fire station (Davies, 2015, personal communication; Appendix C).

The Fire Chief indicated that there may have been spills or discharges during the transfer of AFFF and during the cleaning of fire engines, but all materials are washed down into the floor drains (Davies, 2015, personal communication; Appendix C). The floor drains lead to an oil-water separator that is then pumped into the sanitary sewer system and ends at the on-Base WWTP. There are no known or documented releases of AFFF into the environment at the current fire station (Building 510), other than discharges into the floor drains (Davies, 2015, personal communication; Appendix C).

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 and Targets

Not applicable.

3.2.1.3.2 Surface Water Pathway and Targets

Not applicable.

3.2.1.3.3 Soil and Air Exposure Pathways and Targets

Not applicable.

3.2.2 Former Fire Station (Building 517)

3.2.2.1 Description and Operational History

The former fire station (Building 517) was constructed in 1943 and demolished in 1987 (Walter, 2015, personal communication; Appendix C). In 1987, the equipment and supplies housed in the former fire station (Building 517) were relocated to the current fire station (Building 510), as shown on Figures 1.1 and 3.1. The geographic coordinates are 43°56'8.48"N and 90°15'42.73"W. AFFF was handled in the former fire station (Building 517) similarly to how it is now handled in the current fire station (Building 510) (Gonnering, 2015, personal communication; Appendix C). In the former fire station (Building 517), AFFF was stored in 5-gallon buckets and on fire trucks. There have been no known or documented releases of AFFF outside of the former fire station (Building 517) into the environment (Gonnering, 2015, personal communication; Appendix C).

3.2.2.2 Waste Characteristics

Not applicable.

3.2.2.3 Pathway and Environmental Hazard Assessment

Not applicable.

3.2.2.3.1 Groundwater Pathway and Targets

Not applicable.

3.2.2.3.2 Surface Water Pathway and Targets

Not applicable.

3.2.2.3.3 Soil and Air Exposure Pathways and Targets

Not applicable.

3.3 EMERGENCY RESPONSE

3.3.1 Site 5 – 1978 KC97 Crash Location

3.3.1.1 Description and Operational History

In 1978, a KC97 refueler aircraft crashed approximately 400 feet north of Taxiway 3 and parallel to the main runway. This vegetated area with tall grasses is on the north side of main runway and south of the former secondary WWTP settling pond. Site 5 is an Installation Restoration Program site for Volk Field CRTTC with a status of site closed, no further action required. The area identified volatile organic compounds, total petroleum hydrocarbons, and lead in soil, but did not exceed action levels. No groundwater contamination was detected, and therefore, no remediation activities were performed. The geographical coordinates are 43°56'23.47"N and 90°15'13.16"W. The approximate crash location is shown on Figures 1.1 and 3.1.

3.3.1.2 Waste Characteristics

The Volk Field CRTC Fire Department responded to the aircraft crash. It is unknown what type of firefighting foam was used, or the amount of foam, at the crash location (Davies, 2015, personal communication; Appendix C). However, the fact that it occurred in 1978 and was a fuel fire suggests that AFFF was likely used to extinguish the fire.

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, and a route of intake for the contaminant into the receptor's body at the exposure point. If any of these elements are missing, the pathway is incomplete. Other release mechanisms resulting in exposure media for receptors may include the uptake of soil contaminants by plants and animals and the emission of soil contaminants into the air in association with dust particles (USEPA, 1989).

Database research (EDR, 2015) shows one day care facility and one elementary school within the potential migration area of 4 miles from any potential PFC release location. No schools or day care facilities are located on Base (Gonnering, 2015, personal communication; Appendix C). The day care facility is located approximately 8,710 feet hydrologically upgradient of Site 5-1978 KC97 crash location.

3.3.1.3.1 *Groundwater Pathway and Targets*

The primary drinking water source for Volk Field CRTC is the Sandstone aquifer. Production wells on Base pump water from the Sandstone aquifer at depths ranging from 250 to 305 feet bgs (Zanter, 2015, personal communication; Appendix C). The Sandstone aquifer underlying Volk Field CRTC is unconfined and highly permeable.

The Volk Field CRTC population within a 4-mile radius of the location relies on drinking water from the Sandstone aquifer through onsite production wells (Gonnering, 2015, personal communication; Appendix C). The nearest production well (W-5) from the location is located approximately 3,052 feet to the south and hydrologically cross-gradient of the crash location. There are no residents at Volk Field CRTC (Gonnering, 2015, personal communication; Appendix C). The nearest off-Base PWS well is located at Camp Douglas Waterworks, approximately 8,250 feet southwest and hydrologically cross-gradient of the crash location (EDR, 2015). This active well serves a population of approximately 640 (EDR, 2015). Ingestion exposure is a potential pathway for local populations.

The majority of the off-Base population within a 4-mile radius of the location relies on municipal water taken from the Sandstone aquifer. The off-Base population within 4 miles of the location is approximately 1,290 (EDR, 2015). The closest downgradient residential area is more than 4 miles from the location.

3.3.1.3.2 *Surface Water Pathway and Targets*

Surface drainage originating from most of Volk Field CRTC drains to the Lemonweir River. The surface water drainage from Site 5-1978 KC97 crash location mostly penetrates the ground through the porous sands and soil onsite because the location is in a low-lying area of land where all

surrounding areas flow to the crash location. The potential migration of surface water into groundwater is likely, based on the hydraulically connected aquifers and porous soils, which could provide a complete pathway for exposures, such as dermal and ingestion exposure to humans. Dermal contact and ingestion by aquatic or other animals is also a potential pathway for ecological receptors.

The location is not located within any floodplains. Any surface water that does not penetrate the porous soils will flow toward the east to an unnamed tributary and discharge into the Lemonweir River approximately 2.5 miles downstream.

The north half of the crash location is located in a freshwater emergent wetland. There are no identified downstream fisheries or other ecologically sensitive environments adjacent to the surface water migration path 15 miles downstream of the location (EDR, 2015; USFWS, 2015). Several wetlands are along the surface water migration path 15 miles downstream of the location (EDR, 2015). Local waterways are used for recreational fishing by residents of nearby communities.

3.3.1.3.3 Soil and Air Exposure Pathways and Targets

The northern half of the crash location is in a freshwater emergent wetland. The well-vegetated area would preclude any fugitive dust emissions and potential exposures. No utilities are present onsite to allow dermal soil exposures to utility workers. However, current land use could expose workers to human health exposure through dermal exposure. The potential of exposure to burrowing animals would be present.

No residents are onsite, and the nearest residential area is approximately 7,900 feet southwest of the location. Population details of the residential areas within a 4-mile radius are discussed in Section 3.3.1.3.1.

No schools or day care facilities are within a 200-foot radius of the location. The nearest school is Camp Douglas Elementary, located approximately 1.7 miles off Base to the southwest of the location (EDR, 2015). The nearest day care facility is Laugh and Learn Child Care, located approximately 1.6 miles to the southwest (EDR, 2015).

3.3.2 Site 8 – 1964 F84 Crash Location

3.3.2.1 Description and Operational History

In 1964, an F84 crashed at the western end of the east-west runway. In 1966, the paved portion of the east-west runway was extended 1,000 feet to the west, covering the reported crash location. Site 8 – 1964 F84 crash location is an Installation Restoration Program site for Volk Field CRTC with a status of site closed, no further action required. Soil samples were below action levels and no groundwater contamination was detected. Therefore, no remediation activities occurred at Site 8 – 1964 F84 crash location. Due to the date of the crash, the use of AFFF at this location did not occur. The geographic coordinates are 43°56'21.21"N and 90°16'14.33"W. The crash location is shown on Figures 1.1 and 3.1.

3.3.2.2 Waste Characteristics

Not applicable.

3.3.2.3 Pathway and Environmental Hazard Assessment

Not applicable.

3.3.2.3.1 *Groundwater Pathway and Targets*

Not applicable.

3.3.2.3.2 *Surface Water Pathway and Targets*

Not applicable.

3.3.2.3.3 *Soil and Air Exposure Pathways and Targets*

Not applicable.

3.4 OTHER

3.4.1 Spray Nozzle Test Area (Primary Location)

3.4.1.1 Description and Operational History

Annual nozzle spray testing for fire engines is typically performed in the sand pit located in the southeast portion of Volk Field CRTC. The location is bordered to the north by the bluff and to the south by S. Perimeter Road. The entire location is surrounded by wooded land. The geographic coordinates are 43°55'24.19"N and 90°15'12.74"W. The location of the sand pit is shown on Figures 1.1 and 3.2.

3.4.1.2 Waste Characteristics

Five fire engines currently perform annual testing to ensure proper equipment operation. Testing is typically conducted in the sand pit on the southeast portion of the Base. Each fire engine holds between 30 and 500 gallons of AFFF. During each annual test, no more than 4 to 5 gallons of AFFF are released from each engine directly into the sand pit. Most of the materials infiltrate into the soils with little runoff due to the porous soils. This practice has been standard for at least the past two decades at Volk Field CRTC (Davies, 2015, personal communication; Appendix C). Based on the operational history and direct release of AFFF during these years, the potential for PFCs released to the environment is high.

3.4.1.3 Pathway and Environmental Hazard Assessment

A complete exposure pathway typically includes the following components: a source of contamination (an environmental medium contaminated at the source or a release mechanism by which chemicals are released from a source medium and transported), an exposure medium by which a receptor comes into contact, and a route of intake for the contaminant into the receptor's body at the exposure point. If any of these elements are missing, the pathway is incomplete. Other release mechanisms resulting in exposure media for receptors may include the uptake of soil contaminants by plants and animals and the emission of soil contaminants into the air in association with dust particles (USEPA, 1989).

Database research (EDR, 2015) shows one day care facility and one elementary school within the potential migration area of 4 miles from any potential PFC release location. No schools or day care

facilities are located on Base (Gonnering, 2015, personal communication; Appendix C). The day care facility is located approximately 5,950 feet hydrologically upgradient of the annual test area.

3.4.1.3.1 Groundwater Pathway and Targets

The primary drinking water source for Volk Field CRTC is the Sandstone aquifer. Production wells on Base pump water from the Sandstone aquifer at depths ranging from 250 to 305 feet bgs (Zanter, 2015, personal communication; Appendix C). The Sandstone aquifer underlying Volk Field CRTC is unconfined and highly permeable.

The Volk Field CRTC population within a 4-mile radius of the location relies on drinking water from the Sandstone aquifer through onsite production wells (Gonnering, 2015, personal communication; Appendix C). The nearest production well (well located on the bluff) from the location is located approximately 1,210 feet to the north and hydrologically cross-gradient of the test area. There are no residents at Volk Field CRTC (Gonnering, 2015, personal communication; Appendix C). The nearest off-Base PWS well is located at Camp Douglas Waterworks, approximately 3,590 feet southwest and hydrologically upgradient of the test area (EDR, 2015). This active well serves a population of approximately 640 (EDR, 2015). Ingestion exposure is a potential pathway for local populations.

The majority of the off-Base population within a 4-mile radius of the location relies on municipal water taken from the Sandstone aquifer. The off-Base population within 4 miles of the location is approximately 1,420 residents (EDR, 2015). The closest downgradient residential area is more than 4 miles from the location.

3.4.1.3.2 Surface Water Pathway and Targets

Surface drainage originating from most of Volk Field CRTC drains to the Lemonweir River. The surface water drainage from the Spray Nozzle Test Area (Primary Location) mostly penetrates the ground through the porous sands and soil onsite. Also, the surrounding surface water drains toward the sand pit from the bluffs and the surrounding area. The potential migration of surface water into groundwater is likely, based on the hydraulically connected aquifers and porous soils, which could provide a complete pathway for exposures, such as dermal and ingestion exposure to humans. Dermal contact and ingestion by aquatic or other animals is also a potential pathway for ecological receptors.

The Spray Nozzle Test Area (Primary Location) is not located within any floodplains. The nearest body of water is a small unnamed tributary, located approximately 3,330 feet east and downgradient of the location. Any surface water that does not penetrate the porous soils will continue to flow east in an unnamed tributary that discharges into the Lemonweir River approximately 3.3 miles downstream.

There are no identified downstream fisheries or other ecologically sensitive environments adjacent to the surface water migration path 15 miles downstream of the location (EDR, 2015; USFWS, 2015). Several wetlands are along the surface water migration path 15 miles downstream of the location (EDR, 2015). Local waterways are used for recreational fishing by residents of nearby communities.

3.4.1.3.3 Soil and Air Exposure Pathways and Targets

The Spray Nozzle Test Area (Primary Location) is covered with a thin layer of grass on top of sand. Although the surrounding area is well-vegetated, the thin grass cover would not preclude all

fugitive dust emissions; therefore, workers could be exposed to soil through dermal or inhalation pathways. The potential exists for soil exposure to burrowing animals.

No residents are onsite. The nearest residential area is approximately 2,700 feet west of the location. Population details of the residential areas within a 4-mile radius are discussed in Section 3.4.1.3.1

No schools or day care facilities are within a 200-foot radius of the location. The nearest school is Camp Douglas Elementary, located approximately 1.2 miles off Base to the west of the location (EDR, 2015). The nearest day care facility is Laugh and Learn Child Care, located approximately 1.1 miles to the west (EDR, 2015).

3.4.2 Spray Nozzle Test Area (Alternate Location)

3.4.2.1 Description and Operational History

When the primary location for the annual nozzle spray test for the fire engines is not accessible, the spray test is performed at an alternate sand pit just east of the primary location at Volk Field CRTC. The Spray Nozzle Test Area (Alternate Location) is bordered to the north by the bluff and to the south by S. Perimeter Road. The entire area is surrounded by wooded land. The geographic coordinates are 43°55'27.56"N and 90°14'53.89"W. The location of the sand pit is shown on Figures 1.1 and 3.2.

3.4.2.2 Waste Characteristics

Five fire engines currently perform annual testing to ensure proper equipment operation. This testing is conducted periodically at the sand pit east of the primary location where annual spray nozzle testing is performed. This alternative testing area is used when the primary location is occupied and the fire department is not able to use the primary area. Each fire engine holds between 30 and 500 gallons of AFFF. During each annual test, no more than 4 to 5 gallons of AFFF are released from each engine directly into the sand pit. Most of the materials will infiltrate into the soil with little runoff due to the porous soils onsite. This practice has been standard at Volk Field CRTC (Davies, 2015, personal communication; Appendix C). Based on the operational history and release of AFFF during these years, the potential for PFCs released to the environment is high.

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 receptor's body at the exposure point. If any of these elements are missing, the pathway is incomplete. Other release mechanisms resulting in exposure media for receptors may include the uptake of soil contaminants by plants and animals and the emission of soil contaminants into the air in association with dust particles (USEPA, 1989).

Database research (EDR, 2015) shows one day care facility and one elementary school within the potential migration area of 4 miles from any potential PFC release location. No schools or day care facilities are located on Base (Gonnering, 2015, personal communication; Appendix C). The day

care facility is located approximately 7,750 feet hydrologically upgradient of the annual alternative test area.

3.4.2.3.1 Groundwater Pathway and Targets

The primary drinking water source for Volk Field CRTC is the Sandstone aquifer. Production wells on Base pump water from the Sandstone aquifer at depths ranging from 250 to 305 feet bgs (Zanter, 2015, personal communication; Appendix C). The Sandstone aquifer underlying Volk Field CRTC is unconfined and highly permeable.

The Volk Field CRTC population within a 4-mile radius of the Spray Nozzle Test Area (Alternate Location) relies on drinking water from the Sandstone aquifer through onsite production wells (Gonnering, 2015, personal communication; Appendix C). The nearest production well (well located on the bluff) from the location is located approximately 2,160 feet to the northwest and hydrologically cross-gradient of the test area. There are no residents at Volk Field CRTC (Gonnering, 2015, personal communication; Appendix C). The nearest off-Base PWS well is located at Camp Douglas Waterworks, approximately 5,380 feet southwest and hydrologically upgradient of the test area (EDR, 2015). This active well serves a population of approximately 640 (EDR, 2015). Ingestion exposure is a potential pathway for local populations.

The majority of the off-Base population within a 4-mile radius of the location relies on municipal water taken from the Sandstone aquifer. The off-Base population within 4 miles of the location is approximately 1,420 residents (EDR, 2015). The closest downgradient residential area is more than 4 miles from the location.

3.4.2.3.2 Surface Water Pathway and Targets

Surface drainage originating from most of Volk Field CRTC drains to the Lemonweir River. The surface water drainage from the Spray Nozzle Test Area (Alternate Location) mostly penetrates the ground through the porous sands and soil onsite. Also, the surrounding surface water drains toward the sand pit from the bluffs and the surrounding area. The potential migration of surface water into groundwater is likely, based on the hydraulically connected aquifers and porous soils, which could provide a complete pathway for exposures, such as dermal and ingestion exposure to humans. Dermal contact and ingestion by aquatic or other animals is also a potential pathway for ecological receptors.

The Spray Nozzle Test Area (Alternate Location) is not located within any floodplains. The National Wetlands Inventory database indicates a small freshwater pond on the area. However, no ponds were observed on the area during the visit. The nearest body of water is a small unnamed tributary, located approximately 2,140 feet east and downgradient of the location. Any surface water that does not penetrate the porous soils will continue to flow east in an unnamed tributary that discharge into the Lemonweir River approximately 3.3 miles downstream.

There are no identified downstream fisheries or other ecologically sensitive environments adjacent to the surface water migration path 15 miles downstream of the location (EDR, 2015; USFWS, 2015). Several wetlands are along the surface water migration path 15 miles downstream of the location (EDR, 2015). Local waterways are used for recreational fishing by residents of nearby communities.

3.4.2.3.3 Soil and Air Exposure Pathways and Targets

The area is covered with a thin layer of grass on top of sand. Although the surrounding area is well-vegetated, the thin grass cover would not preclude all fugitive dust emissions; therefore, workers could be exposed to soil through dermal or inhalation pathways. The potential exists for soil exposure to burrowing animals.

No residents are onsite. The nearest residential area is approximately 4,625 feet west of the location. Population details of the residential areas within a 4-mile radius are discussed in Section 3.4.2.3.1.

No schools or day care facilities are within a 200-foot radius of the location. The nearest school is Camp Douglas Elementary, located approximately 1.5 miles off Base to the west of the location (EDR, 2015). The nearest day care facility is Laugh and Learn Child Care, located approximately 1.4 miles to the west (EDR, 2015).

3.4.3 Oil-Water Separator (Building 510)

3.4.3.1 Description and Operational History

The Oil-Water Separator (Building 510) at the fire department is located on the east side of the building outside of the bay doors and is surrounded by asphalt. All materials captured in the floor drains inside the fire station travel through the Oil-Water Separator (Building 510) before being distributed to the sanitary sewer system. The geographic coordinates are 43°56'6.33"N and 90°15'42.11"W. The location of the Oil-Water Separator (Building 510) is shown on Figures 1.1 and 3.1.

Any spills and all fire engines are washed inside the fire station where all materials are rinsed down the floor drains. The rinse materials, which could potentially contain small amounts of AFFF (approximately less than 1 gallon), will pass through the Oil-Water Separator (Building 510) before going into the sanitary sewer system (Davies, 2015, personal communication; Appendix C). There are no known releases to the environment from Building 510 Oil-Water Separator. There are also no known or documented releases of AFFF outside of the Oil-Water Separator (Building 510).

3.4.3.2 Waste Characteristics

Not applicable.

3.4.3.3 Pathway and Environmental Hazard Assessment

Not applicable.

3.4.3.3.1 *Groundwater Pathway and Targets*

Not applicable.

3.4.3.3.2 *Surface Water Pathway and Targets*

Not applicable.

3.4.3.3.3 Soil and Air Exposure Pathways and Targets

Not applicable.

3.4.4 Current Wastewater Treatment Plant (Building 650)

3.4.4.1 Description and Operational History

The current WWTP (Building 650) was constructed in 1995 and is located on the western portion of Volk Field CRTTC (Walter, 2015, personal communication; Appendix C). The WWTP contains a lift station and three settling ponds. The geographic coordinates are 43°56'7.62"N and 90°16'33.57"W. The location of the current WWTP (Building 650) is shown on Figures 1.1 and 3.3. The current WWTP (Building 650) handles all of the waste produced at Volk Field CRTTC including any AFFF that may have been disposed of into the system from the fire stations or the current FTA (Building 630). The three settling ponds are lined with 60 mil polyvinyl chloride liner (Gonnering, 2015, personal communication; Appendix C). The discharge from the third settling pond travels through a pipe system to an unnamed tributary located north of the Base (Gonnering, 2015, personal communication; Appendix C).

The Fire Chief indicated that any potential discharges of AFFF from the fire stations and current FTA (Building 630) could have potentially traveled to the WWTP (Davies, 2015, personal communication; Appendix C). There are no known releases of AFFF within Building 650. There are also no known or documented releases of AFFF outside of the WWTP.

3.4.4.2 Waste Characteristics

Not applicable.

3.4.4.3 Pathway and Environmental Hazard Assessment

Not applicable.

3.4.4.3.1 *Groundwater Pathway and Targets*

Not applicable.

3.4.4.3.2 *Surface Water Pathway and Targets*

Not applicable.

3.4.4.3.3 *Soil and Air Exposure Pathways and Targets*

Not applicable.

3.4.5 Former Primary and Secondary Wastewater Settling Ponds

3.4.5.1 Description and Operational History

The former primary and secondary wastewater settling ponds were in operation prior to 1970 until 1995 (Walter, 2015, personal communication; Appendix C). The primary wastewater settling pond was located adjacent to the north of the current WWTP (Building 650), and the secondary wastewater settling pond was located north of Site 5 - 1978 KC97 crash location on the north side

of the unnamed road. The geographic coordinates of the former primary and secondary wastewater settling ponds are 43°56'12.55"N and 90°16'32.61"W and 43°56'32.29"N and 90°15'9.69"W, respectively. The pond locations are shown on Figures 1.1, 3.1, and 3.3. Prior to 1995, the former wastewater settling ponds at Volk Field CRTC collected the waste on Base. These wastewater settling ponds were not lined with any type of material. The sanitary sewer utility lines would connect to the primary and secondary wastewater settling ponds. The Environmental Manager indicated that the ponds would discharge into the unnamed tributary located north of the Base just as the current WWTP (Building 650) discharges (Gonnering, 2015, personal communication; Appendix C).

3.4.5.2 Waste Characteristics

The same practices from the fire station occurred while these settling ponds were in operation (Davies, 2015, personal communication; Appendix C). It is therefore likely that any AFFF released from the fire station would have encountered the settling ponds.

3.4.5.3 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 receptor's body at the exposure point. If any of these elements are missing, the pathway is incomplete. Other release mechanisms resulting in exposure media for receptors may include the uptake of soil contaminants by plants and animals and the emission of soil contaminants into the air in association with dust particles (USEPA, 1989).

Database research (EDR, 2015) shows one day care facility and one elementary school within the potential migration area of 4 miles from any potential PFC release location. No schools or day care facilities are located on Base (Gonnering, 2015, personal communication; Appendix C). The day care facility is located approximately 6,520 feet hydrologically upgradient of the former wastewater settling ponds.

3.4.5.3.1 *Groundwater Pathway and Targets*

The primary drinking water source for Volk Field CRTC is the Sandstone aquifer. Production wells on Base pump water from the Sandstone aquifer at depths ranging from 250 to 305 feet bgs (Zanter, 2015, personal communication; Appendix C). The Sandstone aquifer underlying Volk Field CRTC is unconfined and highly permeable.

The Volk Field CRTC population within a 4-mile radius of the location relies on drinking water from the Sandstone aquifer through onsite production wells (Gonnering, 2015, personal communication; Appendix C). The nearest production well (W1) from the former primary wastewater settling pond is located approximately 2,340 feet to the south and hydrologically cross-gradient of the pond. The nearest production well (W5) from the former secondary wastewater settling pond is located approximately 3,725 feet to the south and hydrologically cross-gradient of the pond. There are no residents at Volk Field CRTC (Gonnering, 2015, personal communication; Appendix C).

The nearest off-Base PWS well is located at Camp Douglas Waterworks, approximately 6,310 feet southwest and hydrologically cross-gradient of the former primary wastewater settling pond and approximately 8,740 southwest and hydrologically cross-gradient of the former secondary wastewater settling pond (EDR, 2015). This active well serves a population of approximately 640 (EDR, 2015). Ingestion exposure is a potential pathway for local populations.

The majority of the off-Base population within a 4-mile radius of the location relies on municipal water taken from the Sandstone aquifer. The off-Base population within 4 miles of the location is approximately 1,310 (EDR, 2015). The closest downgradient residential area is more than 4 miles from the location.

3.4.5.3.2 Surface Water Pathway and Targets

Surface drainage originating from most of Volk Field CRTC drains to the Lemonweir River. The surface water drainage from both wastewater settling ponds mostly penetrates the ground through the porous sands and soil onsite because the area in the vicinity is flat. The secondary wastewater settling pond is in a low-lying area. The potential migration of surface water into groundwater is likely, based on the hydraulically connected aquifers and porous soils, which could provide a complete pathway for exposures, such as dermal and ingestion exposure to humans. Dermal contact and ingestion by aquatic or other animals is also a potential pathway for ecological receptors.

The location is not located within any floodplains. Both ponds are identified as freshwater lakes based on the National Wetlands Inventory database. However, during the visit, neither location contained any standing water. The nearest body of water to the primary wastewater settling pond is a small unnamed tributary, located approximately 165 feet northeast and downgradient of the location. The nearest body of water to the secondary wastewater settling pond is a small unnamed tributary, located approximately 200 feet north and downgradient of the location. Any surface water that does not penetrate the porous soils will continue to flow north to where the two unnamed tributaries connect north of the location that discharge into the Lemonweir River approximately 2 miles downstream.

There are no identified downstream fisheries or other ecologically sensitive environments adjacent to the surface water migration path 15 miles downstream of the location (EDR, 2015; USFWS, 2015). Several wetlands are along the surface water migration path 15 miles downstream of the location (EDR, 2015). Local waterways are used for recreational fishing by residents of nearby communities.

3.4.5.3.3 Soil and Air Exposure Pathways and Targets

The wastewater settling ponds are surrounded by well-vegetated, grassy areas. The well-vegetated area would preclude any fugitive dust emissions and potential exposure. Current and planned future land use does not involve any human health exposures. Any future work on the former primary wastewater settling pond could provide the potential of exposure to utility workers from the sanitary sewer line located on the east side of the former pond. No utilities are located near the former secondary wastewater settling pond. The potential of exposure to burrowing animals would be present.

No residents are onsite. The nearest residential area is approximately 6,350 feet south of the location. Population details of the residential areas within a 4-mile radius are discussed in Section 3.4.5.3.1.

No schools or day care facilities are within a 200-foot radius of the location. The nearest school is Camp Douglas Elementary, located approximately 1 mile off Base to the south of the location (EDR, 2015). The nearest day care facility is Laugh and Learn Child Care, located approximately 0.9 mile to the south (EDR, 2015).

3.4.6 Treated Wastewater Outfall

3.4.6.1 Description and Operational History

The current WWTP (Building 650) was constructed in 1995 and is located on the western portion of Volk Field CRTC (Walter, 2015, personal communication; Appendix C). The current WWTP (Building 650) handles all of the waste produced at Volk Field CRTC including any AFFF that may have been disposed of into the system from the fire stations or the current FTA (Building 630). After the water is treated at the current WWTP (Building 650), it is piped offsite where it is discharged into the Lemonweir River. The geographic coordinates of the treated wastewater outfall are 43°56'48.35"N and 90°12'36.41"W. The location of the treated waste water outfall is shown on Figures 1.1 and 3.4.

3.4.6.2 Waste Characteristics

Not applicable.

3.4.6.3 Pathway and Environmental Hazard Assessment

A complete exposure pathway typically includes the following components: a source of contamination (an environmental medium contaminated at the source or a release mechanism by which chemicals are released from a source medium and transported), an exposure medium by which a receptor comes into contact, and a route of intake for the contaminant into the receptor's body at the exposure point. If any of these elements are missing, the pathway is incomplete. Other release mechanisms resulting in exposure media for receptors may include the uptake of soil contaminants by plants and animals and the emission of soil contaminants into the air in association with dust particles (USEPA, 1989).

Database research (EDR, 2015) shows one day care facility and one elementary school within the potential migration area of 4 miles from any potential PFC release location. No schools or day care facilities are located on Base (Gonnering, 2015, personal communication; Appendix C). The day care facility is located approximately 3.7 miles hydrologically upgradient of the treated wastewater outfall.

3.4.6.3.1 *Groundwater Pathway and Targets*

Not applicable.

3.4.6.3.2 *Surface Water Pathway and Targets*

The treated wastewater is directly piped from the current WWTP (Building 650) to the Lemonweird River; therefore, there is no interaction between the treated wastewater and the ground surface until it is discharged into the river. Once the treated wastewater is discharged into the river, the potential migration of surface water into groundwater is likely, based on the hydraulically connected aquifers and porous soils, which could provide a complete pathway for

exposures, such as dermal and ingestion exposure to humans. Dermal contact and ingestion by aquatic or other animals is also a potential pathway for ecological receptors.

The treated wastewater outfall is located within the rivering flood plain.

There are no identified downstream fisheries or other ecologically sensitive environments adjacent to the surface water migration path 15 miles downstream of the location (EDR, 2015; USFWS, 2015). Several wetlands are along the surface water migration path 15 miles downstream of the location (EDR, 2015). Local waterways are used for recreational fishing by residents of nearby communities.

3.4.6.3.3 Soil and Air Exposure Pathways and Targets

Not applicable.

3.4.7 Base Supply Building (Building 10)

3.4.7.1 Description and Operational History

The Base supply building (Building 10) is located on the western boundary of Volk Field CRTC and contains AFFF storage. The geographic coordinates are 43°55'43.97"N and 90°16'11.21"W. The location of the Base supply building (Building 10) is shown on Figures 1.1 and 3.3. On the first floor and in the basement of the Base supply building (Building 10) are approximately 1,800 gallons of AFFF stored in 5-gallon buckets.

Only one discharge of less than 1 gallon of AFFF has occurred inside the building. The discharge was cleaned up and disposed of in accordance with proper procedures (Gasper, 2015, personal communication; Appendix C). No other releases are known or have been documented at the Base supply building (Building 10).

3.4.7.2 Waste Characteristics

Not applicable.

3.4.7.3 Pathway and Environmental Hazard Assessment

Not applicable.

3.4.7.3.1 Groundwater Pathway and Targets

Not applicable.

3.4.7.3.2 Surface Water Pathway and Targets

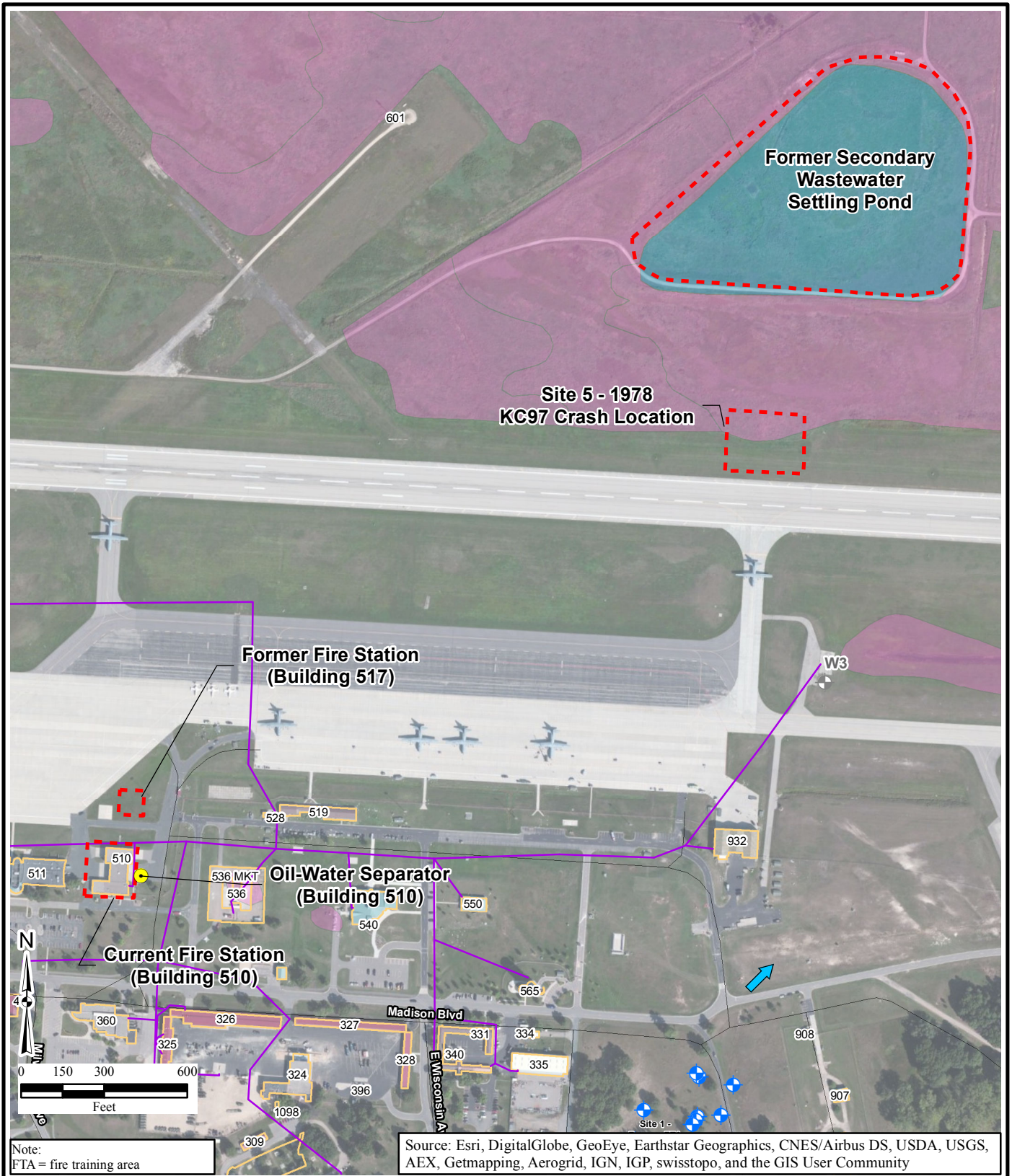
Not applicable.

3.4.7.3.3 Soil and Air Exposure Pathways and Targets

Not applicable.

FIGURES

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ic:\omg\Groups\GIS\00_Proj\A\FCEC\495516_PPC_BI_Reports\ANG_Yolk_Field\GIS\MapFiles\Draft\Figure 3.1.mxd
 4/7/2015 5:11
 Source: Wetland, National Wetlands Inventory - Wetland Polygons, Published September 2012 U.S. Fish and Wildlife Service, Division of Habitat and Resources Conservation, Washington, D.C.
<http://www.fws.gov/wetlands/>

CH2MHILL.

Legend

Abandoned Production Well	Approximate Location
Monitoring Well	Approximate Groundwater Flow Direction (Nov 1990)
Oil-Water Separator	Freshwater Emergent Wetland
Sanitary Sewer	Freshwater Pond
Road	
Building	

**Figure 3.1
 Locations of Non-FTAs,
 East End,
 Volk Field CRTC,
 Wisconsin**

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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Note:
FTA = fire training area

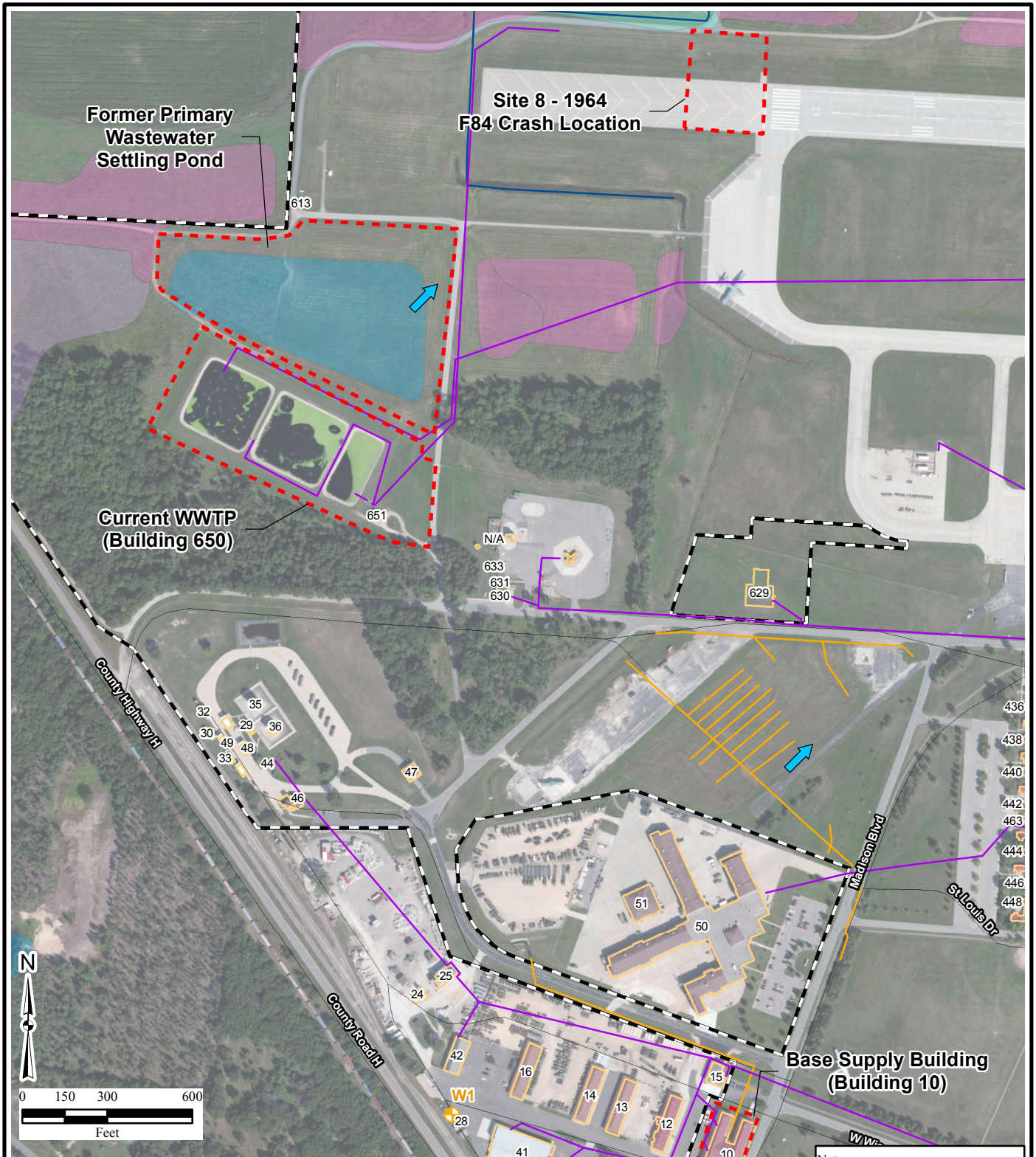
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4/7/2015 5:11
Source: Wetland, National Wetlands Inventory - Wetland Polygons, Published September 2012 U.S. Fish and Wildlife Service, Division of Habitat and Resources Conservation, Washington, D.C.
<http://www.fws.gov/wetlands/>

Legend

- Production Well
- Road
- Approximate Bluff Line
- Building
- Approximate Location
- Installation Boundary
- Approximate Groundwater Flow Direction (Nov 1990)
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

Figure 3.2
Locations of Non-FTAs,
South End,
Volk Field CRTC,
Wisconsin

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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Notes:
FTA = fire training area
WWTP = wastewater treatment plant

Esri, Inc. All rights reserved.
Figure 3.3 (rev. 2/14)
Source: Wetland, National Wetlands Inventory - Wetland Polygons, Published September 2012, U.S. Fish and Wildlife Service, Division of Habitat and Resources Conservation, Washington, D.C.
<http://www.fws.gov/wetlands/>

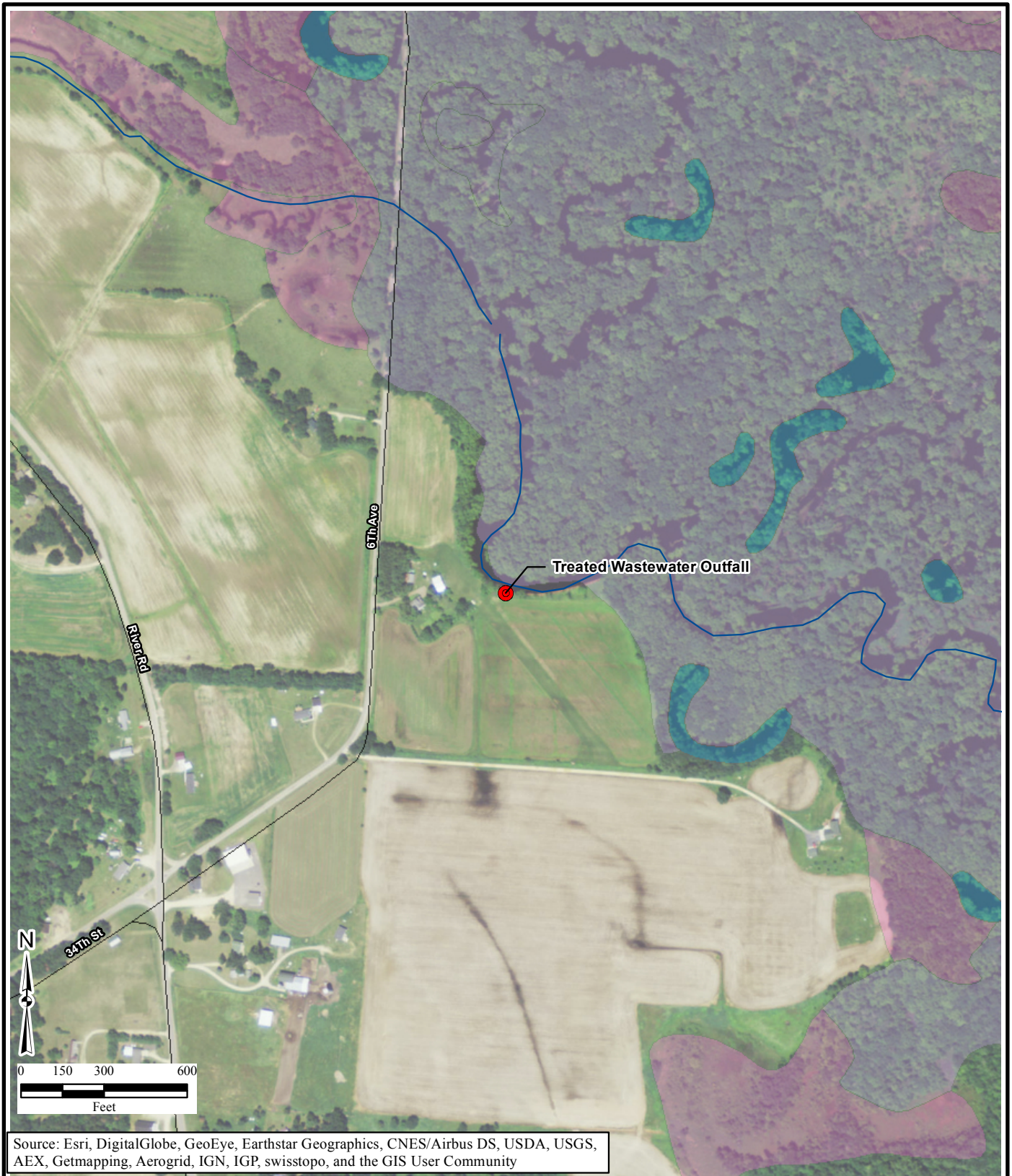
Legend

- Production Well
- Sanitary Sewer
- Storm Drain
- Road
- Building
- Approximate Location
- Installation Boundary
- Approximate Groundwater Flow Direction (Nov 1990)
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Riverine

Figure 3.3
Locations of Non-FTAs,
West End,
Volk Field CRTC,
Wisconsin

CH2MHILL.

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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

icanopus\Groups\GIS00_Proj\A\FCEC\493516_PP_C_Pt_Reports\ANG_Yolk_Field\GIS_MapFiles\Draft\Fig 3.4.mxd
6/2/2015 SA
Source: Wetland National Wetlands Inventory - Wetland Polygons, Published September 2012, U.S. Fish and Wildlife Service, Division of Habitat and Resource Conservation, Washington, D.C.
<http://www.fws.gov/wetlands/>

Legend

- Treated Wastewater Outfall
- Road
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Riverine

**Figure 3.4
Locations of Non-FTAs,
Far East End,
Volk Field CRTC,
Wisconsin**

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4.0 SUMMARY AND CONCLUSIONS

4.1 SUMMARY

4.1.1 Fire Training Areas

4.1.1.1 Fire Training Areas Closed Prior to 1970

No FTAs used only prior to 1970 were identified onsite.

4.1.1.2 Fire Training Areas Operational After 1970

FTAs used after 1970 (Site 1 – Former FTA) could contain PFOA- and PFOS-impacted media.

4.1.1.3 Current Fire Training Areas

Volk Field CRTC currently operates one FTA, which is constructed with asphalt, concrete, and a vinyl-lined gravel pit to collect all excess materials, which are then diverted to the sanitary sewer system. This FTA uses only propane as a fuel source and water to diffuse the fires. Small amounts of AFFF have been released at the location but these were captured in the gravel pit and directed into the sanitary sewer system.

4.1.2 Non-Fire Training Areas

4.1.2.1 Spray Nozzle Test Areas, KC97 Crash Location, and WWTP Locations

To ensure proper equipment operation, the spray nozzle test areas (sand pits) had AFFF applied annually to test the fire engine settings; the AFFF quickly infiltrated the porous soils. These areas could therefore contain PFOA- and PFOS-impacted media.

The Volk Field CRTC Fire Department responded to a KC97 crash location in 1978. It is unknown what type of firefighting foam was used at the crash location or the amount of foam used. Consideration of the possible presence of impacted media cannot be excluded from this emergency response location.

The WWTP locations, both current and former, have had AFFF-impacted media end up in the wastewater settling ponds of the systems from various locations onsite, including the fire stations and the current FTA (Building 630). However, because there are no reported releases from the current WWTP's engineered systems, only the former WWTP is likely to have had AFFF released to the environment. These former settling ponds could therefore contain PFOA- and PFOS-impacted media.

4.1.2.2 Fire Stations and Base Supply Building (Building 10)

Volk Field CRTC has one fire station on Base. Both the former fire station (Building 517) and the current fire station (Building 510) have had fire engines and bulk storage containers that hold AFFF. All refueling and washing of fire engines occurs inside the fire stations, where all excess materials including AFFF are captured in the floor drains. Because of the capture of AFFF inside

the fire station floor drains, and no reported releases outside of the buildings, it is unlikely that PFC-impacted media would be present at the fire stations.

The Base supply building (Building 10) at Volk Field CRTC has storage of AFFF. Due to the lack of releases outside of this location, it is unlikely that PFC-impacted media would be present at the Base supply building (Building 10).

4.2 CONCLUSIONS

Table 4.1 summarizes the findings from this PA Report and presents possible future location management decisions. The identified locations are categorized by group as follows:

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

Based on the group designation and rationale for each location, recommendations are provided in Table 4.1. In accordance with the USEPA CERCLA PA and Site Inspection (SI) Guidance documents (USEPA, 1991; USEPA, 1992), each identified location is recommended for one of the following four actions: implement removal action due to imminent threat; close out due to no release; initiate a Remedial Investigation (RI); or initiate an SI.

- Removal actions, 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 (USEPA, 1991).
- Close out or no further remedial action planned is defined as a disposition decision that further response under the federal Superfund is not necessary (USEPA, 1991).
- RI is defined as a field investigation to characterize the nature and extent of contamination at a location. The RI supports development, evaluation, and selection of the appropriate response alternative (USEPA, 1991).
- SI is defined as an investigation to collect and analyze waste and environmental samples to support an evaluation (USEPA, 1992).

**Table 4.1
Preliminary Assessment Report Summary and Findings
Volk Field CRTC, Wisconsin**

Locations	Group	Rationale	Recommendation
Site 1 – Former FTA	Group 2	<ul style="list-style-type: none"> • Unknown use of AFFF from 1970 to 1980. • No containment. • Unknown amounts of AFFF released. 	Initiate SI.
Current FTA (Building 630)	Group 4	<ul style="list-style-type: none"> • All AFFF releases contained to sanitary sewer system. 	Close out with no additional investigation.
Current Fire Station (Building 510)	Group 4	<ul style="list-style-type: none"> • All AFFF releases contained to sanitary sewer system. 	Close out with no additional investigation.
Former Fire Station (Building 517)	Group 4	<ul style="list-style-type: none"> • All AFFF releases contained to sanitary sewer system. 	Close out with no additional investigation.
Site 5 – 1978 KC97 Crash Location	Group 2	<ul style="list-style-type: none"> • Unknown use and amounts of AFFF discharged directly onto ground (no pavement). • One-time event. 	Initiate SI.
Site 8 – 1964 F84 Crash Location	Group 4	<ul style="list-style-type: none"> • No AFFF use. 	Close out with no additional investigation.
Spray Nozzle Test Area (Primary Location)	Group 2	<ul style="list-style-type: none"> • Repeated application of AFFF directly into sand pit. • No more than 20 gallons of AFFF used each year. 	Initiate SI.
Spray Nozzle Test Area (Alternate Location)	Group 2	<ul style="list-style-type: none"> • Repeated application of AFFF directly into sand pit. • No more than 20 gallons of AFFF used each year. 	Initiate SI.
Oil-Water Separator (Building 510)	Group 4	<ul style="list-style-type: none"> • Potential for AFFF within the Oil-Water Separator (Building 510), but no known discharges or releases to the environment. 	Close out with no additional investigation.
Current WWTP (Building 650)	Group 4	<ul style="list-style-type: none"> • No known discharges or releases outside of WWTP. 	Close out with no additional investigation.
Treated Wastewater Outfall	Group 2	<ul style="list-style-type: none"> • Potential discharge of water contaminated with AFFF. 	Initiate SI.
Former Primary and Secondary Wastewater Settling Ponds	Group 2	<ul style="list-style-type: none"> • Known AFFF-impacted media. • No containment. • Unknown amounts of AFFF released. 	Initiate SI.

Table 4.1
Preliminary Assessment Report Summary and Findings
Volk Field CRTC, Wisconsin

Locations	Group	Rationale	Recommendation
Base Supply Building (Building 10)	Group 4	<ul style="list-style-type: none">• Known AFFF storage, but no known releases.	Close out with no additional investigation.

5.0 REFERENCES

- Bouwer. 1978. Groundwater Hydrology. McGraw-Hill, Inc.
- Chang, E.T., H.O. Adami, P. Boffetta, P. Cole, T.B. Starr, and J.S. Mandel. 2014. A Critical Review of Perfluorooctanoate and Perfluorooctanesulfonate Exposure and Cancer Risk in Humans, *Critical Reviews in Toxicology*, 44(S1): 1-81
- Coates, C.Y. (Center Historian). 1977. A History of USAF Fire Protection Training at Chanute Air Force Base, 1964-1976. Chanute Technical Training Center, Chanute AFB, Illinois. February.
- Davies, Matthew (Fire Chief). 2015. Personal communication. March 2.
- Engineering-Science, Inc., 1993. Final Remedial Investigation Report, Volk Field Air National Guard, HAZWRAP. September.
- Environmental Data Resources, Inc. (EDR). 2015. EDR Offsite Receptor Report 4228893.3s, EDR NEPACHECK 4228893.2s, EDR GEOCHECK 4228893.1s. March.
- Gasper, Tiffany (Base Supply). 2015. Personal communication. March 2.
- Gonnering, Daniel (Environmental Manager). 2015. Personal communication. March 2-3.
- Hazardous Materials Technical Center, 1984. Installation Restoration Program Records Search, 8204th Field Training Site, Wisconsin Air National Guard, Volk Field Air National Guard Base.
- Montgomery Watson. 1998. Installation Restoration Program Final Technical Memorandum Volume 1. February.
- Porter, R. 2011. "AFCEE/TDV Emerging Issues. Perfluorinated Compounds." Air Force Restoration and Technology Transfer Workshop. March.
- Rak, Andrew and Catherine M. Vogel. 2009. Increasing Regulation of Perfluorinated Compounds and the Potential Impacts at Air Force Installations. Prepared for the U.S. Air Force. March.
- U.S. Air Force (USAF). 2012. Interim Air Force Guidance on Sampling and Response Actions for Perfluorinated Compounds at Active and BRAC Installations. August.
- U.S. Environmental Protection Agency (USEPA). 1989. Risk Assessment Guidance for Superfund Volume I: Human Health Evaluation Manual (Part A). Interim Final. USEPA/540/1-89/002 December. Office of Emergency and Remedial Response U.S. Environmental Protection Agency, Washington, D.C.
- U.S. Environmental Protection Agency (USEPA). 1991. Guidance for Preparing Preliminary Assessments under CERCLA. September.
- U.S. Environmental Protection Agency (USEPA). 1992. Guidance for Performing Site Inspections under CERCLA. September.
- U.S. Fish and Wildlife Service (USFWS). 2015. Geospatial Fisheries Information Network (GeoFIN). Available at: <http://ecos.fws.gov/geofin/>.

Walter, Edwin (Real Property). 2015. Personal communication. March 2.

Zanter, Tom (Utility Supervisor). 2015. Personal communication. March 2.

APPENDIX A
PHOTO DOCUMENTATION

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PHOTOGRAPH LOG

Team: S. Aselage		Date: 3-2 & 3-3-15	
Project Number: 495516.03.81.01		Observation Period: Start: _____ Stop: _____	
Weather: Sunny, 20s, snow covered			
Photo No.	3-2 Time	View Direction	Location/Description
1	1327	NA	Bulk storage container inside fire station
2	1327	NA	Floor drains inside fire station
3	1329	NA	5 gallon storage of AFFF inside fire station
4	1329	NA	Floor drains inside fire station
5	1339	NE	Site 1- Former FTA
6	1339	NW	Site 1- Former FTA
7	1349	East	Current FTA -close up
8	1351	NE	Current FTA -overview
9	1400	South	Site 5- KC97 Crash Site
10	1406	South	Current WWTP
11	1408	West	Current WWTP
12	1413	NA	Storage of AFFF inside Base Supply (Bldg 10)
13	1414	NA	" " " " " "
14	1446	North	Nozzle test spray area (west side)
15	1446	NW	" " " " " "
16	1449	North	Nozzle test spray area (East side)
17	1449	NW	" " " " " "
18	9:55	NW	old location of secondary WWTP
19	9:55	North	" " " " " "
20	10:04	West	Location of old fire station (demolished)

3-3



Photo 1



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6



Photo 7



Photo 8



Photo 9



Photo 10



Photo 11



Photo 12



Photo 13



Photo 14



Photo 15



Photo 16



Photo 17



Photo 18



Photo 19



Photo 20

APPENDIX B
FIELD DOCUMENTATION

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POTENTIAL HAZARDOUS WASTE SITE FORMS

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Potential Hazardous Waste Site Preliminary Assessment Form	Identification	
	State: <u>WI</u>	CERCLIS #:
	CERCLIS Discovery Date:	

1. General Site Information

Name: <u>Volk Field CRTC</u>		Street Address:			
City: <u>Camp Douglas</u>	State: <u>WI</u>	Zip Code: <u>54618</u>	County: <u>Juneau</u>	Co. Code:	Cong. Dist:
Latitude: <u>43°55'58.49"N</u>	Longitude: <u>90°15'15.82"W</u>	Approximate Area of Site: <u>6.3</u> Acres		Status of Site:	
		Square Ft		<input type="checkbox"/> Active	<input type="checkbox"/> Not Specified
				<input checked="" type="checkbox"/> Inactive	<input type="checkbox"/> NA (GW plume, etc.)

Site Name: Site 1 - Former FTA

Site Description:
 Formerly used for fire training exercises from the 1940s-1980.

2. Owner/Operator Information

Owner: <u>Volk Field CRTC</u>			Operator:		
Street Address:			Street Address:		
City: <u>Camp Douglas</u>			City:		
State: <u>WI</u>	Zip Code: <u>54618</u>	Telephone:	State:	Zip Code:	Telephone:
Type of Ownership: <input type="checkbox"/> Private <input checked="" type="checkbox"/> Federal Agency Name: <u>ANG</u> <input type="checkbox"/> State <input type="checkbox"/> Indian			Type of Ownership: <input type="checkbox"/> Private <input type="checkbox"/> Federal Agency Name: _____ <input type="checkbox"/> State <input type="checkbox"/> Indian		
<input type="checkbox"/> County <input type="checkbox"/> Municipal <input type="checkbox"/> Not Specified <input type="checkbox"/> Other _____			<input type="checkbox"/> County <input type="checkbox"/> Municipal <input type="checkbox"/> Not Specified <input type="checkbox"/> Other _____		

3. Site Evaluator Information

Name of Evaluator: <u>Stephanie Aselage</u>	Agency/Organization: <u>CH2M HILL</u>	Date Prepared:
Street Address: <u>10123 Alliance Rd. Suite 300</u>	City: <u>Cincinnati</u>	State: <u>OH</u>
Name of EPA or State Agency Contact:	Street Address:	
City:	State:	Telephone:

4. Site Disposition (for EPA use only)

Emergency Response/Removal Assessment Recommendation: <input type="checkbox"/> Yes <input type="checkbox"/> No Date: _____	CERCLIS Recommendation: <input type="checkbox"/> Higher Priority SI <input type="checkbox"/> Lower Priority SI <input type="checkbox"/> NFRAP <input type="checkbox"/> RCRA <input type="checkbox"/> Other: _____ Date: _____	Signature:
		Name (typed):
		Position:

7. Ground Water Pathway

<p>Is Ground Water Used for Drinking Within 4 Miles:</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes, Distance to nearest Drinking Well: <u>372</u> Feet</p> <p>Type of Drinking Water Wells Within 4 Miles (check all that apply):</p> <p><input checked="" type="checkbox"/> Municipal <input checked="" type="checkbox"/> Private <input type="checkbox"/> None</p>	<p>Is There a Suspected Release to Ground Water¹:</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <hr/> <p>Have Primary Target Drinking Water Wells Been Identified:</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes, Enter Primary Target Population: _____ People³</p>	<p>List Secondary Target Population Served by Ground Water Withdrawn From:</p> <p>0 - 1/4 Mile _____</p> <p>>1/4 - 1/2 Mile _____</p> <p>>1/2 - 1 Mile _____</p> <p>>1 - 2 Mile _____</p> <p>>2 - 3 Mile _____</p> <p>>3 - 4 Mile _____</p> <p>Total Within 4 Miles⁴ _____</p> <p><small>*Use population #s for PA Table 2 *Note nearest well for #5 on GW Pathway Scoresheet</small></p>
<p>Depth to Shallowest Aquifer:</p> <p>_____ Feet</p> <p>Karst Terrain/Aquifer Present:</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Nearest Designated Wellhead Protection Area⁶:</p> <p><input type="checkbox"/> Underlies Site <input type="checkbox"/> >0-4 Miles <input type="checkbox"/> None Within 4 Miles</p>	

8. Surface Water Pathway

<p>Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):</p> <p><input checked="" type="checkbox"/> Stream <input checked="" type="checkbox"/> River <input type="checkbox"/> Pond <input type="checkbox"/> Lake <input type="checkbox"/> Bay <input type="checkbox"/> Ocean <input type="checkbox"/> Other _____</p>	<p>Shortest Overland Distance From Any Source to Surface Water:</p> <p>_____ Feet _____ Miles</p>
<p>Is There a Suspected Release to Surface Water¹:</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Site is Located in:</p> <p><input type="checkbox"/> Annual - 10 yr Floodplain <input type="checkbox"/> >10yr - 100yr Floodplain <input type="checkbox"/> >100yr - 500yr Floodplain <input checked="" type="checkbox"/> >500yr Floodplain</p>
<p>Drinking Water Intake Located Along the Surface Water Migration Path:</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Have Primary Target Drinking Water Intakes Been Identified:</p> <p><input type="checkbox"/> Yes If Yes, Distance to Nearest Drinking Water Intake : _____ Miles⁶ <input checked="" type="checkbox"/> No</p> <p>If Yes, Enter Population Served by Target Intake:</p> <p>_____ People⁴</p>	<p>List All Secondary Target Drinking Water Intakes:</p> <p><u>Name:</u> <u>Water Body:</u> <u>Flow (cfs):</u> <u>Population Served:</u></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p align="right">Total within 15 Miles ⁴ _____</p>
<p>Fisheries Located Along the Surface Water Migration Path:</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Distance to Nearest Fishery: _____ Miles</p> <p>Have Primary Target Fisheries Been Identified:</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>List All Secondary Target Fisheries¹⁰:</p> <p><u>Water Body/ Fishery Name :</u> <u>Flow (cfs):</u></p> <p>_____</p> <p>_____</p> <p>_____</p>

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

Yes
 No

Have Primary Target Wetlands Been Identified:

Yes
 No

List All Wetlands:

Water Body: Flow (cfs): Frontage miles:

Other Sensitive Environments Located Along the Surface Water Migration Path:

Yes
 No

If Yes, Distance to Nearest Sensitive Environment: _____ Miles

Have Primary Target Sensitive Environments Been Identified:

Yes
 No

List All Sensitive Environments¹¹:

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:

_____ People²

Number of Workers Onsite⁴:

→ None
 1 - 100
 101 - 1,000
 > 1,000

Population Within 1 Mile:

_____ People⁷

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 Environment⁵:

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air¹:

Yes
 No

Enter Total Population on or Within:

Onsite _____

0-1/4 Mile _____

>1/4-1/2 Mile _____

>1/2-1 Mile _____

>1-2 Miles _____

>2-3 Miles _____

>3-4 Miles _____

Total Within 4 Miles ³⁻⁵ _____

Wetlands Located Within 4 Miles of the Site⁶:

Yes
 No

If Yes, How Many Acres: _____ Acres

Other Sensitive Environments Located Within 4 Miles of the Site:

→ Yes
 No

List All Sensitive Environments Within 1/2 Mile of the Site⁶:

Distance: Sensitive Environment Type/Wetlands Area (acres):

Onsite none

0-1/4 Mile wetlands

>1/4-1/2 Mile wetlands

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

¹⁻¹¹ Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification	
State: <u>WI</u>	CERCLIS #:
CERCLIS Discovery Date:	

1. General Site Information

Name: <u>Volk Field CRTC</u>		Street Address:			
City: <u>Camp Douglas</u>	State: <u>WI</u>	Zip Code: <u>54618</u>	County: <u>Juneau</u>	Co. Code:	Cong. Dist:
Latitude: <u>43° 56' 23.47" N</u>	Longitude: <u>90° 15' 13.16" W</u>	Approximate Area of Site: <u>~1.4</u> Acres		Status of Site:	
		Square Ft		<input type="checkbox"/> Active	<input checked="" type="checkbox"/> Not Specified
				<input type="checkbox"/> Inactive	<input type="checkbox"/> NA (GW plume, etc.)

Site Name: Site 5 - 1978 KC97 Crash Site

Site Description:
KC97 Crash Site North of Taxiway 3 in 1978.

2. Owner/Operator Information

Owner: <u>Volk Field CRTC</u>			Operator:		
Street Address:			Street Address:		
City: <u>Camp Douglas</u>			City:		
State: <u>WI</u>	Zip Code: <u>54618</u>	Telephone:	State:	Zip Code:	Telephone:
Type of Ownership:			Type of Ownership:		
<input type="checkbox"/> Private	<input type="checkbox"/> County	<input type="checkbox"/> Federal Agency	<input type="checkbox"/> Private	<input type="checkbox"/> County	<input type="checkbox"/> Federal Agency
<input checked="" type="checkbox"/> Federal Agency	<input type="checkbox"/> Municipal	Name: <u>ANG</u>	<input type="checkbox"/> Federal Agency	<input type="checkbox"/> Municipal	Name: _____
<input type="checkbox"/> State	<input type="checkbox"/> Not Specified	<input type="checkbox"/> State	<input type="checkbox"/> State	<input type="checkbox"/> Not Specified	<input type="checkbox"/> Other _____
<input type="checkbox"/> Indian	<input type="checkbox"/> Other _____	<input type="checkbox"/> Indian	<input type="checkbox"/> Indian	<input type="checkbox"/> Other _____	

3. Site Evaluator Information

Name of Evaluator: <u>Stephanie Aselage</u>	Agency/Organization: <u>CH2M HILL</u>	Date Prepared:
Street Address: <u>10123 Alliance Rd, Suite 300</u>	City: <u>Cincinnati</u>	State: <u>OH</u>
Name of EPA or State Agency Contact:	Street Address:	
City:	State:	Telephone:

4. Site Disposition (for EPA use only)

Emergency Response/Removal Assessment Recommendation: <input type="checkbox"/> Yes <input type="checkbox"/> No Date: _____	CERCLIS Recommendation: <input type="checkbox"/> Higher Priority SI <input type="checkbox"/> Lower Priority SI <input type="checkbox"/> NFRAP <input type="checkbox"/> RCRA <input type="checkbox"/> Other: _____ Date: _____	Signature:
		Name (typed):
		Position:

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:
 Yes
 No

If Yes, Distance to nearest Drinking Well: 3,052 Feet

Type of Drinking Water Wells Within 4 Miles (check all that apply):
 Municipal
 Private
 None

Is There a Suspected Release to Ground Water¹:
 Yes
 No

Have Primary Target Drinking Water Wells Been Identified:
 Yes
 No

If Yes, Enter Primary Target Population: _____ People³

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile _____

>1/4 - 1/2 Mile _____

>1/2 - 1 Mile _____

>1 - 2 Mile _____

>2 - 3 Mile _____

>3 - 4 Mile _____

Depth to Shallowest Aquifer: _____ Feet

Karst Terrain/Aquifer Present:
 Yes
 No

Nearest Designated Wellhead Protection Area⁶:
 Underlies Site
 >0-4 Miles
 None Within 4 Miles

Total Within 4 Miles⁴ _____

*Use population #s for PA Table 2
 *Note nearest well for #5 on GW Pathway Scoresheet

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):
 Stream River Pond Lake
 Bay Ocean Other _____

Shortest Overland Distance From Any Source to Surface Water:
 _____ Feet
 _____ Miles

Is There a Suspected Release to Surface Water¹:
 Yes
 No

Site is Located in:
 Annual - 10 yr Floodplain
 >10yr - 100yr Floodplain
 >100yr - 500yr Floodplain
 >500yr Floodplain

Drinking Water Intake Located Along the Surface Water Migration Path:
 Yes
 No

Have Primary Target Drinking Water Intakes Been Identified:
 Yes If Yes, Distance to Nearest Drinking Water Intake : _____ Miles⁶
 No

If Yes, Enter Population Served by Target Intake:
 _____ People⁴

List All Secondary Target Drinking Water Intakes:

<u>Name:</u>	<u>Water Body:</u>	<u>Flow (cfs):</u>	<u>Population Served:</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
Total within 15 Miles ⁴			_____

Fisheries Located Along the Surface Water Migration Path:
 Yes No If Yes, Distance to Nearest Fishery: _____ Miles

List All Secondary Target Fisheries¹⁰:

<u>Water Body/ Fishery Name :</u>	<u>Flow (cfs):</u>
_____	_____
_____	_____
_____	_____

Have Primary Target Fisheries Been Identified:
 Yes No

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

Yes
 No

Have Primary Target Wetlands Been Identified:

Yes
 No

List All Wetlands:

Water Body: Flow (cfs): Frontage miles:

Other Sensitive Environments Located Along the Surface Water Migration Path:

Yes
 No

If Yes, Distance to Nearest Sensitive Environment: _____ Miles

Have Primary Target Sensitive Environments Been Identified:

Yes
 No

List All Sensitive Environments¹¹:

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:

_____ People²

Number of Workers Onsite⁴:

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

Population Within 1 Mile:

_____ People⁷

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 Environment⁵:

* Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air¹:

Yes
 No

Enter Total Population on or Within:

Onsite _____

0-1/4 Mile _____

>1/4-1/2 Mile _____

>1/2-1 Mile _____

>1-2 Miles _____

>2-3 Miles _____

>3-4 Miles _____

Total Within 4 Miles³⁻⁵ _____

Wetlands Located Within 4 Miles of the Site⁶:

Yes
 No

If Yes, How Many Acres: _____ Acres

Other Sensitive Environments Located Within 4 Miles of the Site:

Yes
→ No

List All Sensitive Environments Within 1/2 Mile of the Site⁶:

Distance: Sensitive Environment Type/Wetlands Area (acres):

Onsite Wetlands

0-1/4 Mile Wetlands

>1/4-1/2 Mile Wetlands

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

¹⁻¹¹ Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification	State: <u>WI</u>
	CERCLIS #:
CERCLIS Discovery Date:	

1. General Site Information

Name: <u>Volk Field CRTC</u>		Street Address:			
City: <u>Camp Douglas</u>	State: <u>WI</u>	Zip Code: <u>54618</u>	County: <u>WI</u>	Co. Code:	Cong. Dist:
Latitude: <u>43° 55' 24.19" N</u>	Longitude: <u>90° 15' 12.74" W</u>	Approximate Area of Site: <u>~21</u> Acres		Status of Site:	
				<input checked="" type="checkbox"/> Active	<input type="checkbox"/> Not Specified
				<input type="checkbox"/> Inactive	<input type="checkbox"/> NA (GW plume, etc.)

Site Name: Spray Nozzle Test Area (Primary Location)

Site Description:
Sand pit where yearly spray nozzle tests occur

2. Owner/Operator Information

Owner: <u>Volk Field CRTC</u>			Operator:		
Street Address:			Street Address:		
City: <u>Camp Douglas</u>			City:		
State: <u>WI</u>	Zip Code: <u>54618</u>	Telephone:	State:	Zip Code:	Telephone:
Type of Ownership: <input type="checkbox"/> Private <input checked="" type="checkbox"/> Federal Agency Name: <u>ANG</u> <input type="checkbox"/> State <input type="checkbox"/> Indian			Type of Ownership: <input type="checkbox"/> Private <input type="checkbox"/> Federal Agency Name: _____ <input type="checkbox"/> State <input type="checkbox"/> Indian		
<input type="checkbox"/> County <input type="checkbox"/> Municipal <input type="checkbox"/> Not Specified <input type="checkbox"/> Other _____			<input type="checkbox"/> County <input type="checkbox"/> Municipal <input type="checkbox"/> Not Specified <input type="checkbox"/> Other _____		

3. Site Evaluator Information

Name of Evaluator: <u>Stephanie AseLage</u>	Agency/Organization: <u>CH2M HILL</u>	Date Prepared:
Street Address: <u>10123 Alliance Rd. Suite 300</u>	City: <u>Cincinnati</u>	State: <u>OH</u>
Name of EPA or State Agency Contact:	Street Address:	
City:	State:	Telephone:

4. Site Disposition (for EPA use only)

Emergency Response/Removal Assessment Recommendation: <input type="checkbox"/> Yes <input type="checkbox"/> No Date: _____	CERCLIS Recommendation: <input type="checkbox"/> Higher Priority SI <input type="checkbox"/> Lower Priority SI <input type="checkbox"/> NFRAP <input type="checkbox"/> RCRA <input type="checkbox"/> Other: _____ Date: _____	Signature: _____
		Name (typed): _____
		Position: _____

7. Ground Water Pathway

<p>Is Ground Water Used for Drinking Within 4 Miles:</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes, Distance to nearest Drinking Well: <u>1210</u> Feet</p> <p>Type of Drinking Water Wells Within 4 Miles (check all that apply):</p> <p><input checked="" type="checkbox"/> Municipal <input checked="" type="checkbox"/> Private <input type="checkbox"/> None</p>	<p>Is There a Suspected Release to Ground Water¹:</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <hr/> <p>Have Primary Target Drinking Water Wells Been Identified:</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes, Enter Primary Target Population: _____ People³</p>	<p>List Secondary Target Population Served by Ground Water Withdrawn From:</p> <p>0 - 1/4 Mile _____</p> <p>>1/4 - 1/2 Mile _____</p> <p>>1/2 - 1 Mile _____</p> <p>>1 - 2 Mile _____</p> <p>>2 - 3 Mile _____</p> <p>>3 - 4 Mile _____</p> <p>Total Within 4 Miles⁴ _____</p> <p><small>*Use population #s for PA Table 2 *Note nearest well for #5 on GW Pathway Scoresheet</small></p>
<p>Depth to Shallowest Aquifer: _____ Feet</p> <p>Karst Terrain/Aquifer Present:</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Nearest Designated Wellhead Protection Area⁶:</p> <p><input type="checkbox"/> Underlies Site <input type="checkbox"/> >0-4 Miles <input type="checkbox"/> None Within 4 Miles</p>	

8. Surface Water Pathway

<p>Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):</p> <p><input type="checkbox"/> Stream <input checked="" type="checkbox"/> River <input type="checkbox"/> Pond <input type="checkbox"/> Lake <input type="checkbox"/> Bay <input type="checkbox"/> Ocean <input type="checkbox"/> Other _____</p>	<p>Shortest Overland Distance From Any Source to Surface Water:</p> <p>_____ Feet _____ Miles</p>
<p>Is There a Suspected Release to Surface Water¹:</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Site is Located in:</p> <p><input type="checkbox"/> Annual - 10 yr Floodplain <input type="checkbox"/> >10yr - 100yr Floodplain <input type="checkbox"/> >100yr - 500yr Floodplain <input checked="" type="checkbox"/> >500yr Floodplain</p>
<p>Drinking Water Intake Located Along the Surface Water Migration Path:</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Have Primary Target Drinking Water Intakes Been Identified:</p> <p><input type="checkbox"/> Yes If Yes, Distance to Nearest Drinking Water Intake : _____ Miles⁶ <input checked="" type="checkbox"/> No</p> <p>If Yes, Enter Population Served by Target Intake:</p> <p>_____ People⁴</p>	<p>List All Secondary Target Drinking Water Intakes:</p> <p><u>Name:</u> <u>Water Body:</u> <u>Flow (cfs):</u> <u>Population Served:</u></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p align="right">Total within 15 Miles⁴ _____</p>
<p>Fisheries Located Along the Surface Water Migration Path:</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Distance to Nearest Fishery: _____ Miles</p> <p>Have Primary Target Fisheries Been Identified:</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>List All Secondary Target Fisheries¹⁰:</p> <p><u>Water Body/ Fishery Name :</u> <u>Flow (cfs):</u></p> <p>_____</p> <p>_____</p> <p>_____</p>

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

Yes
 No

Have Primary Target Wetlands Been Identified:

Yes
 No

List All Wetlands:

Water Body: Flow (cfs): Frontage miles:

Other Sensitive Environments Located Along the Surface Water Migration Path:

Yes
 No

If Yes, Distance to Nearest Sensitive Environment: _____ Miles

Have Primary Target Sensitive Environments Been Identified:

Yes
 No

List All Sensitive Environments¹¹:

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:

_____ People²

Number of Workers Onsite⁴:

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

Population Within 1 Mile:

_____ People⁷

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 Environment⁵:

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air¹:

Yes
 No

Enter Total Population on or Within:

Onsite _____

0-1/4 Mile _____

>1/4-1/2 Mile _____

>1/2-1 Mile _____

>1-2 Miles _____

>2-3 Miles _____

>3-4 Miles _____

Total Within 4 Miles³⁻⁵ _____

Wetlands Located Within 4 Miles of the Site⁶:

Yes
 No

If Yes, How Many Acres: _____ Acres

Other Sensitive Environments Located Within 4 Miles of the Site:

Yes
 No

List All Sensitive Environments Within 1/2 Mile of the Site⁶:

Distance: Sensitive Environment Type/Wetlands Area (acres):

Onsite none

0-1/4 Mile wetlands

>1/4-1/2 Mile wetlands

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

¹⁻¹¹ Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form	Identification	
	State: WI	CERCLIS #:
	CERCLIS Discovery Date:	

1. General Site Information

Name: Volk Field CRTC		Street Address:			
City: Camp Douglas	State: WI	Zip Code: 54618	County: Juneau	Co. Code:	Cong. Dist:
Latitude: 43°55'27.56"N	Longitude: 90°14'53.89"W	Approximate Area of Site: ~5 Acres		Status of Site:	
				<input checked="" type="checkbox"/> Active <input type="checkbox"/> Not Specified <input type="checkbox"/> Inactive <input type="checkbox"/> NA (GW plume, etc.)	
Site Name: Spray Nozzle Test Area (Alternative Location)					
Site Description: Additional sand pit where yearly spray nozzle tests occur when primary location is not accessible					

2. Owner/Operator Information

Owner: Volk Field CRTC			Operator:		
Street Address:			Street Address:		
City: Camp Douglas			City:		
State: WI	Zip Code: 54618	Telephone:	State:	Zip Code:	Telephone:
Type of Ownership: <input type="checkbox"/> Private <input type="checkbox"/> County <input checked="" type="checkbox"/> Federal Agency <input type="checkbox"/> Municipal Name: <u>ANG</u> <input type="checkbox"/> Not Specified <input type="checkbox"/> State <input type="checkbox"/> Other _____ <input type="checkbox"/> Indian			Type of Ownership: <input type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> Federal Agency <input type="checkbox"/> Municipal Name: _____ <input type="checkbox"/> Not Specified <input type="checkbox"/> State <input type="checkbox"/> Other _____ <input type="checkbox"/> Indian		

3. Site Evaluator Information

Name of Evaluator: Stephanie Aselage	Agency/Organization: CH2M HILL	Date Prepared:
Street Address: 10123 Alliance Rd, Suite 300	City: Cincinnati	State: OH
Name of EPA or State Agency Contact:	Street Address:	
City:	State:	Telephone:

4. Site Disposition (for EPA use only)

Emergency Response/Removal Assessment Recommendation: <input type="checkbox"/> Yes <input type="checkbox"/> No Date: _____	CERCLIS Recommendation: <input type="checkbox"/> Higher Priority SI <input type="checkbox"/> Lower Priority SI <input type="checkbox"/> NFRAP <input type="checkbox"/> RCRA <input type="checkbox"/> Other: _____ Date: _____	Signature:
		Name (typed):
		Position:

5. General Site Characteristics

<p>Predominant Land Use Within 1 Mile of Site (check all that apply):</p> <table style="width: 100%;"> <tr> <td><input type="checkbox"/> Industrial</td> <td><input type="checkbox"/> Agriculture</td> <td><input type="checkbox"/> DOI</td> </tr> <tr> <td><input type="checkbox"/> Commercial</td> <td><input type="checkbox"/> Mining</td> <td><input type="checkbox"/> Other Federal Facility: <u>ANG</u></td> </tr> <tr> <td><input checked="" type="checkbox"/> Residential</td> <td><input type="checkbox"/> DOD</td> <td><input type="checkbox"/> Other _____</td> </tr> <tr> <td><input checked="" type="checkbox"/> Forest/Fields</td> <td><input type="checkbox"/> DOE</td> <td></td> </tr> </table>	<input type="checkbox"/> Industrial	<input type="checkbox"/> Agriculture	<input type="checkbox"/> DOI	<input type="checkbox"/> Commercial	<input type="checkbox"/> Mining	<input type="checkbox"/> Other Federal Facility: <u>ANG</u>	<input checked="" type="checkbox"/> Residential	<input type="checkbox"/> DOD	<input type="checkbox"/> Other _____	<input checked="" type="checkbox"/> Forest/Fields	<input type="checkbox"/> DOE		<p>Site Setting:</p> <p><input type="checkbox"/> Urban</p> <p><input type="checkbox"/> Suburban</p> <p><input checked="" type="checkbox"/> Rural</p>	<p>Years of Operation:</p> <p>Beginning Year _____</p> <p>Ending Year _____</p> <p><input type="checkbox"/> Unknown</p>
<input type="checkbox"/> Industrial	<input type="checkbox"/> Agriculture	<input type="checkbox"/> DOI												
<input type="checkbox"/> Commercial	<input type="checkbox"/> Mining	<input type="checkbox"/> Other Federal Facility: <u>ANG</u>												
<input checked="" type="checkbox"/> Residential	<input type="checkbox"/> DOD	<input type="checkbox"/> Other _____												
<input checked="" type="checkbox"/> Forest/Fields	<input type="checkbox"/> DOE													
<p>Type of Site Operations (check all that apply):</p> <p><input type="checkbox"/> Manufacturing (must check subcategory)</p> <table style="width: 100%;"> <tr> <td style="width: 50%;"> <input type="checkbox"/> Lumber and Wood Products <input type="checkbox"/> Inorganic Chemicals <input type="checkbox"/> Plastic and/or Rubber Products <input type="checkbox"/> Paints, Varnishes <input type="checkbox"/> Industrial Organic Chemicals <input type="checkbox"/> Agricultural Chemicals <input type="checkbox"/> Miscellaneous Chemical Products <input type="checkbox"/> Primary Metals <input type="checkbox"/> Metal Coating, Plating, Engraving <input type="checkbox"/> Metal Forging, Stamping <input type="checkbox"/> Fabricated Structural Metal Products <input type="checkbox"/> Electronic Equipment <input type="checkbox"/> Other Manufacturing </td> <td style="width: 50%;"> <input type="checkbox"/> Retail <input type="checkbox"/> Recycling <input type="checkbox"/> Junk/Salvage Yard <input type="checkbox"/> Municipal Landfill <input type="checkbox"/> Other Landfill <input type="checkbox"/> DOD <input type="checkbox"/> DOE <input type="checkbox"/> DOI <input type="checkbox"/> Other Federal Facility _____ <input type="checkbox"/> RCRA <input type="checkbox"/> Treatment, Storage, or Disposal <input type="checkbox"/> Large Quantity Generator <input type="checkbox"/> Small Quantity Generator <input type="checkbox"/> Subtitle D <input type="checkbox"/> Municipal <input type="checkbox"/> Industrial <input type="checkbox"/> "Converter" <input type="checkbox"/> "Protective Filer" <input type="checkbox"/> "Non-or Late Filer" <input type="checkbox"/> Note Specified <input type="checkbox"/> Other _____ </td> </tr> </table> <p><input type="checkbox"/> Mining</p> <table style="width: 100%;"> <tr> <td><input type="checkbox"/> Metals</td> </tr> <tr> <td><input type="checkbox"/> Coal</td> </tr> <tr> <td><input type="checkbox"/> Oil and Gas</td> </tr> <tr> <td><input type="checkbox"/> Non-metallic Minerals</td> </tr> </table>	<input type="checkbox"/> Lumber and Wood Products <input type="checkbox"/> Inorganic Chemicals <input type="checkbox"/> Plastic and/or Rubber Products <input type="checkbox"/> Paints, Varnishes <input type="checkbox"/> Industrial Organic Chemicals <input type="checkbox"/> Agricultural Chemicals <input type="checkbox"/> Miscellaneous Chemical Products <input type="checkbox"/> Primary Metals <input type="checkbox"/> Metal Coating, Plating, Engraving <input type="checkbox"/> Metal Forging, Stamping <input type="checkbox"/> Fabricated Structural Metal Products <input type="checkbox"/> Electronic Equipment <input type="checkbox"/> Other Manufacturing	<input type="checkbox"/> Retail <input type="checkbox"/> Recycling <input type="checkbox"/> Junk/Salvage Yard <input type="checkbox"/> Municipal Landfill <input type="checkbox"/> Other Landfill <input type="checkbox"/> DOD <input type="checkbox"/> DOE <input type="checkbox"/> DOI <input type="checkbox"/> Other Federal Facility _____ <input type="checkbox"/> RCRA <input type="checkbox"/> Treatment, Storage, or Disposal <input type="checkbox"/> Large Quantity Generator <input type="checkbox"/> Small Quantity Generator <input type="checkbox"/> Subtitle D <input type="checkbox"/> Municipal <input type="checkbox"/> Industrial <input type="checkbox"/> "Converter" <input type="checkbox"/> "Protective Filer" <input type="checkbox"/> "Non-or Late Filer" <input type="checkbox"/> Note Specified <input type="checkbox"/> Other _____	<input type="checkbox"/> Metals	<input type="checkbox"/> Coal	<input type="checkbox"/> Oil and Gas	<input type="checkbox"/> Non-metallic Minerals	<p>Waste Generated:</p> <p><input checked="" type="checkbox"/> Onsite</p> <p><input type="checkbox"/> Offsite</p> <p><input type="checkbox"/> Onsite and Offsite</p> <p>Waste Deposition Authorized By:</p> <p><input checked="" type="checkbox"/> Present Owner</p> <p><input type="checkbox"/> Former Owner</p> <p><input type="checkbox"/> Present & Former Owner</p> <p><input type="checkbox"/> Unauthorized</p> <p><input type="checkbox"/> Unknown</p> <p>Waste Accessible to the Public:</p> <p><input type="checkbox"/> Yes</p> <p><input checked="" type="checkbox"/> No</p> <p>Distance to Nearest Dwelling, School, or Workplace:</p> <p style="text-align: right;">_____ Feet</p>							
<input type="checkbox"/> Lumber and Wood Products <input type="checkbox"/> Inorganic Chemicals <input type="checkbox"/> Plastic and/or Rubber Products <input type="checkbox"/> Paints, Varnishes <input type="checkbox"/> Industrial Organic Chemicals <input type="checkbox"/> Agricultural Chemicals <input type="checkbox"/> Miscellaneous Chemical Products <input type="checkbox"/> Primary Metals <input type="checkbox"/> Metal Coating, Plating, Engraving <input type="checkbox"/> Metal Forging, Stamping <input type="checkbox"/> Fabricated Structural Metal Products <input type="checkbox"/> Electronic Equipment <input type="checkbox"/> Other Manufacturing	<input type="checkbox"/> Retail <input type="checkbox"/> Recycling <input type="checkbox"/> Junk/Salvage Yard <input type="checkbox"/> Municipal Landfill <input type="checkbox"/> Other Landfill <input type="checkbox"/> DOD <input type="checkbox"/> DOE <input type="checkbox"/> DOI <input type="checkbox"/> Other Federal Facility _____ <input type="checkbox"/> RCRA <input type="checkbox"/> Treatment, Storage, or Disposal <input type="checkbox"/> Large Quantity Generator <input type="checkbox"/> Small Quantity Generator <input type="checkbox"/> Subtitle D <input type="checkbox"/> Municipal <input type="checkbox"/> Industrial <input type="checkbox"/> "Converter" <input type="checkbox"/> "Protective Filer" <input type="checkbox"/> "Non-or Late Filer" <input type="checkbox"/> Note Specified <input type="checkbox"/> Other _____													
<input type="checkbox"/> Metals														
<input type="checkbox"/> Coal														
<input type="checkbox"/> Oil and Gas														
<input type="checkbox"/> Non-metallic Minerals														

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

<p>Source Type: (check all that apply)</p> <p><input type="checkbox"/> Landfill</p> <p><input type="checkbox"/> Surface Impoundment</p> <p><input type="checkbox"/> Drums</p> <p><input type="checkbox"/> Tanks and Non-Dum Containers</p> <p><input type="checkbox"/> Chemical Waste Pile</p> <p><input type="checkbox"/> Scrap Metal or Junk Pile</p> <p><input type="checkbox"/> Tailings Pile</p> <p><input type="checkbox"/> Trash Pile (open drum)</p> <p><input type="checkbox"/> Land Treatment</p> <p><input type="checkbox"/> Contaminated GW Plume (unidentified source)</p> <p><input type="checkbox"/> Contaminated SW/Sediment (unidentified source)</p> <p><input type="checkbox"/> Contaminated Soil</p> <p><input type="checkbox"/> Other _____</p> <p><input type="checkbox"/> No Sources</p>	<p>Source Waste Quantity: (include unit)</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>Tier*:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>General Type of Waste (check all that apply):</p> <table style="width: 100%;"> <tr> <td><input type="checkbox"/> Metals</td> <td><input type="checkbox"/> Pesticides/Herbicides</td> </tr> <tr> <td><input type="checkbox"/> Organics</td> <td><input type="checkbox"/> Acids/Bases</td> </tr> <tr> <td><input type="checkbox"/> Inorganics</td> <td><input type="checkbox"/> Oily Waste</td> </tr> <tr> <td><input type="checkbox"/> Solvents</td> <td><input type="checkbox"/> Municipal Waste</td> </tr> <tr> <td><input type="checkbox"/> Paints/Pigments</td> <td><input type="checkbox"/> Mining Waste</td> </tr> <tr> <td><input type="checkbox"/> Laboratory/Hospital Waste</td> <td><input type="checkbox"/> Explosives</td> </tr> <tr> <td><input type="checkbox"/> Radioactive Waste</td> <td><input type="checkbox"/> Other _____</td> </tr> <tr> <td><input type="checkbox"/> Construction/Demolition Waste</td> <td></td> </tr> </table> <p>Physical State of Waste as Deposited (check all that apply):</p> <p><input type="checkbox"/> Solid</p> <p><input type="checkbox"/> Sludge</p> <p><input type="checkbox"/> Powder</p> <p><input checked="" type="checkbox"/> Liquid</p> <p><input type="checkbox"/> Gas</p>	<input type="checkbox"/> Metals	<input type="checkbox"/> Pesticides/Herbicides	<input type="checkbox"/> Organics	<input type="checkbox"/> Acids/Bases	<input type="checkbox"/> Inorganics	<input type="checkbox"/> Oily Waste	<input type="checkbox"/> Solvents	<input type="checkbox"/> Municipal Waste	<input type="checkbox"/> Paints/Pigments	<input type="checkbox"/> Mining Waste	<input type="checkbox"/> Laboratory/Hospital Waste	<input type="checkbox"/> Explosives	<input type="checkbox"/> Radioactive Waste	<input type="checkbox"/> Other _____	<input type="checkbox"/> Construction/Demolition Waste	
<input type="checkbox"/> Metals	<input type="checkbox"/> Pesticides/Herbicides																		
<input type="checkbox"/> Organics	<input type="checkbox"/> Acids/Bases																		
<input type="checkbox"/> Inorganics	<input type="checkbox"/> Oily Waste																		
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<input type="checkbox"/> Paints/Pigments	<input type="checkbox"/> Mining Waste																		
<input type="checkbox"/> Laboratory/Hospital Waste	<input type="checkbox"/> Explosives																		
<input type="checkbox"/> Radioactive Waste	<input type="checkbox"/> Other _____																		
<input type="checkbox"/> Construction/Demolition Waste																			

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

7. Ground Water Pathway

Is Ground Water Used for Drinking Within 4 Miles:

Yes
 No

If Yes, Distance to nearest Drinking Well:
2,160 Feet

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

Municipal
 Private
 None

Is There a Suspected Release to Ground Water¹:

Yes
 No

Have Primary Target Drinking Water Wells Been Identified:

Yes
 No

If Yes, Enter Primary Target Population:
_____ People³

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - 1/4 Mile _____

>1/4 - 1/2 Mile _____

>1/2 - 1 Mile _____

>1 - 2 Mile _____

>2 - 3 Mile _____

>3 - 4 Mile _____

Total Within 4 Miles⁴ _____

* Use population #s for PA Table 2
* Note nearest well for #5 on GW Pathway Scoresheet

Depth to Shallowest Aquifer:
_____ Feet

Karst Terrain/Aquifer Present:

Yes
 No

Nearest Designated Wellhead Protection Area⁵:

Underlies Site
 >0-4 Miles
 None Within 4 Miles

8. Surface Water Pathway

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

Stream River Pond Lake
 Bay Ocean Other _____

Shortest Overland Distance From Any Source to Surface Water:

_____ Feet
_____ Miles

Is There a Suspected Release to Surface Water¹:

Yes
 No

Site is Located in:

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

Drinking Water Intake Located Along the Surface Water Migration Path:

Yes
 No

Have Primary Target Drinking Water Intakes Been Identified:

Yes If Yes, Distance to Nearest Drinking Water Intake : _____ Miles⁶
 No

If Yes, Enter Population Served by Target Intake:
_____ People⁴

List All Secondary Target Drinking Water Intakes:

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

Total within 15 Miles⁴ _____

Fisheries Located Along the Surface Water Migration Path:

Yes No If Yes, Distance to Nearest Fishery: _____ Miles

List All Secondary Target Fisheries¹⁰:

Water Body/ Fishery Name : Flow (cfs):

Have Primary Target Fisheries Been Identified:

Yes No

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

Yes
 No

Have Primary Target Wetlands Been Identified:

Yes
 No

List All Wetlands:

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

Other Sensitive Environments Located Along the Surface Water Migration Path:

Yes
 No

If Yes, Distance to Nearest Sensitive Environment: _____ Miles

Have Primary Target Sensitive Environments Been Identified:

Yes
 No

List All Sensitive Environments¹¹:

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:

_____ People²

Number of Workers Onsite⁴:

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

Population Within 1 Mile:

_____ People⁷

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 Environment⁵:

* Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air¹:

Yes
 No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____
Total Within 4 Miles³⁻⁵	_____

Wetlands Located Within 4 Miles of the Site⁶:

Yes
 No

If Yes, How Many Acres: _____ Acres

Other Sensitive Environments Located Within 4 Miles of the Site:

Yes
 No

List All Sensitive Environments Within 1/2 Mile of the Site⁶:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____ none _____
0-1/4 Mile	_____ wetlands _____
>1/4-1/2 Mile	_____ wetlands _____

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

¹⁻¹¹ Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form	Identification	
	State: <u>WI</u>	CERCLIS #:
	CERCLIS Discovery Date:	

1. General Site Information

Name: <u>Volk Field CRTC</u>		Street Address:			
City: <u>Camp Douglas</u>	State: <u>WI</u>	Zip Code: <u>54618</u>	County: <u>Juneau</u>	Co. Code:	Cong. Dist:
Latitude: <u>43°56'6.33"N</u>	Longitude: <u>90°15'42.11"W</u>	Approximate Area of Site: <u>218</u> Square Ft		Status of Site: <input checked="" type="checkbox"/> Active <input type="checkbox"/> Not Specified <input type="checkbox"/> Inactive <input type="checkbox"/> NA (GW plume, etc.)	
Site Name: <u>Oil/Water Separator (Building 510)</u>					
Site Description: <u>oil/water separator located just east of fire station. Floor drains inside fire station leads to this location.</u>					

2. Owner/Operator Information

Owner: <u>Volk Field CRTC</u>			Operator:		
Street Address:			Street Address:		
City: <u>Camp Douglas</u>			City:		
State: <u>WI</u>	Zip Code: <u>54618</u>	Telephone:	State:	Zip Code:	Telephone:
Type of Ownership: <input type="checkbox"/> Private <input type="checkbox"/> County <input checked="" type="checkbox"/> Federal Agency <input type="checkbox"/> Municipal Name: <u>AWG</u> <input type="checkbox"/> Not Specified <input type="checkbox"/> State <input type="checkbox"/> Other _____ <input type="checkbox"/> Indian			Type of Ownership: <input type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> Federal Agency <input type="checkbox"/> Municipal Name: _____ <input type="checkbox"/> Not Specified <input type="checkbox"/> State <input type="checkbox"/> Other _____ <input type="checkbox"/> Indian		

3. Site Evaluator Information

Name of Evaluator: <u>Stephanie Aselege</u>	Agency/Organization: <u>CH2M HILL</u>	Date Prepared:
Street Address: <u>10123 Alliance Rd, Suite 300</u>	City: <u>Cincinnati</u>	State: <u>OH</u>
Name of EPA or State Agency Contact:	Street Address:	
City:	State:	Telephone:

4. Site Disposition (for EPA use only)

Emergency Response/Removal Assessment Recommendation: <input type="checkbox"/> Yes <input type="checkbox"/> No Date: _____	CERCLIS Recommendation: <input type="checkbox"/> Higher Priority SI <input type="checkbox"/> Lower Priority SI <input type="checkbox"/> NFRAP <input type="checkbox"/> RCRA <input type="checkbox"/> Other: _____ Date: _____	Signature:
		Name (typed):
		Position:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Agriculture <input type="checkbox"/> DOI <input type="checkbox"/> Commercial <input type="checkbox"/> Mining <input type="checkbox"/> Other Federal Facility: <u>ANG</u> <input checked="" type="checkbox"/> Residential <input type="checkbox"/> DOD <input type="checkbox"/> Other _____ <input checked="" type="checkbox"/> Forest/Fields <input type="checkbox"/> DOE	Site Setting: <input type="checkbox"/> Urban <input type="checkbox"/> Suburban <input checked="" type="checkbox"/> Rural	Years of Operation: Beginning Year _____ Ending Year _____ <input type="checkbox"/> Unknown
Type of Site Operations (check all that apply): <input type="checkbox"/> Manufacturing (must check subcategory) <input type="checkbox"/> Lumber and Wood Products <input type="checkbox"/> Inorganic Chemicals <input type="checkbox"/> Plastic and/or Rubber Products <input type="checkbox"/> Paints, Varnishes <input type="checkbox"/> Industrial Organic Chemicals <input type="checkbox"/> Agricultural Chemicals <input type="checkbox"/> Miscellaneous Chemical Products <input type="checkbox"/> Primary Metals <input type="checkbox"/> Metal Coating, Plating, Engraving <input type="checkbox"/> Metal Forging, Stamping <input type="checkbox"/> Fabricated Structural Metal Products <input type="checkbox"/> Electronic Equipment <input type="checkbox"/> Other Manufacturing <input type="checkbox"/> Mining <input type="checkbox"/> Metals <input type="checkbox"/> Coal <input type="checkbox"/> Oil and Gas <input type="checkbox"/> Non-metallic Minerals	<input type="checkbox"/> Retail <input type="checkbox"/> Recycling <input type="checkbox"/> Junk/Salvage Yard <input type="checkbox"/> Municipal Landfill <input type="checkbox"/> Other Landfill <input type="checkbox"/> DOD <input type="checkbox"/> DOE <input type="checkbox"/> DOI <input type="checkbox"/> Other Federal Facility _____ <input type="checkbox"/> RCRA <input type="checkbox"/> Treatment, Storage, or Disposal <input type="checkbox"/> Large Quantity Generator <input type="checkbox"/> Small Quantity Generator <input type="checkbox"/> Subtitle D <input type="checkbox"/> Municipal <input type="checkbox"/> Industrial <input type="checkbox"/> "Converter" <input type="checkbox"/> "Protective Filer" <input type="checkbox"/> "Non-or Late Filer" <input type="checkbox"/> Note Specified <input type="checkbox"/> Other _____	Waste Generated: <input checked="" type="checkbox"/> Onsite <input type="checkbox"/> Offsite <input type="checkbox"/> Onsite and Offsite Waste Deposition Authorized By: <input checked="" type="checkbox"/> Present Owner <input type="checkbox"/> Former Owner <input type="checkbox"/> Present & Former Owner <input type="checkbox"/> Unauthorized <input type="checkbox"/> Unknown Waste Accessible to the Public: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Distance to Nearest Dwelling, School, or Workplace: _____ Feet

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

Source Type: (check all that apply)	Source Waste Quantity: (include unit)	Tier*:	General Type of Waste (check all that apply):
<input type="checkbox"/> Landfill <input type="checkbox"/> Surface Impoundment <input type="checkbox"/> Drums <input type="checkbox"/> Tanks and Non-Dum Containers <input type="checkbox"/> Chemical Waste Pile <input type="checkbox"/> Scrap Metal or Junk Pile <input type="checkbox"/> Tailings Pile <input type="checkbox"/> Trash Pile (open drum) <input type="checkbox"/> Land Treatment <input type="checkbox"/> Contaminated GW Plume (unidentified source) <input type="checkbox"/> Contaminated SW/Sediment (unidentified source) <input type="checkbox"/> Contaminated Soil <input type="checkbox"/> Other _____ <input type="checkbox"/> No Sources	_____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____	_____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____	<input type="checkbox"/> Metals <input type="checkbox"/> Pesticides/Herbicides <input type="checkbox"/> Organics <input type="checkbox"/> Acids/Bases <input type="checkbox"/> Inorganics <input type="checkbox"/> Oily Waste <input type="checkbox"/> Solvents <input type="checkbox"/> Municipal Waste <input type="checkbox"/> Paints/Pigments <input type="checkbox"/> Mining Waste <input type="checkbox"/> Laboratory/Hospital Waste <input type="checkbox"/> Explosives <input type="checkbox"/> Radioactive Waste <input type="checkbox"/> Other _____ <input type="checkbox"/> Construction/Demolition Waste
			Physical State of Waste as Deposited (check all that apply): <input type="checkbox"/> Solid <input type="checkbox"/> Sludge <input type="checkbox"/> Powder <input checked="" type="checkbox"/> Liquid <input type="checkbox"/> Gas

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

7. Ground Water Pathway

<p>Is Ground Water Used for Drinking Within 4 Miles:</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes, Distance to nearest Drinking Well: <u>1,966</u> Feet</p> <p>Type of Drinking Water Wells Within 4 Miles (check all that apply):</p> <p><input checked="" type="checkbox"/> Municipal <input checked="" type="checkbox"/> Private <input type="checkbox"/> None</p>	<p>Is There a Suspected Release to Ground Water¹:</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <hr/> <p>Have Primary Target Drinking Water Wells Been Identified:</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes, Enter Primary Target Population: _____ People³</p>	<p>List Secondary Target Population Served by Ground Water Withdrawn From:</p> <p>0 - 1/4 Mile _____</p> <p>>1/4 - 1/2 Mile _____</p> <p>>1/2 - 1 Mile _____</p> <p>>1 - 2 Mile _____</p> <p>>2 - 3 Mile _____</p> <p>>3 - 4 Mile _____</p> <p>Total Within 4 Miles⁴ _____</p> <p><small>*Use population #s for PA Table 2 *Note nearest well for #5 on GW Pathway Scoresheet</small></p>
<p>Depth to Shallowest Aquifer: _____ Feet</p> <p>Karst Terrain/Aquifer Present:</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Nearest Designated Wellhead Protection Area⁶:</p> <p><input type="checkbox"/> Underlies Site <input type="checkbox"/> >0-4 Miles <input type="checkbox"/> None Within 4 Miles</p>	

8. Surface Water Pathway

<p>Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):</p> <p><input type="checkbox"/> Stream <input checked="" type="checkbox"/> River <input type="checkbox"/> Pond <input type="checkbox"/> Lake <input type="checkbox"/> Bay <input type="checkbox"/> Ocean <input type="checkbox"/> Other _____</p>	<p>Shortest Overland Distance From Any Source to Surface Water:</p> <p>_____ Feet _____ Miles</p>
<p>Is There a Suspected Release to Surface Water¹:</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>Site is Located in:</p> <p><input type="checkbox"/> Annual - 10 yr Floodplain <input type="checkbox"/> >10yr - 100yr Floodplain <input type="checkbox"/> >100yr - 500yr Floodplain <input checked="" type="checkbox"/> >500yr Floodplain</p>
<p>Drinking Water Intake Located Along the Surface Water Migration Path:</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Have Primary Target Drinking Water Intakes Been Identified:</p> <p><input type="checkbox"/> Yes If Yes, Distance to Nearest Drinking Water Intake : _____ Miles⁶ <input checked="" type="checkbox"/> No</p> <p>If Yes, Enter Population Served by Target Intake: _____ People⁴</p>	<p>List All Secondary Target Drinking Water Intakes:</p> <p><u>Name:</u> <u>Water Body:</u> <u>Flow (cfs):</u> <u>Population Served:</u></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p align="right">Total within 15 Miles⁴ _____</p>
<p>Fisheries Located Along the Surface Water Migration Path:</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Distance to Nearest Fishery: _____ Miles</p> <p>Have Primary Target Fisheries Been Identified:</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>List All Secondary Target Fisheries¹⁰:</p> <p><u>Water Body/ Fishery Name :</u> <u>Flow (cfs):</u></p> <p>_____</p> <p>_____</p> <p>_____</p>

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

Yes
 No

Have Primary Target Wetlands Been Identified:

Yes
 No

List All Wetlands:

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

Other Sensitive Environments Located Along the Surface Water Migration Path:

Yes
 No

If Yes, Distance to Nearest Sensitive Environment: _____ Miles

Have Primary Target Sensitive Environments Been Identified:

Yes
 No

List All Sensitive Environments¹¹:

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:

_____ People²

Number of Workers Onsite⁴:

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

Population Within 1 Mile:

_____ People⁷

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 Environment⁵:

* Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air¹:

Yes
 No

Enter Total Population on or Within:

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

Wetlands Located Within 4 Miles of the Site⁶:

Yes
 No

If Yes, How Many Acres: _____ Acres

Other Sensitive Environments Located Within 4 Miles of the Site:

Yes
 No

List All Sensitive Environments Within 1/2 Mile of the Site⁶:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	_____ none _____
0-1/4 Mile	_____ none _____
>1/4-1/2 Mile	_____ wetlands _____

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

¹⁻¹¹ Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form						Identification	
						State:	CERCLIS #:
						CERCLIS Discovery Date:	
1. General Site Information							
Name: Volk Field CRTC			Street Address:				
City: Camp Douglas		State: WI	Zip Code: 54618	County: Juneau	Co. Code:	Cong. Dist:	
Latitude: 43° 27.62"	Longitude: 90° 16' 33.57"	Approximate Area of Site: ~8.8 Acres		Status of Site:			
				<input checked="" type="checkbox"/> Active <input type="checkbox"/> Not Specified			
				<input type="checkbox"/> Inactive <input type="checkbox"/> NA (GW plume, etc.)			
Site Name: Current WWTP (Building 650)							
Site Description: Current/operating WWTP							
2. Owner/Operator Information							
Owner: Volk Field CRTC				Operator:			
Street Address:				Street Address:			
City: Camp Douglas				City:			
State: WI	Zip Code: 54618	Telephone:		State:	Zip Code:	Telephone:	
Type of Ownership: <input type="checkbox"/> Private <input checked="" type="checkbox"/> Federal Agency Name: <u>ANG</u> <input type="checkbox"/> State <input type="checkbox"/> Indian <input type="checkbox"/> County <input type="checkbox"/> Municipal <input type="checkbox"/> Not Specified <input type="checkbox"/> Other _____				Type of Ownership: <input type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> Federal Agency <input type="checkbox"/> Municipal Name: _____ <input type="checkbox"/> State <input type="checkbox"/> Other _____ <input type="checkbox"/> Indian			
3. Site Evaluator Information							
Name of Evaluator: Stephanie Aselage		Agency/Organization: CH2M HILL			Date Prepared:		
Street Address: 10123 Alliance Rd, Suite 300		City: Cincinnati		State: OH			
Name of EPA or State Agency Contact:				Street Address:			
City:		State:		Telephone:			
4. Site Disposition (for EPA use only)							
Emergency Response/Removal Assessment Recommendation: <input type="checkbox"/> Yes <input type="checkbox"/> No Date: _____				CERCLIS Recommendation: <input type="checkbox"/> Higher Priority SI <input type="checkbox"/> Lower Priority SI <input type="checkbox"/> NFRAP <input type="checkbox"/> RCRA <input type="checkbox"/> Other: _____ Date: _____		Signature: Name (typed): Position:	

5. General Site Characteristics

<p>Predominant Land Use Within 1 Mile of Site (check all that apply):</p> <table style="width:100%;"> <tr> <td><input type="checkbox"/> Industrial</td> <td><input type="checkbox"/> Agriculture</td> <td><input type="checkbox"/> DOI</td> </tr> <tr> <td><input type="checkbox"/> Commercial</td> <td><input type="checkbox"/> Mining</td> <td><input type="checkbox"/> Other Federal Facility: <u>ANG</u></td> </tr> <tr> <td><input checked="" type="checkbox"/> Residential</td> <td><input type="checkbox"/> DOD</td> <td><input type="checkbox"/> Other _____</td> </tr> <tr> <td><input checked="" type="checkbox"/> Forest/Fields</td> <td><input type="checkbox"/> DOE</td> <td></td> </tr> </table>	<input type="checkbox"/> Industrial	<input type="checkbox"/> Agriculture	<input type="checkbox"/> DOI	<input type="checkbox"/> Commercial	<input type="checkbox"/> Mining	<input type="checkbox"/> Other Federal Facility: <u>ANG</u>	<input checked="" type="checkbox"/> Residential	<input type="checkbox"/> DOD	<input type="checkbox"/> Other _____	<input checked="" type="checkbox"/> Forest/Fields	<input type="checkbox"/> DOE		<p>Site Setting:</p> <table style="width:100%;"> <tr><td><input type="checkbox"/> Urban</td></tr> <tr><td><input type="checkbox"/> Suburban</td></tr> <tr><td><input checked="" type="checkbox"/> Rural</td></tr> </table>	<input type="checkbox"/> Urban	<input type="checkbox"/> Suburban	<input checked="" type="checkbox"/> Rural	<p>Years of Operation:</p> <p>Beginning Year _____</p> <p>Ending Year _____</p> <p><input type="checkbox"/> Unknown</p>
<input type="checkbox"/> Industrial	<input type="checkbox"/> Agriculture	<input type="checkbox"/> DOI															
<input type="checkbox"/> Commercial	<input type="checkbox"/> Mining	<input type="checkbox"/> Other Federal Facility: <u>ANG</u>															
<input checked="" type="checkbox"/> Residential	<input type="checkbox"/> DOD	<input type="checkbox"/> Other _____															
<input checked="" type="checkbox"/> Forest/Fields	<input type="checkbox"/> DOE																
<input type="checkbox"/> Urban																	
<input type="checkbox"/> Suburban																	
<input checked="" type="checkbox"/> Rural																	
<p>Type of Site Operations (check all that apply):</p> <table style="width:100%;"> <tr> <td style="vertical-align: top;"> <input type="checkbox"/> Manufacturing (must check subcategory) <ul style="list-style-type: none"> <input type="checkbox"/> Lumber and Wood Products <input type="checkbox"/> Inorganic Chemicals <input type="checkbox"/> Plastic and/or Rubber Products <input type="checkbox"/> Paints, Varnishes <input type="checkbox"/> Industrial Organic Chemicals <input type="checkbox"/> Agricultural Chemicals <input type="checkbox"/> Miscellaneous Chemical Products <input type="checkbox"/> Primary Metals <input type="checkbox"/> Metal Coating, Plating, Engraving <input type="checkbox"/> Metal Forging, Stamping <input type="checkbox"/> Fabricated Structural Metal Products <input type="checkbox"/> Electronic Equipment <input type="checkbox"/> Other Manufacturing <input type="checkbox"/> Mining <ul style="list-style-type: none"> <input type="checkbox"/> Metals <input type="checkbox"/> Coal <input type="checkbox"/> Oil and Gas <input type="checkbox"/> Non-metallic Minerals </td> <td style="vertical-align: top;"> <input type="checkbox"/> Retail <input type="checkbox"/> Recycling <input type="checkbox"/> Junk/Salvage Yard <input type="checkbox"/> Municipal Landfill <input type="checkbox"/> Other Landfill <input type="checkbox"/> DOD <input type="checkbox"/> DOE <input type="checkbox"/> DOI <input type="checkbox"/> Other Federal Facility _____ <input type="checkbox"/> RCRA <ul style="list-style-type: none"> <input type="checkbox"/> Treatment, Storage, or Disposal <input type="checkbox"/> Large Quantity Generator <input type="checkbox"/> Small Quantity Generator <input type="checkbox"/> Subtitle D <ul style="list-style-type: none"> <input type="checkbox"/> Municipal <input type="checkbox"/> Industrial <input type="checkbox"/> "Converter" <input type="checkbox"/> "Protective Filer" <input type="checkbox"/> "Non-or Late Filer" <input type="checkbox"/> Note Specified <input type="checkbox"/> Other _____ </td> </tr> </table>		<input type="checkbox"/> Manufacturing (must check subcategory) <ul style="list-style-type: none"> <input type="checkbox"/> Lumber and Wood Products <input type="checkbox"/> Inorganic Chemicals <input type="checkbox"/> Plastic and/or Rubber Products <input type="checkbox"/> Paints, Varnishes <input type="checkbox"/> Industrial Organic Chemicals <input type="checkbox"/> Agricultural Chemicals <input type="checkbox"/> Miscellaneous Chemical Products <input type="checkbox"/> Primary Metals <input type="checkbox"/> Metal Coating, Plating, Engraving <input type="checkbox"/> Metal Forging, Stamping <input type="checkbox"/> Fabricated Structural Metal Products <input type="checkbox"/> Electronic Equipment <input type="checkbox"/> Other Manufacturing <input type="checkbox"/> Mining <ul style="list-style-type: none"> <input type="checkbox"/> Metals <input type="checkbox"/> Coal <input type="checkbox"/> Oil and Gas <input type="checkbox"/> Non-metallic Minerals 	<input type="checkbox"/> Retail <input type="checkbox"/> Recycling <input type="checkbox"/> Junk/Salvage Yard <input type="checkbox"/> Municipal Landfill <input type="checkbox"/> Other Landfill <input type="checkbox"/> DOD <input type="checkbox"/> DOE <input type="checkbox"/> DOI <input type="checkbox"/> Other Federal Facility _____ <input type="checkbox"/> RCRA <ul style="list-style-type: none"> <input type="checkbox"/> Treatment, Storage, or Disposal <input type="checkbox"/> Large Quantity Generator <input type="checkbox"/> Small Quantity Generator <input type="checkbox"/> Subtitle D <ul style="list-style-type: none"> <input type="checkbox"/> Municipal <input type="checkbox"/> Industrial <input type="checkbox"/> "Converter" <input type="checkbox"/> "Protective Filer" <input type="checkbox"/> "Non-or Late Filer" <input type="checkbox"/> Note Specified <input type="checkbox"/> Other _____	<p>Waste Generated:</p> <p><input checked="" type="checkbox"/> Onsite <input type="checkbox"/> Offsite <input type="checkbox"/> Onsite and Offsite</p> <p>Waste Deposition Authorized By:</p> <p><input checked="" type="checkbox"/> Present Owner <input type="checkbox"/> Former Owner <input type="checkbox"/> Present & Former Owner <input type="checkbox"/> Unauthorized <input type="checkbox"/> Unknown</p> <p>Waste Accessible to the Public:</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>Distance to Nearest Dwelling, School, or Workplace:</p> <p align="right">_____ Feet</p>													
<input type="checkbox"/> Manufacturing (must check subcategory) <ul style="list-style-type: none"> <input type="checkbox"/> Lumber and Wood Products <input type="checkbox"/> Inorganic Chemicals <input type="checkbox"/> Plastic and/or Rubber Products <input type="checkbox"/> Paints, Varnishes <input type="checkbox"/> Industrial Organic Chemicals <input type="checkbox"/> Agricultural Chemicals <input type="checkbox"/> Miscellaneous Chemical Products <input type="checkbox"/> Primary Metals <input type="checkbox"/> Metal Coating, Plating, Engraving <input type="checkbox"/> Metal Forging, Stamping <input type="checkbox"/> Fabricated Structural Metal Products <input type="checkbox"/> Electronic Equipment <input type="checkbox"/> Other Manufacturing <input type="checkbox"/> Mining <ul style="list-style-type: none"> <input type="checkbox"/> Metals <input type="checkbox"/> Coal <input type="checkbox"/> Oil and Gas <input type="checkbox"/> Non-metallic Minerals 	<input type="checkbox"/> Retail <input type="checkbox"/> Recycling <input type="checkbox"/> Junk/Salvage Yard <input type="checkbox"/> Municipal Landfill <input type="checkbox"/> Other Landfill <input type="checkbox"/> DOD <input type="checkbox"/> DOE <input type="checkbox"/> DOI <input type="checkbox"/> Other Federal Facility _____ <input type="checkbox"/> RCRA <ul style="list-style-type: none"> <input type="checkbox"/> Treatment, Storage, or Disposal <input type="checkbox"/> Large Quantity Generator <input type="checkbox"/> Small Quantity Generator <input type="checkbox"/> Subtitle D <ul style="list-style-type: none"> <input type="checkbox"/> Municipal <input type="checkbox"/> Industrial <input type="checkbox"/> "Converter" <input type="checkbox"/> "Protective Filer" <input type="checkbox"/> "Non-or Late Filer" <input type="checkbox"/> Note Specified <input type="checkbox"/> Other _____																

6. Waste Characteristics Information

(Refer to PA Table 1 for WC Score)

<p>Source Type: (check all that apply)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Landfill <input type="checkbox"/> Surface Impoundment <input type="checkbox"/> Drums <input type="checkbox"/> Tanks and Non-Dum Containers <input type="checkbox"/> Chemical Waste Pile <input type="checkbox"/> Scrap Metal or Junk Pile <input type="checkbox"/> Tailings Pile <input type="checkbox"/> Trash Pile (open drum) <input type="checkbox"/> Land Treatment <input type="checkbox"/> Contaminated GW Plume (unidentified source) <input type="checkbox"/> Contaminated SW/Sediment (unidentified source) <input type="checkbox"/> Contaminated Soil <input type="checkbox"/> Other _____ <input type="checkbox"/> No Sources 	<p>Source Waste Quantity: (include unit)</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>Tier*:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>General Type of Waste (check all that apply):</p> <table style="width:100%;"> <tr> <td><input type="checkbox"/> Metals</td> <td><input type="checkbox"/> Pesticides/Herbicides</td> </tr> <tr> <td><input type="checkbox"/> Organics</td> <td><input type="checkbox"/> Acids/Bases</td> </tr> <tr> <td><input type="checkbox"/> Inorganics</td> <td><input type="checkbox"/> Oily Waste</td> </tr> <tr> <td><input type="checkbox"/> Solvents</td> <td><input type="checkbox"/> Municipal Waste</td> </tr> <tr> <td><input type="checkbox"/> Paints/Pigments</td> <td><input type="checkbox"/> Mining Waste</td> </tr> <tr> <td><input type="checkbox"/> Laboratory/Hospital Waste</td> <td><input type="checkbox"/> Explosives</td> </tr> <tr> <td><input type="checkbox"/> Radioactive Waste</td> <td><input type="checkbox"/> Other _____</td> </tr> <tr> <td><input type="checkbox"/> Construction/Demolition Waste</td> <td></td> </tr> </table> <p>Physical State of Waste as Deposited (check all that apply):</p> <p><input checked="" type="checkbox"/> Solid <input checked="" type="checkbox"/> Sludge <input type="checkbox"/> Powder <input checked="" type="checkbox"/> Liquid <input type="checkbox"/> Gas</p>	<input type="checkbox"/> Metals	<input type="checkbox"/> Pesticides/Herbicides	<input type="checkbox"/> Organics	<input type="checkbox"/> Acids/Bases	<input type="checkbox"/> Inorganics	<input type="checkbox"/> Oily Waste	<input type="checkbox"/> Solvents	<input type="checkbox"/> Municipal Waste	<input type="checkbox"/> Paints/Pigments	<input type="checkbox"/> Mining Waste	<input type="checkbox"/> Laboratory/Hospital Waste	<input type="checkbox"/> Explosives	<input type="checkbox"/> Radioactive Waste	<input type="checkbox"/> Other _____	<input type="checkbox"/> Construction/Demolition Waste	
<input type="checkbox"/> Metals	<input type="checkbox"/> Pesticides/Herbicides																		
<input type="checkbox"/> Organics	<input type="checkbox"/> Acids/Bases																		
<input type="checkbox"/> Inorganics	<input type="checkbox"/> Oily Waste																		
<input type="checkbox"/> Solvents	<input type="checkbox"/> Municipal Waste																		
<input type="checkbox"/> Paints/Pigments	<input type="checkbox"/> Mining Waste																		
<input type="checkbox"/> Laboratory/Hospital Waste	<input type="checkbox"/> Explosives																		
<input type="checkbox"/> Radioactive Waste	<input type="checkbox"/> Other _____																		
<input type="checkbox"/> Construction/Demolition Waste																			

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

7. Ground Water Pathway

<p>Is Ground Water Used for Drinking Within 4 Miles:</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes, Distance to nearest Drinking Well: <u>2,000</u> Feet</p> <p>Type of Drinking Water Wells Within 4 Miles (check all that apply):</p> <p><input checked="" type="checkbox"/> Municipal <input checked="" type="checkbox"/> Private <input type="checkbox"/> None</p>	<p>Is There a Suspected Release to Ground Water¹:</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <hr/> <p>Have Primary Target Drinking Water Wells Been Identified:</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes, Enter Primary Target Population: _____ People³</p>	<p>List Secondary Target Population Served by Ground Water Withdrawn From:</p> <p>0 - 1/4 Mile _____</p> <p>>1/4 - 1/2 Mile _____</p> <p>>1/2 - 1 Mile _____</p> <p>>1 - 2 Mile _____</p> <p>>2 - 3 Mile _____</p> <p>>3 - 4 Mile _____</p> <p>Total Within 4 Miles⁴ _____</p> <p><small>* Use population #s for PA Table 2 * Note nearest well for #5 on GW Pathway Scoresheet</small></p>
<p>Depth to Shallowest Aquifer: _____ Feet</p> <p>Karst Terrain/Aquifer Present:</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Nearest Designated Wellhead Protection Area⁶:</p> <p><input type="checkbox"/> Underlies Site <input type="checkbox"/> >0-4 Miles <input type="checkbox"/> None Within 4 Miles</p>	

8. Surface Water Pathway

<p>Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):</p> <p><input type="checkbox"/> Stream <input checked="" type="checkbox"/> River <input type="checkbox"/> Pond <input type="checkbox"/> Lake <input type="checkbox"/> Bay <input type="checkbox"/> Ocean <input type="checkbox"/> Other _____</p>	<p>Shortest Overland Distance From Any Source to Surface Water:</p> <p>_____ Feet _____ Miles</p>
<p>Is There a Suspected Release to Surface Water¹:</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Site is Located in:</p> <p><input type="checkbox"/> Annual - 10 yr Floodplain <input type="checkbox"/> >10yr - 100yr Floodplain <input type="checkbox"/> >100yr - 500yr Floodplain <input checked="" type="checkbox"/> >500yr Floodplain</p>
<p>Drinking Water Intake Located Along the Surface Water Migration Path:</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Have Primary Target Drinking Water Intakes Been Identified:</p> <p><input type="checkbox"/> Yes If Yes, Distance to Nearest Drinking Water Intake : _____ Miles⁶ <input checked="" type="checkbox"/> No</p> <p>If Yes, Enter Population Served by Target Intake:</p> <p>_____ People⁴</p>	<p>List All Secondary Target Drinking Water Intakes:</p> <p><u>Name:</u> <u>Water Body:</u> <u>Flow (cfs):</u> <u>Population Served:</u></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p align="right">Total within 15 Miles ⁴ _____</p>
<p>Fisheries Located Along the Surface Water Migration Path:</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Distance to Nearest Fishery: _____ Miles</p> <p>Have Primary Target Fisheries Been Identified:</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>List All Secondary Target Fisheries¹⁰:</p> <p><u>Water Body/ Fishery Name :</u> <u>Flow (cfs):</u></p> <p>_____</p> <p>_____</p> <p>_____</p>

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

Yes
 No

Have Primary Target Wetlands Been Identified:

Yes
 No

List All Wetlands:

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

Other Sensitive Environments Located Along the Surface Water Migration Path:

Yes
 No

If Yes, Distance to Nearest Sensitive Environment: _____ Miles

Have Primary Target Sensitive Environments Been Identified:

Yes
 No

List All Sensitive Environments¹¹:

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:

_____ People²

Number of Workers Onsite⁴:

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

Population Within 1 Mile:

_____ People⁷

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 Environment⁵:

*Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air¹:

Yes
 No

Enter Total Population on or Within:

Onsite	_____
0-1/4 Mile	_____
>1/4-1/2 Mile	_____
>1/2-1 Mile	_____
>1-2 Miles	_____
>2-3 Miles	_____
>3-4 Miles	_____
Total Within 4 Miles³⁻⁵	_____

Wetlands Located Within 4 Miles of the Site⁶:

Yes
 No

If Yes, How Many Acres: _____ Acres

Other Sensitive Environments Located Within 4 Miles of the Site:

Yes
 No

List All Sensitive Environments Within 1/2 Mile of the Site⁶:

Distance:	Sensitive Environment Type/Wetlands Area (acres):
Onsite	None
0-1/4 Mile	wetlands
>1/4-1/2 Mile	wetlands

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

¹⁻¹¹ Refers to question number on the PA scoresheet for each particular pathway

Potential Hazardous Waste Site Preliminary Assessment Form

Identification	
State: <u>WI</u>	CERCLIS #:
CERCLIS Discovery Date:	

1. General Site Information

Name: <u>Volk Field CRTC</u>		Street Address:			
City: <u>Camp Douglas</u>	State: <u>WI</u>	Zip Code: <u>54618</u>	County: <u>Juneau</u>	Co. Code:	Cong. Dist:
Latitude: <u>43° 56' 12.55" N</u>	Longitude: <u>90° 16' 32.61" W</u>	Approximate Area of Site: <u>~28.1</u> Acres		Status of Site:	
<u>S</u> <u>43° 56' 32.29" N</u>	<u>90° 15' 9.69" W</u>	Square Ft		<input type="checkbox"/> Active <input type="checkbox"/> Not Specified <input checked="" type="checkbox"/> Inactive <input type="checkbox"/> NA (GW plume, etc.)	
Site Name: <u>old Primary & Secondary Waste Water Settling Ponds</u>					
Site Description: <u>Former locations of primary & secondary waste settling ponds.</u>					

2. Owner/Operator Information

Owner: <u>Volk Field CRTC</u>			Operator:		
Street Address:			Street Address:		
City: <u>Camp Douglas</u>			City:		
State: <u>WI</u>	Zip Code: <u>54618</u>	Telephone:	State:	Zip Code:	Telephone:
Type of Ownership: <input type="checkbox"/> Private <input type="checkbox"/> County <input checked="" type="checkbox"/> Federal Agency <input type="checkbox"/> Municipal Name: <u>ANG</u> <input type="checkbox"/> Not Specified <input type="checkbox"/> State <input type="checkbox"/> Other _____ <input type="checkbox"/> Indian			Type of Ownership: <input type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> Federal Agency <input type="checkbox"/> Municipal Name: _____ <input type="checkbox"/> Not Specified <input type="checkbox"/> State <input type="checkbox"/> Other _____ <input type="checkbox"/> Indian		

3. Site Evaluator Information

Name of Evaluator: <u>Stephanie Aselege</u>	Agency/Organization: <u>CH2M HILL</u>	Date Prepared:
Street Address: <u>10123 Alliana Rd. Suite 300</u>	City: <u>Cincinnati</u>	State: <u>OH</u>
Name of EPA or State Agency Contact:	Street Address:	
City:	State:	Telephone:

4. Site Disposition (for EPA use only)

Emergency Response/Removal Assessment Recommendation: <input type="checkbox"/> Yes <input type="checkbox"/> No Date: _____	CERCLIS Recommendation: <input type="checkbox"/> Higher Priority SI <input type="checkbox"/> Lower Priority SI <input type="checkbox"/> NFRAP <input type="checkbox"/> RCRA <input type="checkbox"/> Other: _____ Date: _____	Signature: Name (typed): Position:
---	---	--

7. Ground Water Pathway

<p>Is Ground Water Used for Drinking Within 4 Miles:</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes, Distance to nearest Drinking Well: P <u>2,340</u> Feet S <u>3725</u> "</p> <p>Type of Drinking Water Wells Within 4 Miles (check all that apply):</p> <p><input checked="" type="checkbox"/> Municipal <input checked="" type="checkbox"/> Private <input type="checkbox"/> None</p>	<p>Is There a Suspected Release to Ground Water¹:</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <hr/> <p>Have Primary Target Drinking Water Wells Been Identified:</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes, Enter Primary Target Population: _____ People³</p>	<p>List Secondary Target Population Served by Ground Water Withdrawn From:</p> <p>0 - 1/4 Mile _____</p> <p>>1/4 - 1/2 Mile _____</p> <p>>1/2 - 1 Mile _____</p> <p>>1 - 2 Mile _____</p> <p>>2 - 3 Mile _____</p> <p>>3 - 4 Mile _____</p> <p>Total Within 4 Miles⁴ _____</p> <p><small>* Use population #s for PA Table 2 * Note nearest well for #5 on GW Pathway Scoresheet</small></p>
<p>Depth to Shallowest Aquifer: _____ Feet</p> <p>Karst Terrain/Aquifer Present:</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Nearest Designated Wellhead Protection Area⁵:</p> <p><input type="checkbox"/> Underlies Site <input type="checkbox"/> >0-4 Miles <input type="checkbox"/> None Within 4 Miles</p>	

8. Surface Water Pathway

<p>Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):</p> <p><input type="checkbox"/> Stream <input checked="" type="checkbox"/> River <input type="checkbox"/> Pond <input type="checkbox"/> Lake <input type="checkbox"/> Bay <input type="checkbox"/> Ocean <input type="checkbox"/> Other _____</p>	<p>Shortest Overland Distance From Any Source to Surface Water:</p> <p>_____ Feet _____ Miles</p>
<p>Is There a Suspected Release to Surface Water¹:</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Site is Located in:</p> <p><input type="checkbox"/> Annual - 10 yr Floodplain <input type="checkbox"/> >10yr - 100yr Floodplain <input type="checkbox"/> >100yr - 500yr Floodplain <input checked="" type="checkbox"/> >500yr Floodplain</p>
<p>Drinking Water Intake Located Along the Surface Water Migration Path:</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Have Primary Target Drinking Water Intakes Been Identified:</p> <p><input type="checkbox"/> Yes If Yes, Distance to Nearest Drinking Water Intake : _____ Miles⁶ <input checked="" type="checkbox"/> No</p> <p>If Yes, Enter Population Served by Target Intake:</p> <p>_____ People⁴</p>	<p>List All Secondary Target Drinking Water Intakes:</p> <p><u>Name:</u> <u>Water Body:</u> <u>Flow (cfs):</u> <u>Population Served:</u></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p align="right">Total within 15 Miles ⁴ _____</p>
<p>Fisheries Located Along the Surface Water Migration Path:</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Distance to Nearest Fishery: _____ Miles</p> <p>Have Primary Target Fisheries Been Identified:</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>List All Secondary Target Fisheries¹⁰:</p> <p><u>Water Body/ Fishery Name :</u> <u>Flow (cfs):</u></p> <p>_____</p> <p>_____</p> <p>_____</p>

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

- Yes
 No

Have Primary Target Wetlands Been Identified:

- Yes
 No

List All Wetlands:

Water Body : Flow (cfs): Frontage miles:

Other Sensitive Environments Located Along the Surface Water Migration Path:

- Yes
 No

If Yes, Distance to Nearest Sensitive Environment: _____ Miles

Have Primary Target Sensitive Environments Been Identified:

- Yes
 No

List All Sensitive Environments¹¹:

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:

_____ People²

Number of Workers Onsite⁴:

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

Population Within 1 Mile:

_____ People⁷

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 Environment⁵:

* Refer to PA Table 7 for environment types

10. Air Pathway

Is there a Suspected Release to Air¹:

- Yes
 No

Enter Total Population on or Within:

Onsite _____

0-1/4 Mile _____

>1/4-1/2 Mile _____

>1/2-1 Mile _____

>1-2 Miles _____

>2-3 Miles _____

>3-4 Miles _____

Total Within 4 Miles ³⁻⁵ _____

Wetlands Located Within 4 Miles of the Site⁶:

- Yes
 No

If Yes, How Many Acres: _____ Acres

Other Sensitive Environments Located Within 4 Miles of the Site:

- Yes
 No

List All Sensitive Environments Within 1/2 Mile of the Site⁶:

Distance: Sensitive Environment Type/Wetlands Area (acres):

Onsite wetlands

0-1/4 Mile wetlands

>1/4-1/2 Mile wetlands

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

¹⁻¹¹ Refers to question number on the PA scoresheet for each particular pathway

APPENDIX C
RECORDS OF COMMUNICATION

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Date: 2 Mar 15
Time: 10:20

COMMUNICATION RECORD

Name of Base, State: ANG Volk Field, WI

Interviewer: Stephanie Aselage

Organization: CH2M HILL

Phone: 513-587-7088

Position/role on this project: Base Lead

Email: Stephanie.aselage@ch2m.com

Interviewee: Dan Gommersley

Organization: Volk Field CRTC

Phone:

Position/Job Title: Nat Aes Manager

Email:

How Long in this Position? 22 years

How long at this Base in current and previous positions? 22 years

Have you held similar positions at other bases?

No

Which bases?

How long?

Discussion:

* WWT Ponds are lined w/PVC liner (60 mil)
* after treated, pumped to Lemonweir River

* no daycares or schools or residences on base

* old fire station had same practices as current fire station

* old primary + secondary lagoons on north side of base. Operation before 1970s until 1995.



Date: 3/2/2016
 Time: 10:00 A.M.

COMMUNICATION RECORD

Name of Base, State: ANG Volk Field, WI

Interviewer: Stephanie Aselage

Organization: CH2M HILL

Phone: 513-587-7088

Position/role on this project: Base Lead

Email: Stephanie.aselage@ch2m.com

Interviewee: Edwin WALTER

Organization: VOLK CIVIL ENGINEERING

Phone:

Position/Job Title: REAL ESTATE SPECIALIST

Email:

How Long in this Position? 22 YEARS

How long at this Base in current and previous positions? 10 YEARS

Have you held similar positions at other bases?

NO

Which bases?

N/A

How long?

N/A

Discussion:

Firestation (1987-current)

Old Fire Station (1943-1986)

WWTP (1995-current)

Base Supply (1990s-current)

4 production wells onsite, still operational (W1, W2, W5, bluff)



Date:
Time:

COMMUNICATION RECORD

Name of Base, State: ANG Volk Field, WI

Interviewer: Stephanie Aselage

Organization: CH2M HILL

Phone: 513-587-7088

Position/role on this project: Base Lead

Email: Stephanie.aselage@ch2m.com

Interviewee: *Tom Zanter*

Organization: *Volk CRTC*

Phone:

Position/Job Title: *Utility Supervisor*

Email:

How Long in this Position? *12 yrs*

How long at this Base in current and previous positions? *12 yrs*

Have you held similar positions at other bases?

N/A

Which bases?

N/A

How long?

N/A

Discussion:

Vinyl @ WWTP

ol-water Separator @ FTA → water goes to SS to WWTP

- chlorinate & dechlorate @ individual well houses

- both wells alternate (w2 is being rebuilt)

*- w on bluff serves 1 building on top. (6 in well)
280 ft*



Date:
Time:

COMMUNICATION RECORD

Name of Base, State: ANG Volk Field, WI

Interviewer: Stephanie Aselage

Organization: CH2M HILL

Phone: 513-587-7088

Position/role on this project: Base Lead

Email: Stephanie.aselage@ch2m.com

Interviewee: *Tiffany Gasper*

Organization: *Volk Field CRTC*

Phone:

Position/Job Title: *Supply*

Email:

How Long in this Position?

How long at this Base in current and previous positions?

Have you held similar positions at other bases?

Which bases?

How long?

Discussion:

- 1 accidental spill (< 1 gallon) of APFF from 5 gal container.
- cleaned up w/ absorbent pads, placed in secondary spill container & disposed of properly. Nothing released to outside of building.

COMMUNICATION RECORD

Name of Base, State: ANG Volk Field, WI

Interviewer: Stephanie Aselage

Organization: CH2M HILL

Phone: 513-587-7088

Position/role on this project: Base Lead

Email: Stephanie.aselage@ch2m.com

Interviewee: *Matt Ocvies*

Organization: *Fire Dept*

Phone:

Position/Job Title: *Fire Chief*

Email:

How Long in this Position? *8 years*

How long at this Base in current and previous positions? *20 years*

Have you held similar positions at other bases? *Yes*

Which bases? *115th FW*

How long? *15 years as a traditional guard, 2 yrs full time*

Discussion:

Current FTA (1996-current)

- 1 - accidental release 30-40 gals
- goes to sanitary sewer
- 6 - 1 gallon or less release
- goes to sanitary sewer
- vinyl liner under rocks @ Current FTA

Fire Station (1987-current)

- foam storage leaked but goes to oil/water separator, then SS, then WWTP.
- ~1000 gallon bulk storage tank

Spray nozzle test areas

- once a year 4-5 gallons each truck
- 5 trucks
- ~~1000 gallon bulk storage~~

* 2 types of AFFF in fire station

- ① 3M 3%
- ② 3-6% AR-AFFF (fights ethanol fires)

Interview Questions

110
500

Fire Chief / fire chief designee / fire suppression system manager

AFFF

- 1. What type of AFFF was used on this installation (i.e. 3%, 6%, High Expansion Foam)?
3%
- 2. What manufacturer's AFFF products are used on this installation (i.e. 3M, Ansul, Chemguard)?
Chemguard 30 gals
National + Chemguard
- 3. Where has the AFFF solution been handled (mixed, contained, transferred, etc.)?

Bldgs 10, 510

Hangars and Buildings

- 4. Are your automated fire suppression systems currently charged with AFFF or have they been retrofitted for use of high expansion foam?
N/A
- 5. Do you have an inventory of the amount of AFFF stored on the installation or present in automated fire suppression systems?
Chemguard 30 gals (3-6%)
National 1240 (3%)
400 Gallons @ Supply
- 6. Can you describe the procedure on how the suppression systems are supplied with AFFF?
N/A
- 7. Have there been inadvertent releases of AFFF from hangar fire suppression systems?
When?
N/A
- 8. How are releases handled (i.e. when the suppression system goes off)?
N/A

Trucks and Trailers

- 9. Provide a list of trucks and trailers currently carrying AFFF and where they are parked/stored?
Crash 2 (RIV), Crash 3+9 (P23s) Crash 10 (Striker)
Eng 8 P-34 (P-19R)
- 10. How much AFFF (gallons) is carried/stored in the specified trucks and trailers?
2- 57 3- 500 9- 500 10- 210 8- 30 (3-6%)
- 11. Do you test the trucks for spray patterns to make sure equipment is working properly?
YES
- 12. How often are these spray tests performed and can you provide the locations of these tests?
Annual testing - location: sand pit
- 13. Can you describe the procedure on how trucks and trailers are supplied with AFFF?

Where does this resupply occur? Is there secondary containment in this area?
Foam pump (tank to truck)
Foam transfer pump (truck to truck)
Hand fill (dump buckets)

Resupply mostly by the bulk tank

No secondary containment

In station oil/water separator

14. Can you provide the procedures on how these vehicles are cleaned/decontaminated and where vehicle cleaning is performed currently as well as in the past?
15. When AFFF was used during a fire training exercise, how was the AFFF cleaned up and disposed of?

Records, Spill logs, Historical Information

16. Do you have recollection or records of AFFF being used in response to:
 - a. Fuel releases to prevent fires
 - b. Historical emergency response sites (i.e. crash sites and fires)
 - c. Emergency runway landings where foam might have been used as a precaution
17. If not written records or incomplete written records, do you have anecdotal/verbal information and locations of spills or other emergency response incidents where AFFF was used?
18. What are the non-FTA locations where:
 - a. AFFF release systems are installed (i.e. Hangars, Wastewater Treatment Plants, and Fire Stations)
 - b. Where are these locations that currently contain or have contained AFFF (Building numbers) *10, 510*
 - c. If converted from AFFF, when did they convert the system to high expansion foam *N/A*
19. Can you provide any other locations where AFFF has been stored, released, or used (i.e. hangars, buildings, fire stations, firefighting equipment testing and maintenance areas, emergency response sites, storm water/surface water, waste water treatment plants, and AFFF ponds/lagoons)?

Environmental Manager

FTAs

20. Confirm all FTAs identified during research are correct, and list FTAs identified during site visit.
21. What are the years of operation for each FTA?

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