FINAL
Preliminary Assessment Report
Fort McClellan Army National Guard Training Center
Anniston, Alabama

Perfluorooctane-Sulfonic Acid (PFOS) and Perfluorooctanoic Acid (PFOA) Impacted Sites
ARNG Installations, Nationwide

September 2020

Prepared for:

Army National Guard Bureau
111 S. George Mason Drive
Arlington, VA 22204

UNCLASSIFIED

Table of Contents

Figures

Tables

Appendices

Acronyms and Abbreviations

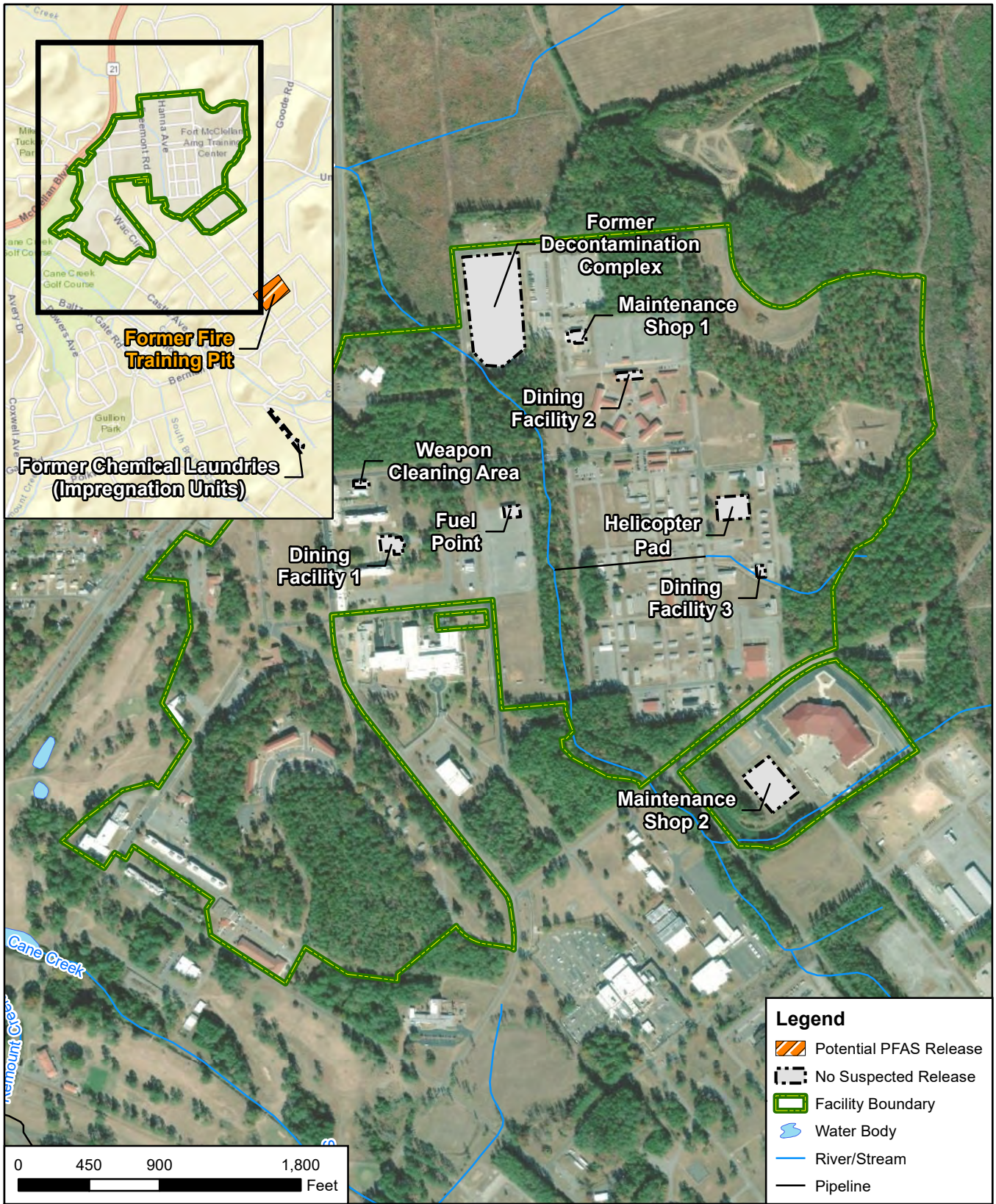
°F	degrees Fahrenheit
AECOM	AECOM Technical Services, Inc.
AFFF	aqueous film forming foam
ALARNG	Alabama Army National Guard
AOI	Area of Interest
ARNG	Army National Guard
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CSM	conceptual site model
CSMS	combined maintenance shop
EBS	Environmental Baseline Survey
EDR™	Environmental Data Resources, Inc.™
FTA	fire training area
FM-ARNGTC	Fort McClellan – Army National Guard Training Center
HA	Health Advisory
PA	Preliminary Assessment
PFAS	per- and poly-fluoroalkyl substances
PFOA	perfluorooctanoic acid
PFOS	perfluorooctanesulfonic acid
SI	Site Inspection
UCMR3	Unregulated Contaminant Monitoring Rule 3
US	United States
USACE	United States Army Corps of Engineers
USACMLS	United States Army Chemical School
USEPA	United States Environmental Protection Agency
VSI	visual site inspection
WWTP	Wastewater Treatment Plant

Executive Summary

The Army National Guard (ARNG) is performing *Preliminary Assessments (PAs) and Site Inspections (SIs) for Perfluorooctanesulfonic acid (PFOS) and Perfluorooctanoic acid (PFOA) Impacted Sites at ARNG Facilities Nationwide*. A PA for per- and polyfluoroalkyl substances (PFAS)-containing materials was completed for Fort McClellan ARNG Training Center (also referred to as the "facility"), in Anniston, Alabama, to assess potential PFAS release areas and exposure pathways to receptors. Fort McClellan ARNG Training Center is located on 300 acres of land that was formerly a portion of the Army Fort McClellan facility, which was closed under Base Realignment and Closure. The property is now leased to ALARNG by the United States Army Corp of Engineers. The performance of this PA included the following tasks:

- Reviewed available administrative record documents and Environmental Data Resources, Inc. (EDR)™ report packages to obtain information relevant to potential PFAS releases, such as: drinking water well locations, historical aerial photographs, Sanborn maps, and environmental compliance actions in the area surrounding the facility
- Conducted a site visit 11 April 2019 and completed visual site inspections at locations where PFAS-containing materials were suspected of being stored, used or disposed of;
- Interviewed current Alabama Army National Guard (ALARNG) personnel, including environmental managers, and operations staff.

Based on the documented absence of the use or release of PFAS-containing materials at the Fort McClellan ARNG Training Center, evidence does not support current or former ARNG activities at the facility having contributed to PFAS contamination in soil, groundwater, surface water, or sediment at the facility or adjacent areas. No areas of interest were identified based on PA data. The Fort McClellan Army National Guard Training Center will not move forward in the Comprehensive Environmental Response, Compensation, and Liability Act process. Based on the USEPA Unregulated Contaminant Monitoring Rule 3 (UCMR3) data, it was indicated that PFAS was detected in a public water system above the USEPA lifetime Health Advisory (HA) within 20 miles of the facility. The HA is 70 parts per trillion for PFOS and PFOA, individually and combined. PFAS analyses performed in 2016 had method detection limits that were higher than currently achievable. Thus, it is possible that low concentrations of PFAS were not detected during the UCMR3 but might be detected if analyzed today. The UCMR3 data is provided in **Appendix A**.



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SCALE	1:10,800	CHK BY	BM	5/28/2020
Base Map: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI,		PM	RG	5/28/2020

Summary of Findings

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Figure ES-1

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1. Introduction

1.1 Authority and Purpose

The Army National Guard (ARNG)-Installations & Environment Division is the lead agency in performing *Preliminary Assessments (PAs) and Site Inspections (SIs) for Perfluorooctanesulfonic acid (PFOS) and Perfluorooctanoic acid (PFOA) at Impacted Sites at ARNG Facilities Nationwide*. This work is supported by the United States (US) Army Corps of Engineers (USACE) Baltimore District and their contractor AECOM Technical Services, Inc. (AECOM) under Contract Number W912DR-12-D-0014, Task Order W912DR17F0192, issued 11 August 2017.

The ARNG is assessing potential effects on human health related to processes at facilities that used per- and poly-fluoroalkyl substances (PFAS), primarily in the form of aqueous film forming foam (AFFF) released as part of firefighting activities, although other PFAS sources are possible. In addition, the ARNG is assessing businesses or operations adjacent to the ARNG facility (not under the control of ARNG) that could potentially be responsible for a PFAS release.

PFAS are classified as emerging environmental contaminants that are garnering increasing regulatory interest due to their potential risks to human health and the environment. PFAS formulations contain highly diverse mixtures of compounds. Thus, the fate of PFAS compounds in the environment varies. The regulatory framework at both federal and state levels continues to evolve. The US Environmental Protection Agency (USEPA) issued lifetime Drinking Water Health Advisories (HAs) for PFOA and PFOS in May 2016, but there are currently no promulgated national standards regulating PFAS in drinking water. The HA is 70 parts per trillion for PFOS and PFOA, individually or combined. In the absence of federal maximum contaminant levels, some states have adopted their own drinking water standards for PFAS. The state of Alabama does not currently have drinking water standards for PFAS.

This report presents the findings of a PA for PFAS-containing materials at Fort McClellan Army National Guard Training Center (FM-ARNGTC) (referred to as “the facility”), Anniston, Alabama, in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, the National Oil and Hazardous Substances Pollution Contingency Plan (40 Code of Federal Regulations [CFR] Part 300), and Army requirements and guidance.

This PA documents locations where PFAS may have been released into the environment at the facility. The term PFAS will be used throughout this report to encompass all PFAS chemicals being evaluated, including PFOS and PFOA, which are key components of AFFF.

1.2 Preliminary Assessment Methods

The performance of this PA included the following tasks:

- Reviewed available administrative record documents and Environmental Data Resources, Inc. (EDR)™ report packages to obtain information relevant to potential PFAS releases, such as: drinking water well locations, historical aerial photographs, Sanborn maps, and environmental compliance actions in the area surrounding the facility;
- Conducted a site visit on 11 April 2019 and 12 April 2019 and completed visual site inspections (VSIs) at locations where PFAS-containing materials were suspected of being stored, used, or disposed;
- Interviewed current Alabama ARNG (ALARNG) personnel, including environmental managers, and operations staff.

1.3 Report Organization

This report has been prepared in accordance with the USEPA *Guidance for Performing Preliminary Assessments under CERCLA* (USEPA, 1991). The report sections and descriptions of each are as follows:

- **Section 1** – **Introduction:** identifies the project purpose and authority and describes the facility location, environmental setting, and methods used to complete the PA
- **Section 2** – **Fire Training Areas:** describes the fire training areas (FTAs) at the facility identified during the site visit
- **Section 3** – **Non-Fire Training Areas:** describes other locations of potential PFAS releases at the facility identified during the site visit
- **Section 4** – **Emergency Response Areas:** describes areas of potential PFAS release at the facility, specifically in response to emergency situations
- **Section 5** – **Adjacent Sources:** describes sources of potential PFAS release adjacent to the facility that are not under the control of ARNG
- **Section 6** – **Preliminary Conceptual Site Model:** describes the pathways of PFAS transport and receptors for the areas of interest (AOIs) and the facility
- **Section 7** – **Conclusions:** summarizes the data findings and presents the conclusions of the PA
- **Section 8** – **References:** provides the references used to develop this document
- **Appendix A** – Data Resources
- **Appendix B** - Preliminary Assessment Documentation
- **Appendix C** – Photographic Log

1.4 Facility Location and Description

The Fort McClellan Army National Guard Training Center (FM-ARNGTC) is within the former Fort McClellan (approximately 45,679 acres) in Calhoun County, Alabama. The former Fort McClellan consisted of the Main Post (18,946 acres), Pelham Range (22,245 acres), and the Choccolocco Corridor (approximately 4,488 acres which was leased from the State of Alabama) (Environmental Science and Engineering, 1998).

Prior to ALARNG operation of the facility, Fort McClellan was operated by the US Army. The land was purchased in 1917 as a troop training ground during World War I. Its primary mission was to provide command and support of the US Army Military Police and Chemical School/Training Centers, the Training Brigade, and other units by higher authorities (Environmental Science and Engineering, 1998).

In 1995, Base Realignment and Closure (BRAC) Commission identified Fort McClellan for closure. In November 1999, the US Army licensed all of Pelham Range and approximately 300 acres within the cantonment area of the Main Post, known as the Enclave, to the ALARNG. The FM-ARNGTC Enclave and Pelham Range make up the FM-ARNGTC. In February 2005 the Army transferred real property accountability of the FM-ARNGTC to the ALARNG. The location of Pelham Range and the FM-ARNGTC Enclave are depicted in **Figure 1-1**. The FM-ARNGTC Enclave is referred to as the Enclave throughout this PA (Environmental Science and Engineering, 1998).

1.5 Facility Environmental Setting

The Enclave lies within the Appalachian Valley and Ridge physiographic province, which is characterized by gently rolling parallel valleys separated by steep to well-rounded ridges that rise from 100 to 700 feet above the valley floors. Major streams flow down the axes of many of the valleys, and tributary streams commonly join the major streams at nearly right angles.

Topography is broadly rolling with elevations ranging from approximately 740 feet near Cave Creek to 864 feet on Trench Hill.

1.5.1 Geology

Enclave lies within the Alabama fold-and-thrust belt of the Appalachian Valley and Ridge physiographic province of the Appalachian Highlands (USGS, 2004). This province is characterized by sharply folded consolidated strata that form northeast trending, subparallel valleys and ridges (ANAD, 2005). The Paleozoic rock formations of the area were repeatedly folded and thrust-faulted by tectonic stresses, creating fold axes, fault traces, and lithologic boundaries. The Enclave is north and east of one such fault complex, the Jacksonville Thrust Fault Complex (USGS, 2004). The geology of the area surrounding The Enclave consists of Cambrian- to Pennsylvanian-age indurate sedimentary rocks. These rock formations consist of folded and faulted sandstones, cherty limestone, dolomites, and conglomerates. High quartz content in the rock formations makes these rock types less susceptible to weathering and erosion. Valleys are formed by less resistant carbonate limestone, shale, and dolomites, which weather easily (Malcolm Pirnie, 2004). The Enclave is on the edge of a widespread karst formation typified by the distribution of carbonate rocks within a high rainfall area. The dissolution of carbonate rock has been documented as an ongoing process in Calhoun County (USGS, 2004; ANAD, 2005).

Geologic formations beneath the facility from oldest to youngest consist of, quartzose and feldspathic sandstone of the Wisner and Wilson Ridge Formations, Shady Dolomite, siltstone and sandstone of the Rome Formation; Little Oak and Newala Limestone; Paleozoic Shale; and unconsolidated surficial soils (regolith). The Wisner and Wilson Ridge Formations are reportedly 1,100 feet in thickness, the Shady dolomite is approximately 500 feet thick, and the Little Oak and Newala Limestone and Paleozoic Shale are approximately 500 and 175 feet thick, respectively (USGS, 2004). The regolith is reported to have an average thickness of 30 to 50 feet but have been found as thin as seven feet to greater than 100 feet in some areas. These unconfined soils are made up of clay and silty clay with weathered rock fragments (Shaw, 2004). Geologic units underlying the facility are depicted on **Figure 1-2**.

1.5.2 Hydrogeology

Calhoun County, Alabama, is underlain by carbonate and clastic rocks that are complexly folded and faulted; some are slightly metamorphosed. Much of the region is underlain by carbonate rocks (limestone and dolomite), which form important aquifers; and silicate rocks (quartzose, sandstone, shale, and siltstone), which typically yield less water to wells. Carbonate rocks are soluble by acidic water, including rain, which can become even more acidic from decaying vegetation and microbial activity when it infiltrates the soil zone. As acidic water infiltrates the subsurface along natural openings, such as faults, fractures, and bedding planes, the openings become enlarged by dissolution of the rock. This process eventually develops a solution-conduit aquifer oriented along the joints, fractures, and bedding planes. The solution-conduit aquifers in Calhoun County can supply large volumes of water to wells and springs (Robinson, 2004).

The complex geology in Calhoun County has created numerous large groundwater storage reservoirs formed by thrust fault zones. The water producing aquifers in this area are found in

dolomite, limestone, sandstone, and shale (USACE, 2004). The primary aquifers underlying the Enclave can be generalized as shallow and deep groundwater systems, consisting of the Residuum (shallow aquifer), and the Valley and Ridge aquifer system (deep). Formations comprising the Valley and Ridge aquifer system include the Knox Group, Conasauga Formation, Shady Dolomite, and Weisner and Wilson Formation aquifers (USGS, 2004). The Conasauga Formation is the most important regional aquifer in Calhoun County (SAIC, 1998b).

The depth of the shallow groundwater system within Enclave is as little as four feet in some areas. The shallow groundwater system (generally down to 50 feet) is comprised of the residuum, weathered bedrock, and epikarst while the deep groundwater (generally below 50 feet) is found in the carbonate bedrock within its fractures and dissolution features (ANAD, 2005). The shallow and deep groundwater systems are interconnected through fractures, voids, and faults.

Groundwater flow in the Enclave area is complex as a result of the regional hydrogeology including the variable thickness of the surface unconsolidated zone (e.g., residuum and epikarst), the porosity of underlying bedrock, and the presence of faults and fractures and other karst features. Generally, groundwater flow is controlled by topography and the permeability of the karst bedrock. Shallow groundwater flow in the residuum and epikarst follows topography, with groundwater movement generally toward Clear Creek and Cane Creek. Groundwater flow directions are supported based on reports for groundwater flow provided in installation monitoring reports (Weston, 1990). Groundwater beneath the Enclave generally flows northwestward, based on average groundwater elevation measurements from spatially clustered wells, as well as widely spaced monitoring wells. Variability in the groundwater flow direction is likely to occur in localized areas of the facility, depending on local topography, proximity to surface water bodies, and subsurface geology and structure. Groundwater features surrounding the facility are shown in **Figure 1-2**.

An EDR™ report conducted a well search for a 1-mile radius surrounding the facility (Appendix A). Using additional online resources, such as state and local GIS databases, wells were researched to a 4-mile radius of the facility. Groundwater wells are used for potable and non-potable water in the surrounding areas. Approximately 90 percent of the water consumed in Calhoun County is supplied by groundwater. Groundwater sources for potable water include private wells and some of the 147 groundwater springs that have been documented within the county. Coldwater Spring located approximately ten miles southwest of former Fort McClellan, at the foot of Coldwater Mountain, is the major source of spring water for the area and is a natural source of about 24 to 36 million gallons of water per day. This spring serves nearly 60 percent of Calhoun County residents, including Anniston, Oxford, Blue Mountain, Hobson City, Anniston Army Depot, FM-ARNGTC, and the former Fort McClellan area (AMEC Earth & Environmental, 2001). The remainder of the residents are served by private wells, groundwater springs, or one of four smaller public water supply systems (i.e., Oxford Water System and Sewer Board, Calhoun Water System, Jacksonville Treatment Facility, and Weaver City Water Supply). The four smaller public water supplies also obtain water from groundwater sources (ATSDR, 1999). A public water supply, Anniston Water Works, draws the majority of its water from Coldwater Spring. In addition to Coldwater Spring, Anniston Water Works uses the Earl C. Knowlton Treatment Plant for standby services. This plant draws its water from Hillabee Lake, which is near the town of Oxford. Based on the USEPA Unregulated Contaminant Monitoring Rule 3 (UCMR3) data, it was indicated that PFAS was detected in a public water system above the USEPA HA within 20 miles of the facility (**Appendix A**). The HA is 70 parts per trillion for PFOS and PFOA, individually or combined. PFAS analyses performed in 2016 had method detection limits that were higher than currently achievable. Thus, it is possible that low concentrations of PFAS were not detected during the UCMR3 but might be detected if analyzed today.

1.5.3 Hydrology

The Enclave is within the Middle Coosa River watershed (approximately 2,571 square miles in total area). The Middle Coosa River watershed contains 23 streams and rivers, totaling approximately 3,360 river miles. Downgradient of FM-ARNGTC, the Coosa River has been impounded to form the Logan Martin Reservoir. Logan Martin Reservoir borders St. Clair and Talladega counties and extends 48.5 miles from the Logan Martin dam upstream to Neely Henry dam. Cane Creek flows westerly through the Enclave into the Logan Martin Reservoir. Tributaries of Cane Creek in this area include Cave, Remount, South Branch, and Ingram creeks (AMEC Earth & Environmental, 2001).

Cane Creek originates at the Choccolocco Mountains on the Enclave and flows westward just south of the facility towards Pelham Range. The operational ranges drain to Cave Creek which is a tributary of Cane Creek; all of the facility is within the drainage basin of Cane Creek.

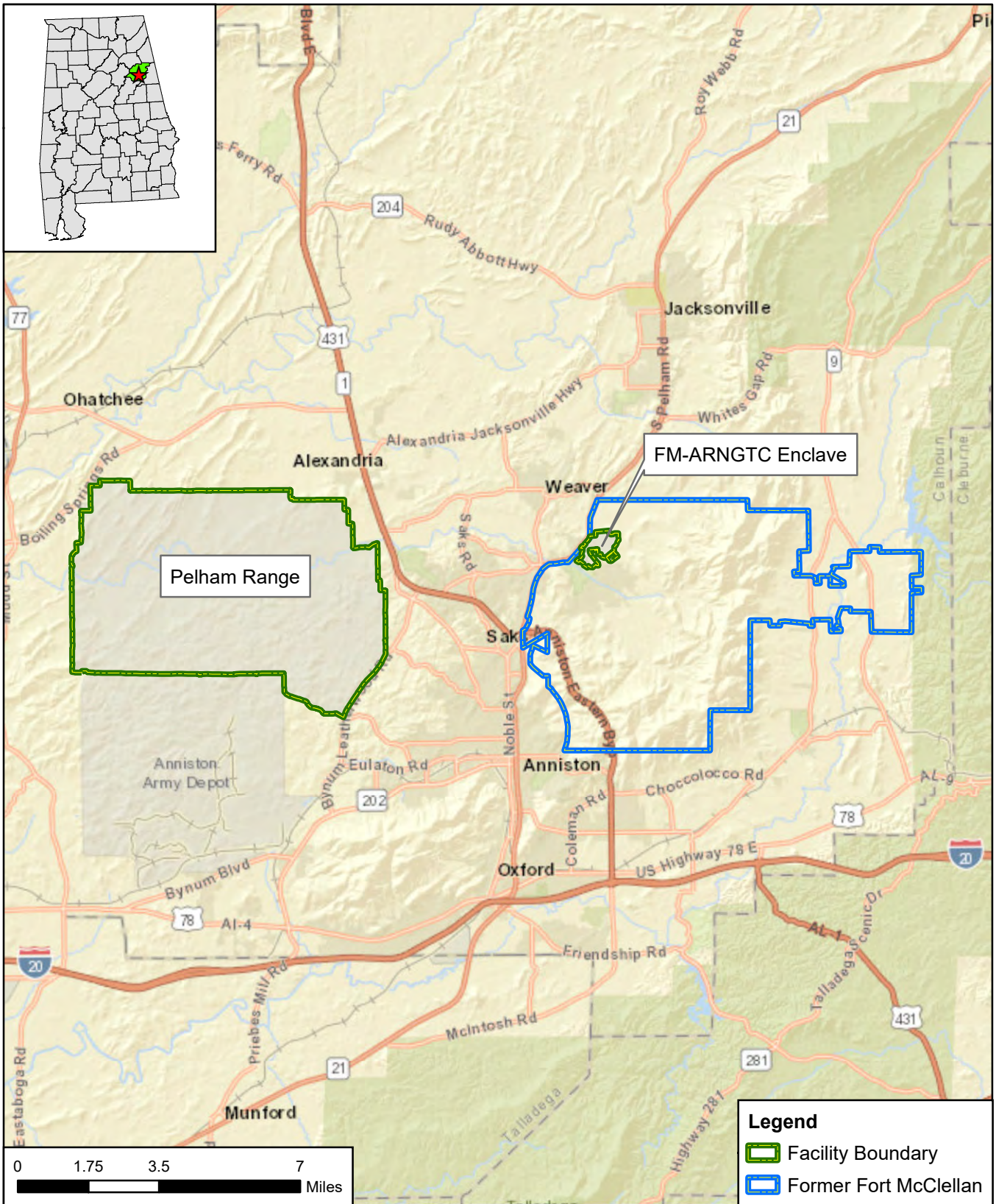
Based on information gathered in a 1998 Environmental Baseline Survey (EBS), storm water collected by storm drains onsite are directed to the Wastewater Treatment Plant (WWTP), located on the west side of Highway 21. The WWTP was built in 1918 and was operated by the US Army until the WWTP was leased to Water Works and Sewer Board of the city of Anniston in 1974. This board operates the facility and holds the WWTP NPDES permit (No. AL0024520). All of the Enclave and the surrounding neighborhoods of Pelham Range and Lenlock are supported by the WWTP. The treated effluent is discharged to Cane Creek (Environmental Science and Engineering, 1998). Surface water features surrounding the facility are shown in **Figure 1-3**.

1.5.4 Climate

The climate in northeastern Alabama is temperate with warm, humid summers and mild, dry winters. During the summer months, the climate borders on the subtropical with frequent localized thunderstorms. Rainfall is greatest from January through April and lowest from September through November. Average annual precipitation is 53.3 inches and the average annual temperature at Anniston is 62 degrees Fahrenheit (°F). The mean maximum temperature for January is 48°F, while the mean maximum in July is 78°F. Temperature extremes at Pelham Range have ranged from -3°F to +105°F. The average daily highs reach 90°F in the summer months. The first frost typically occurs in October, and frost conditions may last into mid-April (National Oceanic and Atmospheric Administration, 2018).

1.5.5 Current and Future Land Use

The Enclave is within an area of mixed residential and commercial properties. Mixed residential and commercial properties are located adjacent to the facility to the north, west and south. The Mountain Longleaf National Wildlife Refuge is located adjacent and to the west of the Enclave. Reasonably anticipated future land use is not expected to change from the current land use.



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Facility Location

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Figure 1-1

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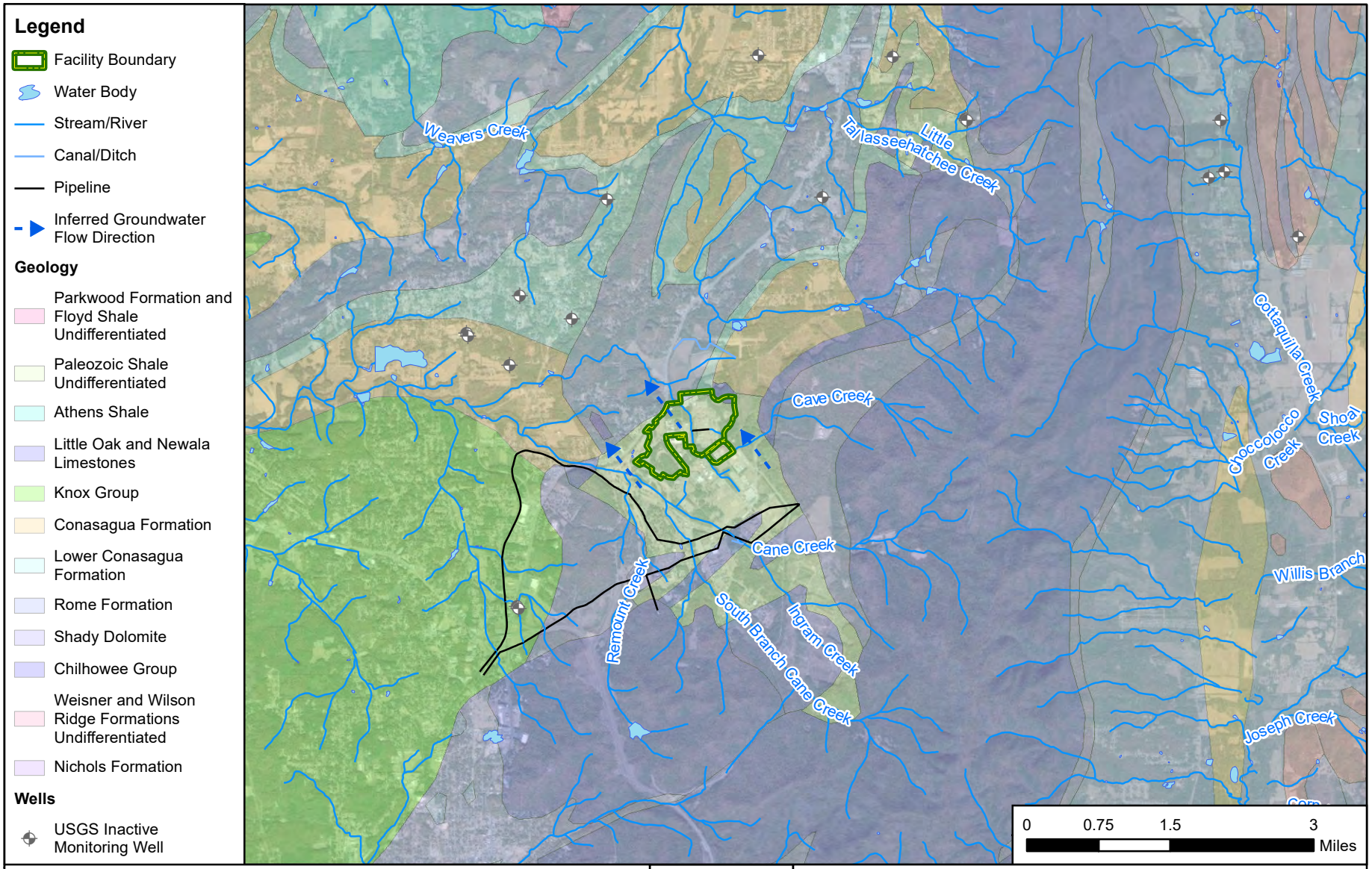

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Groundwater Features

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Figure 1-2

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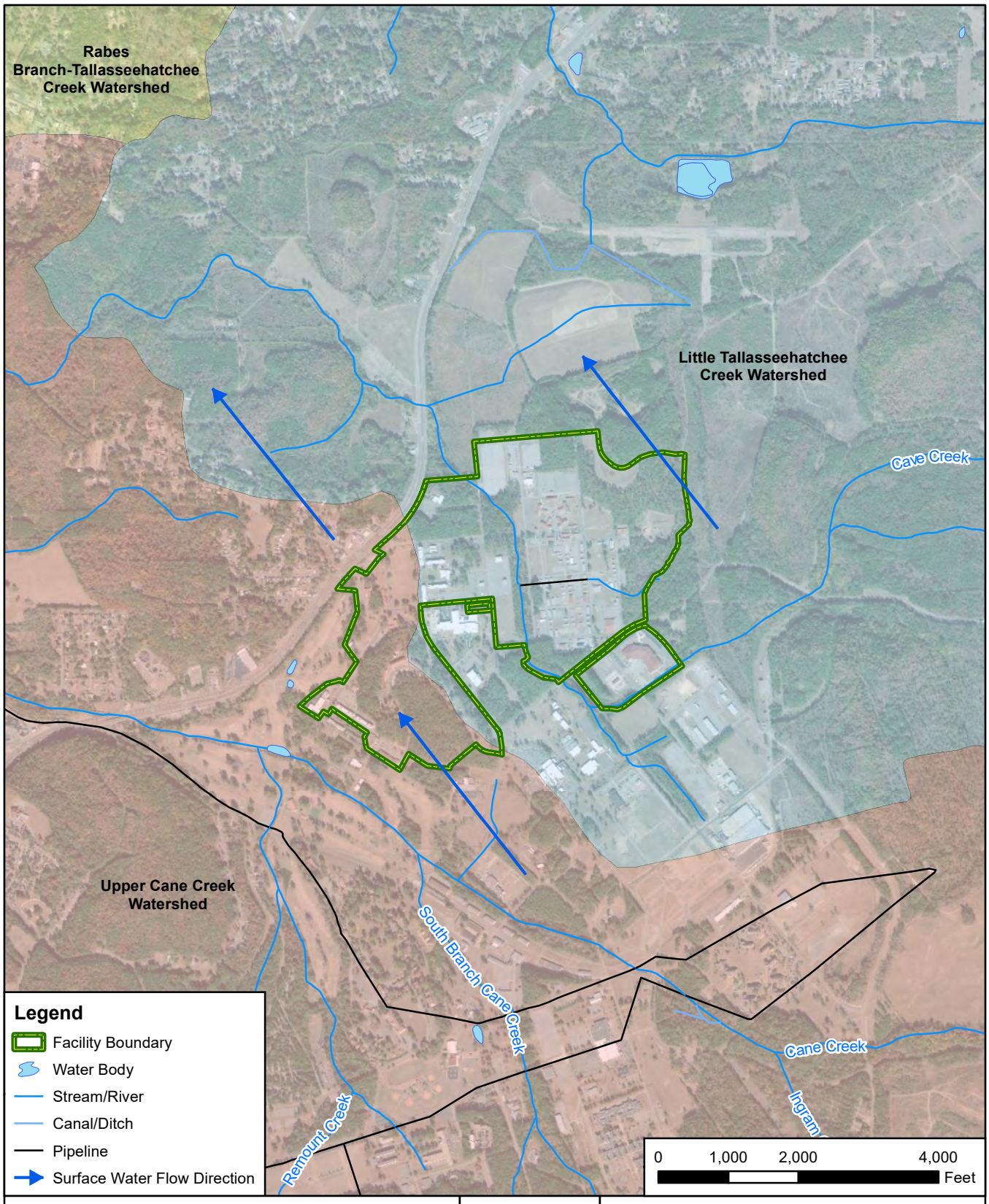

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Surface Water Features

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Figure 1-3

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2. Fire Training Areas

No FTAs were identified within the facility during the PA through interviews (**Appendix B**) or document review (**Appendix A**). Based on interviews conducted during this PA, ALARNG personnel with knowledge of the property dating back to 1986 confirmed that no fire training occurred within the FM-ARNGTC. However, a Former Fire Training Pit used by the US Army prior to ALARNG operation, was identified on the former Main Post at the location of Building 350, the Consolidated Maintenance Facility. The location of the Former Fire Training Pit is located outside the facility boundary and discussed in **Section 5**.

3. Non-Fire Training Areas

In addition to FTAs, the PA evaluated areas where PFAS-containing materials may have been broadly used, stored, or disposed. This may include buildings with fire suppression systems, paint booths, AFFF storage areas, and areas of compliance demonstrations. Information on these features obtained during the PA are included in **Appendices A** and **B**. Nine non-FTAs were investigated as part of this PA. A description of each non-FTA is presented below and shown on **Figure 3-1** with photographs appearing in **Appendix C**.

3.1 Helicopter Pad

The Helicopter Pad is approximately 200 feet southwest of the FM-ALARNGTC Army Air Force Exchange Service Building. The geographic coordinates are 33° 43' 58.5" N; 85° 47' 8.8"W. Fire protection is provided by mobile ABC class fire extinguishers. According to ALARNG personnel with knowledge of the site since 1986, AFFF has not been used or stored in this area. Based on interviews and document review, there were no reported rotary aircraft crashes or emergency responses at the Helicopter Pad. Therefore, Helicopter Pad is not considered a suspected release area.

3.2 Dining Facilities

There are seven dining facilities at FM-ALARNGTC. Several dining facilities at the facility were visited during the PA site visit. These dining facilities are designated as Dining Facility's 1 through 3 on **Figure 3-1**. The geographic coordinates of Dining Facility 1 through 3 are 33° 43' 56.2" N; 85° 47' 34.8"W, 33° 44' 6.6" N; 85° 47' 16.4"W, and 33° 43' 54.3" N; 85° 47' 6.7"W, respectively. According to ALARNG personnel interviewed, AFFF was not used or stored in the dining facilities. Restaurant fire suppression systems are installed within the dining facilities and charged with ANSULEX Low pH Liguid Fire Suppressant. Additionally, wall mounted Class K, potassium carbonate fire extinguishers are located in each of the dining facilities. Therefore, the dining facilities are not considered suspected release areas.

3.3 Weapons Cleaning Area

The Weapons Cleaning Area is approximately 400 feet northwest of Dining Facility 1. The geographic coordinates are 33° 43' 59.9" N; 85° 47' 36.6"W. The ALARNG uses two wooden tables approximately 60 feet long for disassembling, cleaning and reassembling weapons. Gun cleaners and lubricant including Break-Free® CLP® are stored in a locked equipment room at the east side of the Weapons Cleaning Area. According to ALARNG personnel, approximately one gallon of CLP® is used per month. Rags used with CLP® are double bagged and disposed of as hazardous waste. According to ALARNG personnel interviewed, AFFF was not used or stored in this area. Additionally, minimal amounts of CLP® are stored in the locked equipment room at one time. Therefore, this weapons cleaning area is not considered a suspected release area.

3.4 Fuel Point

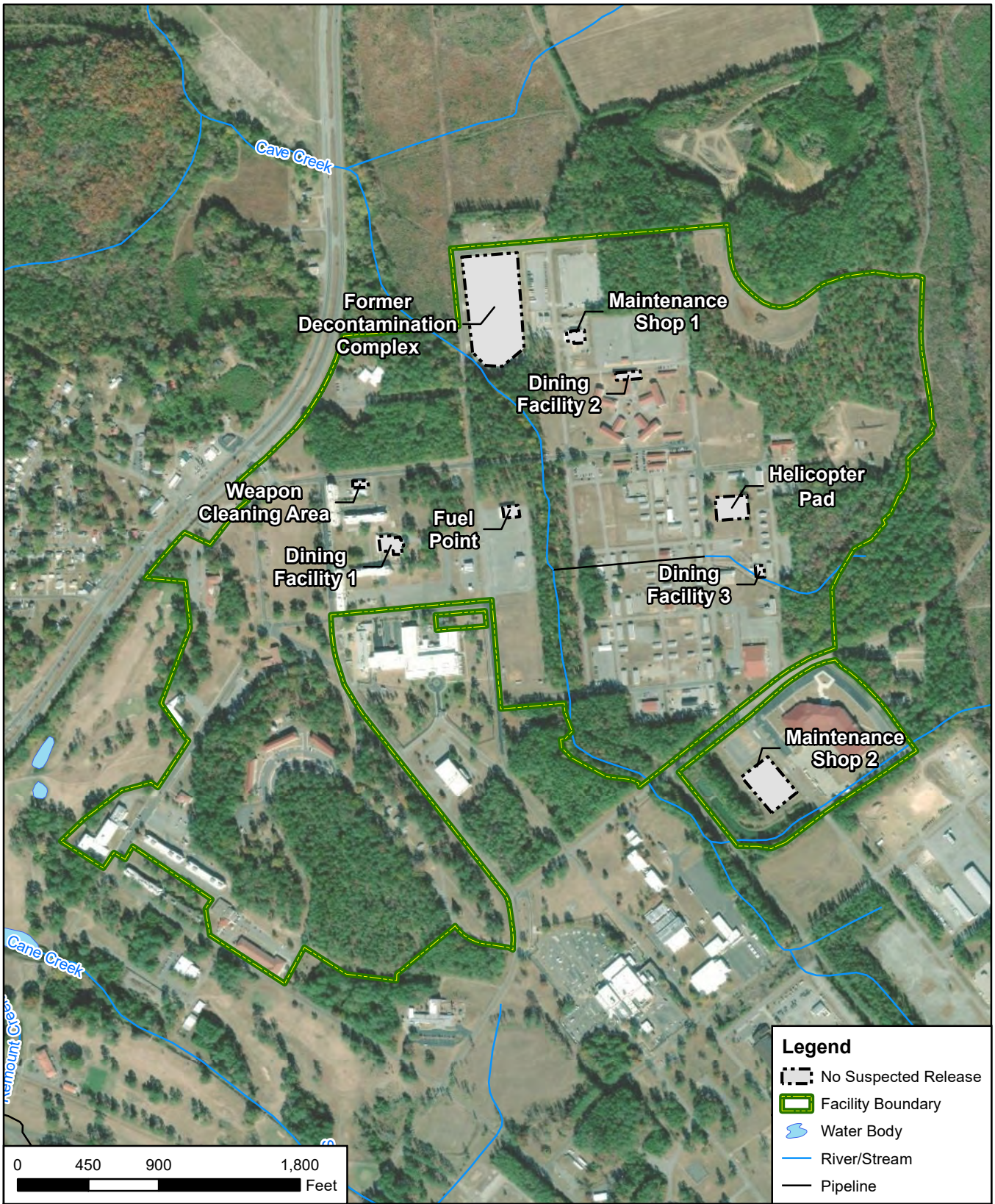
The Fuel Point is approximately 700 feet northwest of Dining Facility 1. The geographic coordinates are 33° 43' 58.1" N; 85° 47' 25.5" W. This Fuel Point is used for military vehicle refilling. Fire suppression at the fuel point is provided by wall mounted Class ABC fire extinguishers. ALARNG personnel interviewed did not have knowledge of fuel spills at this fuel point and confirmed that AFFF had not been used or stored in this area. Therefore, the fuel point is not considered a suspected release area.

3.5 Maintenance Shops

Two vehicle maintenance buildings were visited during the PA site visit and designated as Maintenance Shop 1 and Maintenance Shop 2. The geographic coordinates for Maintenance Shop 1 and Maintenance Shop 2 are 33° 44' 9.1" N; 85° 47' 20.2" W , and 33° 43' 40.7" N; 85° 47' 6.0" W, respectively. These maintenance areas are used for general maintenance of ALARNG vehicles. All fueling activity takes place at the Fuel Point discussed above. Fire protection in the maintenance area is provided by a wall mounted ABC class fire extinguisher or Purple K fire extinguishers. The maintenance shops were not equipped with an AFFF fire suppression systems, and according to ALARNG personnel interviewed, AFFF has not been used or stored in these areas. Therefore, the maintenance shops are not considered suspected release areas.

3.6 Former Decontamination Complex

The Former Decontamination Complex is at the north end of the FM-ARNGTC. The geographic coordinates are 33° 44' 11.9" N; 85° 47' 26.6"W. Prior to ALARNG operation of the facility, the Former Decontamination Complex was used by the US Army and housed the 61st Chemical Company from 1961 to 1973, a chemical laundry. The 61st Chemical Company reimpregnated undergarments with paraffin used in chemical exercises. All the waste from the laundry's operation were discharged to the sanitary sewer. Reimpregnation activities used wax, chlorinated oils and reportedly toluene and ethanol alcohol. The Former Decontamination Complex was closed in 1994 (Environmental Science and Engineering, 1998). Based on aerial imagery provided in the EDR™ report (**Appendix A**), buildings associated with the Former Decontamination Complex were demolished after 1998. Currently the area is used as a paved lot for staging of ALARNG vehicles. ALARNG personnel with knowledge of the property back to 1986 have confirmed that PFAS were not used in the reimpregnation process at the Former Decontamination Complex. Therefore, the Former Decontamination Complex is not considered a suspected release area.



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Base Map: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,		PM	RG	5/28/2020

Non-Fire Training Areas

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Figure 3-1

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4. Emergency Response Areas

No emergency response areas were identified within the Enclave during the PA through interviews or document review. Based on interviewees, informal mutual agreements are in place with the local county fire department.

5. Adjacent Sources

Two potential off-facility sources of PFAS adjacent to FM-ARNGTC, not under the control of ALARNG, were identified during the PA. These potential off-facility sources include the Former Fire Training Pit and the Former Chemical Laundries (Impregnation Units). These potential sources are depicted on **Figure 5-1** and described below.

5.1 Former Fire Training Pit

The Former Fire Training Pit is located approximately 0.5 miles southeast of the FM-ARNGTC. The geographic coordinates for the Former Fire Training Pit are 33° 43' 19.8" N; 85° 46' 43.2" W. The Former Fire Training Pit used by the US Army prior to ALARNG operation, and was identified on the former Main Post at the location of Building 350, the Consolidated Maintenance Facility. Currently, International Automotive Components is constructed on the location of the Former Fire Training Pit.

The dates of the operation of the Former Fire Training Pit are unknown, however, according to an Environmental Baseline Survey (EBS) completed in 1998, use of the former fire pit was discontinued prior to 1986. The fire pit was reportedly used approximately once a year by the US Army to train firefighters. Waste oil and other fluids that were stored across the street in a fenced compound were spread on the ground at the fire pit, ignited and then extinguished during training. According to the EBS the fire pit was concrete lined after 1978 and rainwater runoff was discharged to cane Creek. Prior to construction of Building 350 in 1991, the entire pad and soil were excavated, and the area was backfilled with clean soil.

The EBS did not specify methods used to extinguish fires at the Former Fire Training Pit. However, based on historical fire training practices and the prevalence of PFAS in AFFF after 1969, it is possible AFFF could have been used in these fire training exercises. Therefore, the Former Fire Training Pit is considered a potential off-facility source of PFAS, not under control of ALARNG.

5.2 Former Chemical Laundries (Impregnation Units)

The 111th Garment Impregnation Plant and 317th Garment Impregnation Plant were located on the hard stand east of 5th Avenue, about 1 mile south of the current FM-ARNGTC. The geographic coordinates for the Former Chemical Laundries are 33° 42' 44.0" N; 85° 46' 44.8" W. Based on information provided in the 1998 EBS, the dates of operation of this facility are unknown but can be estimated as beginning in 1951 when the US Army Chemical School (USACMLS) arrived at the former FM-ARNGTC, until approximately the mid-1960s when butyl rubber protective garments began to be issued.

The garment impregnation facilities were reportedly used to treat military garments to render them relatively impermeable to chemical warfare material (CWM). The standard operating procedure (SOP) for typical impregnation plants was located in the USACMLS library, and describes use of only water, wax and “chlorinated oil.” ALARNG personnel with knowledge of the property back to 1986 have confirmed that PFAS were not used in the impregnation process at the Former Chemical Laundries (Impregnation Units). Therefore, the Former Chemical Laundries (Impregnation Units) is not considered a potential off-facility source of PFAS.

CLIENT	ARNG			
Preliminary Assessment for FM-ARNGTC Enclave, AL				
REVISED	5/28/2020	GIS BY	MS	5/28/2020
SCALE	1:15,600	CHK BY	BM	5/28/2020
Base Map: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,		PM	RG	5/28/2020

N

Adjacent Sources

AECOM
12420 Milestone Center Drive
Germantown, MD 20876

Figure 5-1

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6. Preliminary Conceptual Site Model

Based on the PA findings, no release areas were identified as AOIs at FM-ARNGTC. A conceptual site model (CSM) identifies the three components necessary for a potentially complete exposure pathway: (1) source, (2) pathway, (3) receptor. If any of these elements are missing, the pathway is considered incomplete. Based on the findings of this PA, there are no PFAS sources that originate at the Enclave from activities associated with the facility; therefore, exposure pathways are considered incomplete.

7. Conclusions

This report presents a summary of available information gathered during the PA on the use and storage of AFFF and other PFAS-related activities at FM-ARNGTC. The PA findings are based on the information presented in **Appendix A** and **Appendix B**.

7.1 Findings

No PFAS releases relating to current or historical activities at the Enclave were identified during this PA (**Figure 7-1**. The following areas, which were discussed in **Section 3** and **Section 5**) and are presented in **Table 7-1** below, were determined to have no suspected releases.

Table 7-1: No Suspected Release Areas

No Suspected Release Area	Used by	Rationale for No Suspected Release Determination
Helicopter Pad	ALARNG	According to interviews and document review, AFFF was not used or stored at the Helicopter Pad. There were no reported emergency response or rotary aircraft crashes in this area.
Dining Facilities	ALARNG	According to interviews, AFFF was not used or stored at the dining facilities. Visual inspection confirmed the use of ANSULEX Low pH Liquid Fire Suppressant and wall mounted Class K, potassium carbonate fire extinguishers.
Weapons Cleaning Area	ALARNG	According to interviews, AFFF was not used or stored in this area. Minimal amounts of CLP® are stored in the locked equipment room at one time. Residual amounts of CLP® and rags used in the cleaning process are double bagged and disposed of as hazardous waste.
Fuel Point	ALARNG	According to interviews, no fuel spills were reported at the Fuel Point and confirmed that AFFF had not been used or stored in this area.
Maintenance Shops	ALARNG	The maintenance shops were not equipped with an AFFF fire suppression systems. According to interviews, AFFF has not been used or stored in these areas.
Former Decontamination Complex	US Army	According to interviews, no PFAS were used in the reimpregnation process at the Former Decontamination Complex.

Based on the documented absence of the use or release of PFAS-containing materials at FM-ARNGTC, evidence does not support current or former ARNG activities at the facility having contributed to PFAS contamination in soil, groundwater, surface water, or sediment at the facility or adjacent areas. No AOIs related to PFAS release were identified based on PA data. One potential off-facility PFAS release area, Former Fire Training Pit, exists adjacent to FM-ARNGTC. Because this area includes property upgradient of the facility, it is unknown whether or not the off-facility source affects FM-ARNGTC.

7.2 Uncertainties

A number of information sources were investigated during this PA to determine the potential for PFAS-containing materials to have been present, used, or released at the facility. Historically, documentation of PFAS use was not required because PFAS were considered benign. Therefore, records were not typically kept by the facility or available during the PA on the use of PFAS in training, firefighting, or other non-traditional activities, or on its disposition.

The conclusions of this PA are based on all available information, including: previous environmental reports, EDRs™, observations made during the VSI, and interviews. Interviews of personnel with direct knowledge of a facility generally provided the most useful insights regarding a facility's historical and current PFAS-containing materials. Sometimes, the provided information was vague or conflicted with other sources. Gathered information has a degree of uncertainty due to the absence of written documentation, the limited number of personnel with direct knowledge due to staffing changes, the time passed since PFAS were first used (1969 to present), and a reliance on personal recollection. Inaccuracies may arise in potential PFAS release locations, dates of release, volume of releases, and the concentration of AFFF used. There is also a possibility the PA has missed a source of PFAS, as the science of how PFAS may enter the environment continually evolves.

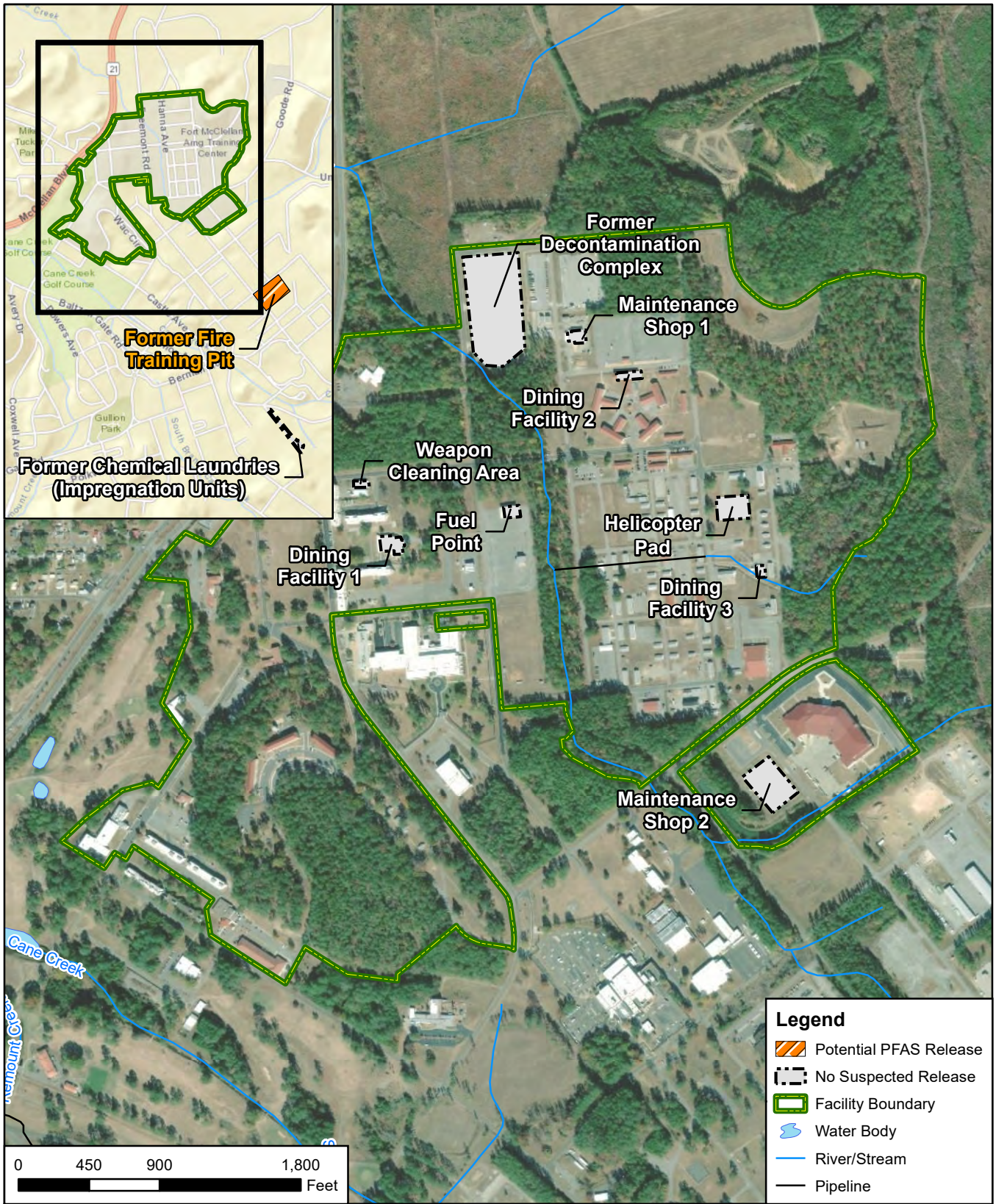
In order to minimize the level of uncertainty, readily available data regarding the use and storage of PFAS were reviewed, current personnel were interviewed, multiple persons were interviewed for the same potential source area, and potential source areas were visually inspected. **Table 7-3** summarizes the uncertainties associated with the PA:

Table 7-2: Uncertainties

Location	Source of Uncertainty
FM-ARNGTC	The US Army operated at the facility from 1917 to 1999. Most ALARNG personnel interviewed had limited knowledge of Army operations. One interviewee had limited knowledge of the site from 1986. Most of the US Army operation could only be gleaned from historical document review.

7.3 Potential Future Actions

Based on the documented absence of the use or release of PFAS-containing materials at the Enclave (1986 to present), no AOIs were identified during the PA. Evidence does not indicate that current or former ARNG activities contributed PFAS contamination to soil, groundwater, surface water, or sediment at the facility or adjacent areas. Therefore, the Enclave will not move forward in the CERCLA process.



CLIENT	ARNG			
Preliminary Assessment for FM-ARNGTC Enclave, AL				
REVISED	5/28/2020	GIS BY	MS	5/28/2020
SCALE	1:10,800	CHK BY	BM	5/28/2020
Base Map: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI,		PM	RG	5/28/2020

Summary of Findings

AECOM
12420 Milestone Center Drive
Germantown, MD 20876

Figure 7-1

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United States Environmental Protection Agency (USEPA). 1991. *Guidance for Performing Preliminary Assessments under CERCLA.* September.

United States Geological Survey (USGS). 2004. Age and Source of Water in Springs Associated with the Jacksonville Thrust Fault Complex, Calhoun County, Alabama.

USACE. 2004. Second Five-Year Review Report for Interim Action Record of Decision Shallow Groundwater Operable Unit Groundwater Treatment System, Anniston Army Depot, Calhoun County, Alabama.

Weston, Roy F. Inc. (Weston). 1990. Enhanced Preliminary Assessment: Fort McClellan, Alabama, Volumes I & II.

Appendix A
Data Resources

Data resources will be provided separately on CD. Data resources for Fort McClellan Army National Guard Training Center include:

Deed Documents

- 2001 Quitclaim Deed NO. 3 Form McClellan, Alabama. Deed 3004
- 2003 Quitclaim Deed NO. 9 Form McClellan, Alabama. Deed 3036

  2005 Quitclaim Deed Form McClellan, Alabama. Deed 3068

Historical Reports and Documents

- 1990 Weston, Roy F. Inc. (Weston). Enhanced Preliminary Assessment: Fort McClellan, Alabama, Volumes I & II.
- 1994 Ewers Water Consultants Inc. Final Report Groundwater Tracing Studies Anniston Army Depot, Anniston, Alabama.
- 1998 Environmental Science & Engineering, Inc. Final, Environmental Baseline Survey, Fort McClellan, Alabama (Volume I and II).
- 1998 SAIC. Report on the Findings for the Groundwater Tracer Test at the Anniston Army Depot Southeast Industrial Area, Anniston, Alabama.
- 2001 AMEC Earth and Environmental, Inc. Final Integrated Natural Resource Management Plan and Environmental Assessment for the Fort McClellan Army National Guard Training Center
- 2004 Malcolm Pirnie, Inc. Final Historical Records Review for Anniston Army Depot.
- 2004 USACE. Second Five-Year Review Report for Interim Action Record of Decision Shallow Groundwater Operable Unit Groundwater Treatment System, Anniston Army Depot, Calhoun County, Alabama.
- 2005 Anniston Army Depot (ANAD). Installation Action Plan (IAP) FY2006 for Alabama, Anniston Army Depot.

Environmental Data Resources, Inc. Geocheck Report

- 2019 Environmental Data Resources, Inc. Geocheck Report for Fort McClellan, Anniston, Alabama

Miscellaneous Documents

- 1989 USEPA Risk Assessment Guidance for Superfund Volume I, Human Health Evaluation Manual (Part A) Interim Final

Appendix B
Preliminary Assessment Documentation

Appendix B.1
Interview Records

PA Interview Questionnaire - Environmental Manager

Facility: Fort McClellan
Interviewer: [redacted]
Date/Time: 4/11/19 & 4/12/19

Interviewee: See Sign In sheet **Title:** " **Phone Number:** " **Email:** "	Can your name/role be used in the PA Report? Y or N Can you recommend anyone we can interview? Y or N _____

1. Roles or activities with the Facility/years working at the Facility.

[redacted]

Logistics Supervisor
Environmental Manager
Environmental Manager

2. Where can I find previous facility ownership information?

Deed information in AECOM files.
Facility owned by US Army until 1999. Facility transferred to ARNG in 2000/2001. BRAC was in 1999.

3. What can you tell us about the history of PFAS including aqueous film forming foam (AFFF) at the Facility? Was it used for any of the following activities, circle all that apply and indicate years of active use, if known? Identify these locations on a facility map.

Maintenance Truck maintence buildings. NO AFFF use or storage
Fire Training Areas Not on ARNG Property. Fire Train pit offsite ≈ 0.5 mile South
Firefighting (Active Fire) Former US Army Property.
Crash None → NA
Fire Suppression Systems (Hangers/Dining Facilities) None with AFFF. Klass K type.
Fire Protection at Fueling Stations Class ABC at Fuel Point.
Non-Technical/Recreational/ Pest Management NA
Metals Plating Facility None
Waterproofing Uniforms (Laundry Facilities) Former Decontamination Complex used to
Other Impregnate underground with Paraffin. ALARNG Confirmed no PFAS use.

4. Fill out CSM Information worksheet with the Environmental Manager.

5. Are any current buildings constructed with AFFF dispensing systems or fire suppression systems? What are the AFFF/suppression system test requirements? What is the frequency of testing the AFFF/suppression system? Do you have "As Built" drawings for the buildings?

No AFFF fire Suppression

PA Interview Questionnaire - Environmental Manager

Facility: Fort McClellan
Interviewer: [redacted]
Date/Time: 4/11/19 + 4/12/19

6. Are fire suppression systems currently charged with AFFF or have they been retrofitted for use of high expansion foam? If retrofitted, when was that done?

NA

7. How is AFFF procured? Do you have an inventory/procurement system that tracks use?

NA

8. What type of AFFF has been/is being used (3%, 6%, Mil Spec Mil-F-24385, High Expansion)? Manufacturer (3M, Dupont, Ansul, National Foam, Angus, Chemguard, Buckeye, Fire Service Plus)?

NA

9. Where is the AFFF stored? How is it stored (tanks, 55-gallon drums, 5-gallon buckets)? What size are the storage tanks? Is the AFFF stored as a mixed solution (3% or 6%) or concentrated material?

No AFFF Stored by ARNG

10. How many FTAs are/were on this facility and where are they? Locate on a map. How many FTAs are active and inactive? For inactive FTAs, when was the last time that fire training using AFFF was conducted at them?

One FTA on former US Army Property, ≈ 0.5 miles South of ALARNG Property. 1998 EBS states FTA was used until 1986. There is limited use of practice & use of fire suppressions. Assumed AFFF could have been used.

PA Interview Questionnaire - Environmental Manager

Facility: Fort McClellan
Interviewer: [redacted]
Date/Time: 4/11/14 & 4/12/14

11. When a release of AFFF occurs during a fire training exercise, now and in the past, how is the AFFF cleaned and disposed of? Were retention ponds built to store discharged AFFF? Was the AFFF trickled to the sanitary sewer or left in the pond to infiltrate?

    Unknown for US Army Training Pit offsite.

    No FTA by ALARNG

12. Can you recall specific times when city, county, and/or state personnel came on-post for training? If so, please state which state/county agency or military entity? Do you have any records, including photographs to share with us?

    NA

13. Did military routinely or occasionally fire train off-post? List the units that you can recall used/trained at various areas.

    None by ALARNG.

    As stated, US Army had an FTA 0.5 south of ALARNG Property.

14. Did individual units come with their own safety personnel, did they also bring their own AFFF? Was training with AFFF part of these exercises? How were emergencies handled under these circumstances?

    N/A

15. Are there specific emergency response incident reports (i.e., aircraft or vehicle crash sites and fires)? If so, may we please copy these reports? Who (entity) was the responder?

    No record of emergency response or crash sites.

PA Interview Questionnaire - Environmental Manager

Facility: Fort McClellan
Interviewer: [redacted]
Date/Time: 4/11/19 & 4/12/19

16. Do you have records of fuel spill logs? Was it common practice to wash away fuel spills with AFFF? Is/was AFFF used as a precaution in response to fuel releases or emergency runway landings to prevent fires?

No fuel spills known

17. Was AFFF used for forest fires or fire management on-post/off-post? If so, please describe what happened and who was involved?

NA

18. Are there mutual aid/use agreements between county, city, and local fire department? Please list, even if informal. If formalized, may we have a copy of the agreement?

Local fire department. There is also a fire station at Pelham Range.

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 treatment plants, and AFFF ponds)?

NO AFFF storage or use by AL ARNG

20. Are you aware of any other creative uses of AFFF? If so, how was AFFF used? What entities were involved?

None

PA Interview Questionnaire - Environmental Manager

Facility: [redacted] Fort McClellan
Interviewer: [redacted]
Date/Time: 4/11/19 & 4/12/19

21. Are there past studies you are aware of with environmental information on plants/animals/ groundwater/soil types, etc., such as Integrated Cultural Resources Management Plans or Integrated Natural Resources Management Plans?

EBS from 1998

22. What other records might be helpful to us (environmental compliance, investigation records, admin record) and where can we find them?

Link to Admin records for Fort McClellan Provided.

23. Do you have or did you have a chrome plating shop on base? What were/are the years of operation of that chrome plating shop?

No Chrome Plating

24. Do you know whether the shop has/had a foam blanket mist suppression system or used a fume hood for emissions control? If foam blanket mist suppression was used, where was the foam stored, mixed, applied, etc.?

None

25. How is off-spec AFFF disposed (used for training, turned in, or given to a local Fire Station)? If applicable, do you know the name of the vendor that removes off-spec AFFF? Do you have copies of the manifest or B/L?

NA

PA Interview Questionnaire - Environmental Manager

Facility: Fort McClellan
Interviewer: [redacted]
Date/Time: 4/11/19 & 4/12/19

26. Do you recommend anyone else we can interview? If so, do you have contact information for them?

[redacted] was not onsite during PA visit. Followed up via email.

Preliminary Assessment Sign-In Sheet

Name	Position	Years at the Facility	Phone Number/Email	May AECOM use your name in the PA Report?
[redacted]	Logistics Supervisor	7	[redacted]	yes
[redacted]	Environmental Manager		[redacted]	yes
[redacted]	Environmental Manager		[redacted]	yes
[redacted]	Environmental Compliance	since 1986	[redacted]	yes
			[redacted]	

Appendix B.2
Visual Site Inspection Checklists

Visual Site Inspection Checklist

Names(s) of people performing VSI: [redacted]

Recorded by:

ARNG Contact:

Date and Time: 4/12/19

Method of visit (walking, driving, adjacent): walking / Driving

Source/Release Information

Site Name / Area Name / Unique ID: Fort McClellan - Dining Facilities

Site / Area Acreage:

Historic Site Use (Brief Description): Dining Facilities

Current Site Use (Brief Description): Dining Facilities

Physical barriers or access restrictions: At times Personnel restricted

1. Was PFAS used (or spilled) at the site/area? **Y / (N)**

1a. If yes, document how PFAS was used and usage time (e.g., fire fighting training 2001 to 2014):

2. Has usage been documented? **Y / (N)**

2a. If yes, keep a record (place electronic files on a disk):

3. What types of businesses are located near the site? **Industrial / (Commercial) / Plating / Waterproofing / (Residential)**

3a. Indicate what businesses ar[redacted]d near the site

Surrounding properties mixed residential / commercial properties

4. Is this site located at an airport/flightline? **Y / (N)**

4a. If yes, provide a description of the airport/flightline tenants:

Visual Survey Inspection Log

Other Significant Site Features:

1. Does the facility have a fire suppression system? **(Y)** / N

   1a. If yes, indicate which type of AFFF has been used:

   No AFFF. uses class K and Ansulex low pH Liquid fire Suppressant.

   1b. If yes, describe maintenance schedule/leaks:

   1c. If yes, how often is the AFFF replaced:

   1d. If yes, does the facility have floor drains and where do they lead? Can we obtain an as built drawing?

Transport / Pathway Information

Migration Potential:

1. Does site/area drainage flow off installation? **(Y)** / N

   1a. If so, note observation and location:

   Storm drains lead to swamp across the street (McClellan Blvd)

2. Is there channelized flow within the site/area? **(Y)** / N

   2a. If so, please note observation and location:

   Floor drains in building.

3. Are monitoring or drinking water wells located near the site? Y / **(N)**

   3a. If so, please note the location:

   None Identified by EDR.

4. Are surface water intakes located near the site? Y / **(N)**

   4a. If so, please note the location:

5. Can wind dispersion information be obtained? Y / **(N)**

   5a. If so, please note and observe the location.

6. Does an adjacent non-ARNG PFAS source exist? **(Y)** / N

   6a. If so, please note the source and location.

   ≈ 0.5 miles South of property at former US Army FTA. No ALAR Site

   6b. Will off-site reconnaissance be conducted? Y / **(N)** Identified after visit.

Visual Survey Inspection Log

Significant Topographical Features:

1. Has the infrastructure changed at the site/area? Y / (N)

1a. If so, please describe change (ex. Structures no longer exist):

no evidence of change. unknown prior to 1999.

2. Is the site/area vegetated? Y / (N)

2a. If not vegetated, briefly describe the site/area composition:

3. Does the site or area exhibit evidence of erosion? Y / (N)

3a. If yes, describe the location and extent of the erosion:

4. Does the site/area exhibit any areas of ponding or standing water? Y / (N)

4a. If yes, describe the location and extent of the ponding:

Receptor Information

1. Is access to the site restricted? (Y) / N

1a. If so, please note to what extent:

ALARWA / Contractors

2. Who can access the site? (Site Workers) / Construction (Workers) / Trespassers / Residential / Recreational Users / Ecological

2a. Circle all that apply, note any not covered above:

3. Are residential areas located near the site? (Y) N

3a. If so, please note the location/distance:

Surrounding site mixed residential / commercial

4. Are any schools/day care centers located near the site? (Y) N

4a. If so, please note the location/distance/type:

Sacred Heart Catholic School ≈ 2 miles SW.

5. Are any wetlands located near the site? Y / (N)

5a. If so, please note the location/distance/type:

Visual Site Inspection Checklist

Names(s) of people performing VSI: [redacted]

Recorded by:

ARNG Contact:

Date and Time: 4/12/19

Method of visit (walking, driving, adjacent): walking / Driving

Source/Release Information

Site Name / Area Name / Unique ID: Fort McClellan - Truck maintenance Area 1

Site / Area Acreage:

Historic Site Use (Brief Description): Truck maintenance Area

Current Site Use (Brief Description): Truck maintenance

Physical barriers or access restrictions: Restricted to AL ARNG

1. Was PFAS used (or spilled) at the site/area? Y / (N)

1a. If yes, document how PFAS was used and usage time (e.g., fire fighting training 2001 to 2014):

2. Has usage been documented? Y / (N)

2a. If yes, keep a record (place electronic files on a disk):

3. What types of businesses are located near the site? **Industrial / (Commercial) / Plating / Waterproofing / (Residential)**

3a. Indicate what businesses are located near the site

mixed residential / commercial

4. Is this site located at an airport/flightline? Y / (N)

4a. If yes, provide a description of the airport/flightline tenants:

Visual Survey Inspection Log

Other Significant Site Features:

1. Does the facility have a fire suppression system? Y / **N**

1a. If yes, indicate which type of AFFF has been used:

Class ABC Fire extinguishers + some Purple K extinguishers.

1b. If yes, describe maintenance schedule/leaks:

1c. If yes, how often is the AFFF replaced:

1d. If yes, does the facility have floor drains and where do they lead? Can we obtain an as built drawing?

Transport / Pathway Information

Migration Potential:

1. Does site/area drainage flow off installation? **Y** / N

1a. If so, note observation and location:

Storm drains not noted in area of maintenance facility. FL present, Stormdrains go to WWTP across McClellan Blvd.

2. Is there channelized flow within the site/area? Y / **N**

2a. If so, please note observation and location:

No observed in area

3. Are monitoring or drinking water wells located near the site? Y / **N**

3a. If so, please note the location:

wells not noted in EDR

4. Are surface water intakes located near the site? Y / **N**

4a. If so, please note the location:

5. Can wind dispersion information be obtained? Y / **N**

5a. If so, please note and observe the location.

6. Does an adjacent non-ARNG PFAS source exist? Y / N

6a. If so, please note the source and location.

Noted former US Army FTA to the South of Property. No ALARNG AoFs.

6b. Will off-site reconnaissance be conducted? Y / **N** Former Army FTA noticed after [illegible]

Visual Survey Inspection Log

Significant Topographical Features:

1. Has the infrastructure changed at the site/area? Y / (N)

1a. If so, please describe change (ex. Structures no longer exist):

Unknown use by Former Army Post to 1949.

2. Is the site/area vegetated? Y / (N)

2a. If not vegetated, briefly describe the site/area composition:

3. Does the site or area exhibit evidence of erosion? Y / (N)

3a. If yes, describe the location and extent of the erosion:

4. Does the site/area exhibit any areas of ponding or standing water? Y / (N)

4a. If yes, describe the location and extent of the ponding:

Receptor Information

1. Is access to the site restricted? (Y) / N

1a. If so, please note to what extent:

Restricted to ALARNG

2. Who can access the site? **Site Workers / Construction Workers / Trespassers / Residential / Recreational Users / Ecological**

2a. Circle all that apply, note any not covered above:

AL ARNG Personnel + possibly authorized Contractors

3. Are residential areas located near the site? (Y) / N

3a. If so, please note the location/distance:

≈ 1 to 2 miles.

4. Are any schools/day care centers located near the site? (Y) / N

4a. If so, please note the location/distance/type:

≈ 1 to 2 mls

5. Are any wetlands located near the site? Y / (N)

5a. If so, please note the location/distance/type:

Visual Site Inspection Checklist

Names(s) of people performing VSI: [redacted]

Recorded by:

ARNG Contact:

Date and Time: 4/12/19

Method of visit (walking, driving, adjacent): Walking / Driving

Source/Release Information

Site Name / Area Name / Unique ID: Fort McClellan - Gun cleaning area

Site / Area Acreage:

Historic Site Use (Brief Description): Gun Cleaning Area

Current Site Use (Brief Description): Gun Cleaning Area

Physical barriers or access restrictions: Access restricted to ALARNG.

1. Was PFAS used (or spilled) at the site/area? **Y / (N)**

1a. If yes, document how PFAS was used and usage time (e.g., fire fighting training 2001 to 2014):

2. Has usage been documented? **Y / (N)**

2a. If yes, keep a record (place electronic files on a disk):

3. What types of businesses are located near the site? **Industrial / (Commercial) / Plating / Waterproofing / (Residential)**

3a. Indicate what businesses are located near the site

mixed commercial / residential properties

4. Is this site located at an airport/flightline? **Y / (N)**

4a. If yes, provide a description of the airport/flightline tenants:

Visual Survey Inspection Log

Other Significant Site Features:

1. Does the facility have a fire suppression system? Y / (N)

1a. If yes, indicate which type of AFFF has been used:

1b. If yes, describe maintenance schedule/leaks:

1c. If yes, how often is the AFFF replaced:

1d. If yes, does the facility have floor drains and where do they lead? Can we obtain an as built drawing?

Transport / Pathway Information

Migration Potential:

1. Does site/area drainage flow off installation? Y / (N)

1a. If so, note observation and location:

No storm drains noted in Area. Stormwater system goes to WWTP across the street

2. Is there channelized flow within the site/area? Y / (N)

2a. If so, please note observation and location:

3. Are monitoring or drinking water wells located near the site? Y / (N)

3a. If so, please note the location:

4. Are surface water intakes located near the site? Y / (N)

4a. If so, please note the location:

5. Can wind dispersion information be obtained? Y / (N)

5a. If so, please note and observe the location.

6. Does an adjacent non-ARNG PFAS source exist? (Y) / N

6a. If so, please note the source and location.

Former fire pit off-site + documented in 1998 EBS. used by US Army NG ALARNG site.

6b. Will off-site reconnaissance be conducted? Y / (N) Identified after site visit

Visual Survey Inspection Log

Significant Topographical Features:

1. Has the infrastructure changed at the site/area? (Y) / N

1a. If so, please describe change (ex. Structures no longer exist):

No indication of former infrastructure. However, property was owned by US ARMY prior to 1999.

2. Is the site/area vegetated? Y / (N)

2a. If not vegetated, briefly describe the site/area composition:

3. Does the site or area exhibit evidence of erosion? Y / (N)

3a. If yes, describe the location and extent of the erosion:

4. Does the site/area exhibit any areas of ponding or standing water? Y / (N)

4a. If yes, describe the location and extent of the ponding:

Receptor Information

1. Is access to the site restricted? (Y) / N

1a. If so, please note to what extent:

ARMY Personnel only.

2. Who can access the site? **Site Workers / (Construction Workers) / Trespassers / Residential / Recreational Users / (Ecological)**

2a. Circle all that apply, note any not covered above:

3. Are residential areas located near the site? (Y) / N

3a. If so, please note the location/distance:

Residential Property across McClellan Blvd.

4. Are any schools/day care centers located near the site? (Y) / N

4a. If so, please note the location/distance/type:

Nearest school is Sacred Heart Catholic School ≈ 2 miles away.

5. Are any wetlands located near the site? Y / (N)

5a. If so, please note the location/distance/type:

Visual Site Inspection Checklist

Names(s) of people performing VSI: [redacted]

Recorded by:

ARNG Contact:

Date and Time: 4/12/19

Method of visit (walking, driving, adjacent): Walking / Driving

Source/Release Information

Site Name / Area Name / Unique ID: Fort McClellan Helicopter PAD

Site / Area Acreage:

Historic Site Use (Brief Description): Helicopter Pad

Current Site Use (Brief Description): Helicopter Pad

Physical barriers or access restrictions: Access to main POSL by ALARNG only

1. Was PFAS used (or spilled) at the site/area? Y / (N)

1a. If yes, document how PFAS was used and usage time (e.g., fire fighting training 2001 to 2014):

2. Has usage been documented? Y / (N) NA

2a. If yes, keep a record (place electronic files on a disk):

3. What types of businesses are located near the site? **Industrial / (Commercial) / Plating / Waterproofing / (Residential)**

3a. Indicate what businesses are located near the site

Commercial & Residential properties surrounding main POSL property.

4. Is this site located at an airport/flightline? Y / (N)

4a. If yes, provide a description of the airport/flightline tenants:

Visual Survey Inspection Log

Other Significant Site Features:

1. Does the facility have a fire suppression system? Y / (N)

1a. If yes, indicate which type of AFFF has been used:

Class K Suppression in Kitchens

1b. If yes, describe maintenance schedule/leaks:

NL

1c. If yes, how often is the AFFF replaced:

NA

1d. If yes, does the facility have floor drains and where do they lead? Can we obtain an as built drawing?

NA

Transport / Pathway Information

Migration Potential:

1. Does site/area drainage flow off installation? (Y) / N

1a. If so, note observation and location:

Stormwater drains go to WWTP across the street owned by City of Anniston

2. Is there channelized flow within the site/area? Y / (N)

2a. If so, please note observation and location:

None observed by helicopter pad

3. Are monitoring or drinking water wells located near the site? Y / (N)

3a. If so, please note the location:

No wells identified on EDR report

4. Are surface water intakes located near the site? Y / (N)

4a. If so, please note the location:

5. Can wind dispersion information be obtained? Y / (N)

5a. If so, please note and observe the location.

6. Does an adjacent non-ARNG PFAS source exist? (Y) / N

6a. If so, please note the source and location.

After review of EBS + Noted by ALARNG former US Army Fire Pit 0.5 miles South of ALARNG Property.

6b. Will off-site reconnaissance be conducted? Y / (N) Identified after Site visit #

Visual Survey Inspection Log

Significant Topographical Features:

1. Has the infrastructure changed at the site/area? (Y) / N

1a. If so, please describe change (ex. Structures no longer exist):

Some former US Army sites no longer exist based on info gained by EBS. However, Not, evident at Helicopter Pad.

2. Is the site/area vegetated? (Y) / N

2a. If not vegetated, briefly describe the site/area composition:

3. Does the site or area exhibit evidence of erosion? Y / (N)

3a. If yes, describe the location and extent of the erosion:

4. Does the site/area exhibit any areas of ponding or standing water? Y / (N)

4a. If yes, describe the location and extent of the ponding:

Receptor Information

1. Is access to the site restricted? (Y) / N

1a. If so, please note to what extent:

only ALARNG authorized

2. Who can access the site? **Site Workers / Construction Workers / Trespassers / Residential / Recreational Users / Ecological**

2a. Circle all that apply, note any not covered above:

3. Are residential areas located near the site? (Y) / N

3a. If so, please note the location/distance:

Across McClellan Blvd. ≈ 3K feet from Helicopter Pad.

4. Are any schools/day care centers located near the site? Y / N

4a. If so, please note the location/distance/type:

Sacred Heart Catholic School ≈ 2 miles South east of Helicopter Pad.

5. Are any wetlands located near the site? Y / (N)

5a. If so, please note the location/distance/type:

Mountain Lambert natural wildlife Refuge west of Property

Visual Site Inspection Checklist

Names(s) of people performing VSI: [redacted]

Recorded by:

ARNG Contact:

Date and Time: 6/12/19

Method of visit (walking, driving, adjacent): Walking Driving

Source/Release Information

Site Name / Area Name / Unique ID: Fuel Mechellan Fuel Point

Site / Area Acreage:

Historic Site Use (Brief Description): Fuel point

Current Site Use (Brief Description): Fuel point

Physical barriers or access restrictions: Site Restricted to AZ ARNG

1. Was PFAS used (or spilled) at the site/area? **Y / (N)**

1a. If yes, document how PFAS was used and usage time (e.g., fire fighting training 2001 to 2014):

2. Has usage been documented? **Y / (N)**

2a. If yes, keep a record (place electronic files on a disk):

3. What types of businesses are located near the site? **Industrial / (Commercial) / Plating / Waterproofing / (Residential)**

3a. Indicate what businesses are located near the site

< 1 mile from site

4. Is this site located at an airport/flightline? **Y / (N)**

4a. If yes, provide a description of the airport/flightline tenants:

Visual Survey Inspection Log

Other Significant Site Features:

1. Does the facility have a fire suppression system? Y / (N)

1a. If yes, indicate which type of AFFF has been used:

ABC Extinguisher in area. Portable + wall mounted.

1b. If yes, describe maintenance schedule/leaks:

1c. If yes, how often is the AFFF replaced:

1d. If yes, does the facility have floor drains and where do they lead? Can we obtain an as built drawing?

Transport / Pathway Information

Migration Potential:

1. Does site/area drainage flow off installation? (Y) / N

1a. If so, note observation and location:

Storm drain. Storm water drains go to WWTP across McClellan Blvd.

2. Is there channelized flow within the site/area? (Y) / N

2a. If so, please note observation and location:

Storm drain.

3. Are monitoring or drinking water wells located near the site? Y / (N)

3a. If so, please note the location:

None identified on EDR

4. Are surface water intakes located near the site? Y / (N)

4a. If so, please note the location:

5. Can wind dispersion information be obtained? Y / (N)

5a. If so, please note and observe the location.

6. Does an adjacent non-ARNG PFAS source exist? Y / N

6a. If so, please note the source and location.

Former US Army site South of property. No ALARWA sites

6b. Will off-site reconnaissance be conducted? Y / (N) Identified after work

Visual Survey Inspection Log

Significant Topographical Features:

1. Has the infrastructure changed at the site/area? Y / (N)

1a. If so, please describe change (ex. Structures no longer exist):

unknown. No evidence of changes.

2. Is the site/area vegetated? Y / (N)

2a. If not vegetated, briefly describe the site/area composition:

3. Does the site or area exhibit evidence of erosion? Y / (N)

3a. If yes, describe the location and extent of the erosion:

4. Does the site/area exhibit any areas of ponding or standing water? Y / (N)

4a. If yes, describe the location and extent of the ponding:

Receptor Information

1. Is access to the site restricted? (Y) / N

1a. If so, please note to what extent:

only AL ARMY & authorized contractors.

2. Who can access the site? **Site Workers / Construction Workers / Trespassers / Residential / Recreational Users / Ecological**

2a. Circle all that apply, note any not covered above:

ALARMY or authorized contractors

3. Are residential areas located near the site? (Y) / N

3a. If so, please note the location/distance:

surrounding Property

4. Are any schools/day care centers located near the site? (Y) / N

4a. If so, please note the location/distance/type:

Sacred Heart Catholic School ≈ 7 miles SW

5. Are any wetlands located near the site? Y / (N)

5a. If so, please note the location/distance/type:

Visual Survey Inspection Log

Additional Notes • Cleaners, lubricants & rags in weapon cleaning room double bagged & manifested as hazardous waste.

Photographic Log

Photo ID/Name	Date & Location	Photograph Description
1	4/12/19 weapon ~~Gun~~ cleaning room	Weapon cleaning room & cleaners & lubricants
2	4/12/19 weapon cleaning area	In locked room. cleaners & rags used for cleaning
3	4/12/19 Helicopter Pad	General view of helicopter pad
4	4/12/19 Helicopter Pad	General view of ABC extinguisher at helicopter pad
5	4/12/19 Dining facility	General Ansul Low pH suppression system over hood in dining facility
6	4/12/19 Dining Facility	General Class K extinguisher in Dining facility

Visual Survey Inspection Log

Additional Notes

Photographic Log

Photo ID/Name	Date & Location	Photograph Description
7	4/12/19 Fuel Point	General view of fuel point
8	4/12/19 Fuel Point	General view of ABC extinguisher at fuel point
9	4/12/19 Fuel Point	Storm drain at Fuel Point
10	4/12/19 Truck maintenance Building	Portable fire extinguisher at Truck maintenance area.

Appendix B.3
Conceptual Site Model Information

Preliminary Assessment – Conceptual Site Model Information

Site Name: Fort McClellan

Why has this location been identified as a site? Possible use of AFFF.

Are there any other activities nearby that could also impact this location? No current operations identified

Training Events

Have any training events with AFFF occurred at this site? Not onsite. Former US Army FTA South

If so, how often? at Site. [redacted] used once a year

How much material was used? Is it documented? Not documented. FTA use ended 1990.

Identify Potential Pathways: Do we have enough information to fully understand over land surface water flow, groundwater flow, and geological formations on and around the facility? Any direct pathways to larger water bodies?

Surface Water:

Surface water flow direction? Northwest

Average rainfall? ≈ 53"

Any flooding during rainy season? Not known

Direct or indirect pathway to ditches? Not known

Direct or indirect pathway to larger bodies of water? Surface water to Cane Creek

Does surface water pond any place on site? No ponding identified

Any impoundment areas or retention ponds? Not at sites visited.

Any NPDES location points near the site? NPDES identified in 1998 EBS.

How does surface water drain on and around the flight line? NA

Preliminary Assessment – Conceptual Site Model Information

Groundwater:

Groundwater flow direction? Northwest

Depth to groundwater? 4' in some areas. Shallow GW system 50'

Uses (agricultural, drinking water, irrigation)? NO wells identified on EDR. GW source is Cullman Spring

Any groundwater treatment systems? None identified

Any groundwater monitoring well locations near the site? None identified

Is groundwater used for drinking water? Yes. No wells identified on EDR however.

Are there drinking water supply wells on installation? None identified

Do they serve off-post populations? None identified

Are there off-post drinking water wells downgradient None identified on EDR

Waste Water Treatment Plant:

Has the installation ever had a WWTP, past or present? Not onsite. Former Army waste west of Hwy

If so, do we understand the process and which water is/was treated at the plant? unknown Treated water discharge to Cove Creek.

Do we understand the fate of sludge waste? EBS report states sludge is classified as Class B

Is surface water from potential contaminated sites treated? unknown.

Equipment Rinse Water

1. Is firefighting equipment washed? Where does the rinse water go? NA

2. Are nozzles tested? How often are nozzles tested? Where are nozzles tested? Are nozzles cleaned after use? Where does the rinse water flow after cleaning nozzles? NA

3. Other? NA

Preliminary Assessment – Conceptual Site Model Information

Identify Potential Receptors:

Site Worker ✓

Construction Worker ✓

Recreational User

Residential

Child

Ecological

Note what is located near by the site (e.g. daycare, schools, hospitals, churches, agricultural, livestock)?

No AOIs identified at ALARWA Fuel [illegible]

Documentation

Ask for Engineering drawings (if applicable).

Has there been a reconstruction or changes to the drainage system? When did that occur?

Appendix C
Photographic Log

APPENDIX C – Photographic Log

Army National Guard, Preliminary Assessment for PFAS	Fort McClellan Army National Guard Training Center- Anniston AL	Anniston, Alabama

Photograph No. 1

Description:

Cleaners and lubricants in the Weapons Cleaning Area

Photo date 4/12/19

Photograph No. 2

Description:

Cleaners, lubricants and rags in the Weapons Cleaning Area

Photo Date: 4/12/19

APPENDIX C – Photographic Log

Army National Guard, Preliminary Assessment for PFAS	Fort McClellan Army National Guard Training Center- Anniston AL	Anniston, Alabama

Photograph No. 3

Description:

Looking southeast

General view of Helicopter Pad

Photo Date: 4/12/19

Photograph No. 4

Description:

Looking southeast

General view of ABC fire extinguisher at Helicopter Pad

Photo Date: 4/12/19

APPENDIX C – Photographic Log

Army National Guard, Preliminary Assessment for PFAS	Fort McClellan Army National Guard Training Center- Anniston AL	Anniston, Alabama

Photograph No. 5

Description:

General view of hood fire suppression system in dining facility

Photo Date: 4/12/19

Photograph No. 6

Description:

General view of Class K fire extinguisher in dining facility

Photo Date: 4/12/19

APPENDIX C – Photographic Log

Army National Guard, Preliminary Assessment for PFAS	Fort McClellan Army National Guard Training Center- Anniston AL	Anniston, Alabama

Photograph No. 7

Description:

Looking east

General view of Fuel Point

Photo Date: 4/12/19

Photograph No. 8

Description:

Looking north

General view of ABC fire extinguisher at Fuel Point

Photo Date: 4/12/19

APPENDIX C – Photographic Log

Army National Guard, Preliminary Assessment for PFAS	Fort McClellan Army National Guard Training Center- Anniston AL	Anniston, Alabama

Photograph No. 9

Description:

Looking north

Storm drain at Fuel Point

Photo Date: 4/12/19

Photograph No. 10

Description:

Looking southwest

General view of Purple K fire extinguisher at truck maintenance area.

Photo Date: 4/12/19