Final

Preliminary Assessment Report
Pelham Range, Anniston, Alabama

Perfluorooctanesulfonic 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
ATSDR	Agency for Toxic Substances and Disease Registry
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CSM	conceptual site model
EDR™	Environmental Data Resources, Inc.™
FM-ARNGTC	Fort McClellan Army National Guard Training Center
FTA	fire training area
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
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
VSI	visual site inspection

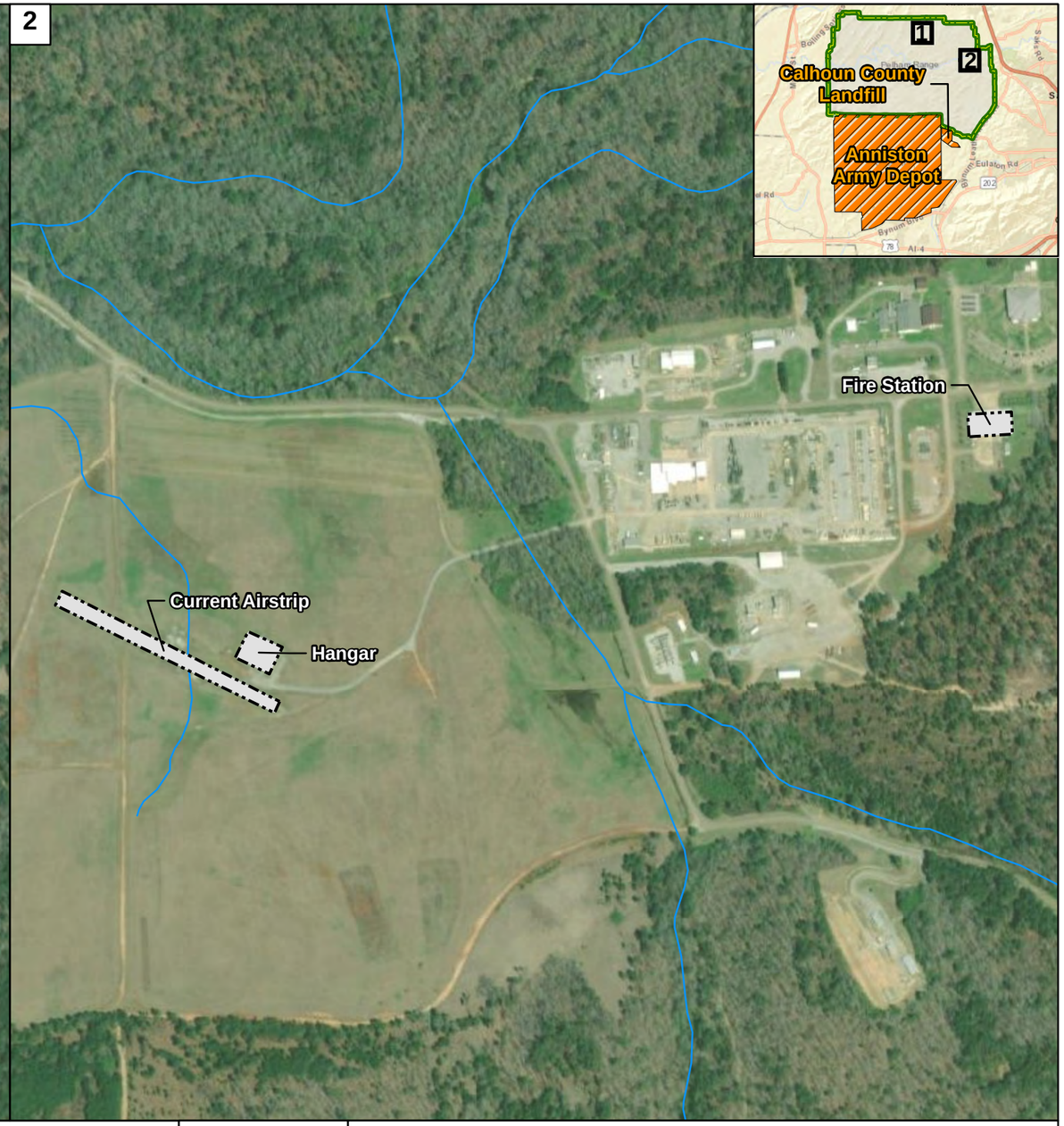
Executive Summary

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 Pelham Range (also referred to as the "facility") in Anniston, Alabama, to assess potential PFAS release areas and exposure pathways to receptors. Pelham Range is a portion of Fort McClellan Army National Guard Training Center (FM-ARNGTC), located within the former Fort McClellan in Calhoun County, Alabama. Following the closure of Fort McClellan, the Army licensed Pelham Range to the Alabama Army National Guard (ALARNG) in 1999, and property accountability was transferred in 2005. 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 completed visual site inspections at locations where PFAS-containing materials were suspected of being stored, used, or disposed;
- Interviewed current ALARNG Environmental Managers, Fire Station Chief, and Maintenance Inspector during the site visit.

Two potential off-facility PFAS release areas, Anniston Army Depot and Calhoun County Landfill, exist adjacent to Pelham Range. Because these areas include property upgradient of the facility, it is unknown whether or not the off-facility sources affect Pelham Range. Based on the United States Environmental Protection Agency (USEPA) Unregulated Contaminant Monitoring Rule 3 (UCMR3) data, it was indicated that PFAS were detected in the Southside Water Works public water system above the USEPA's lifetime Health Advisories (HAs). The HA is 70 parts per trillion for PFOS and PFOA, individually or combined. The surface water intakes for Southside Water Works are located within 10 miles to the north of the facility. 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.

Based on the documented absence of the use or release of PFAS-containing materials at Pelham Range, 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 related to PFAS release were identified at Pelham Range based on PA data (**Figure ES-1**).



CLIENT	ARNG			
PROJECT	Preliminary Assessment for PFAS at Pelham Range, Anniston, AL			
REVISED	9/1/2020	GIS BY	MS	9/1/2020
SCALE	1:7,200	CHK BY	ST	9/1/2020
Base Map: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community		PM	RG	9/1/2020

Legend

- Potential PFAS Release
- No Suspected Release
- Facility Boundary
- Stream/River

0 300 600 1,200 Feet

N

Summary of Findings

AECOM
12420 Milestone Center Drive
Germantown, MD 20876

Figure ES-1

C:\Users\stankevichm\OneDrive - AECOM Directory\ARNG_PFAS_GIS_60552172\MXDs\AL\Pelham_Range\Fig_ES-1_PelhamRange_Summary.mxd

1. Introduction

1.1 Authority and Purpose

The Army National Guard (ARNG) G9 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) (a suite of related chemicals), 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 has adopted the USEPA HAs for PFAS.

This report presents the findings of a PA for PFAS-containing materials at Pelham Range in 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 the locations where PFAS may have been released into the environment at the Pelham Range. 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 completed visual site inspections (VSIs) at locations where PFAS-containing materials were suspected of being stored, used, or disposed;
- Interviewed current Alabama Army National Guard (ALARNG) Environmental Managers, Fire Station Chief, and Maintenance Inspector during the site visit.

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** – **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

Pelham Range is located within the historical footprint of 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). The current Fort McClellan Army National Guard Training Center (FM-ARNGTC) is comprised of the entire Pelham Range and approximately 300 acres within the cantonment area of the Main Post, known as the Enclave. Pelham Range is approximately 5 miles west of the Enclave and lies contiguously north of the Anniston Army Depot. The historical boundary of Fort McClellan and current locations of Pelham Range and the Enclave are depicted in **Figure 1-1**.

Pelham Range, formerly known as the Morrisville Maneuver Area, was purchased by the US Army in 1941 in order to expand the training capacity at Fort McClellan. The operational range areas at Pelham Range have been in use by multiple organizational elements; such as the US Army Chemical School, US Army Reserves, Marine Corps Administrative Detachment, Women's Army Corps, and US Air Force Disaster Preparedness School; since the land was first acquired. In 1995, the Base Realignment and Closure Commission identified Fort McClellan for closure. In November 1999, after the closure of Fort McClellan, the Army licensed all of Pelham Range and the Enclave to the ALARNG, and in February 2005, the Army transferred real property

accountability of the FM-ARNGTC to the ALARNG. Pelham Range continues to be actively used by ALARNG (Shaw Environmental, Inc., 2004b).

1.5 Facility Environmental Setting

Pelham Range 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.

Topographic relief at Pelham Range is approximately 445 feet. Elevations range from 500 feet, in the area where Cane Creek exits the Pelham Range to the west, to approximately 945 feet, near the southeastern range boundary. The northern portion of Pelham Range contains broad rolling topography with northeast to southwest oriented ridges and isolated round knobs rising 75 to 90 feet above the surrounding terrain (URS Group, Inc. and Arcadis U.S. Inc., 2014).

1.5.1 Geology

The primary geologic formations underlying Pelham Range from youngest to oldest consist of the Pennsylvanian to Mississippian shale, siltstone, sandstone, limestone, and chert; Devonian sandstone and shale; Ordovician shale, limestone, chert, mudstone, and dolomite; and Cambrian dolomite, shale, and mudstone. The Ordovician-Cambrian dolomite and limestone compose the majority of the facility's geology is part of the Knox Group and is underlain by the Cambrian Conasauga Formation, which is approximately 2,500 feet thick (**Figure 1-2**). The unconsolidated surficial soils at Pelham Range area are 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 soils are made up of clay and silty clay with weathered rock fragments (Shaw Environmental, Inc., 2004a). Numerous sinkholes and underwater sink holes have been identified throughout Pelham Range, in areas where the regolith is thin or absent. Sinkholes, other subsurface voids, and underwater holes common to karst geology can accelerate the transport of surface water to groundwater.

1.5.2 Hydrogeology

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 groundwater flow system at Pelham Range is complex and can be divided into two general regions. The eastern two-thirds of Pelham Range is underlain by Knox Group carbonates and dolomites comprising the Valley and Ridge aquifer system, which is a karst aquifer at Pelham Range. Karst aquifers are formed of bedrock that exhibits enhanced permeability due to dissolution processes. The west-northwest portion of Pelham Range sits atop a system of faulted and folded rocks that form part of the Coosa Deformed Belt consisting of the Fort Payne-Tuscumbia aquifer, and clastic aquicludes of Mississippian age. All of the bedrock units beneath Pelham Range are overlain by a relatively thick mantle (30 to 100 feet) of unconsolidated material. The unconsolidated material overlying the Knox Group of the Valley and Ridge aquifer system consists mainly of residuum, the insoluble remnants of the carbonate bedrock that has weathered in place.

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 (Anniston Army Depot, 2005). The water table at Pelham Range occurs in the residuum; therefore, the underlying epikarst and bedrock units are perennially saturated. The shallow and deep groundwater systems are interconnected through fractures, voids, and faults.

Previous dye trace and localized studies of groundwater movement have been completed at Anniston Army Depot and Pelham Range (Ewers Water Consultants Inc., 1994; SAIC, 1998, 1999, and 2000; and URS Group Inc., 2002). The results of the studies indicate the following: 1) multi-directional flow in the bedrock from higher elevations to lower elevations, generally following topography; 2) groundwater migration within the epikarst is directed by the regional gradient to the west-northwest with a mixture of low-velocity, conduit-directed flow and diffuse flow; and 3) groundwater flow in the residuum generally following local topography with a portion of the groundwater discharging as base flow to seeps, creeks, and streams.

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 Geographic Information System databases, wells were researched to a 4-mile radius of the facility. Four wells are located on Pelham Range and used for non-potable water only (Shaw Environmental, Inc., 2003; U.S. Army, 2004). Groundwater wells in the surrounding areas are used for potable and non-potable water (agriculture and recreation) but are currently classified as “inactive” by U.S. Geological Survey (USGS) (USGS, 2019). 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 is the major source of spring water for the area and is a natural source of an enormous quantity of very high-quality water (about 24 to 36 million gallons per day) located approximately four miles southeast of Pelham Range at the foot of Coldwater Mountain. 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 (Agency for Toxic Substances and Disease Registry [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 were detected above the USEPA’s HA in the Southside Water Works public water system. The HA is 70 parts per trillion for PFOS and PFOA, individually or combined. The surface water intakes for the Southside Water Works are located at the Coosa River within 10 miles of the facility, and the UCMR3 data are included in **Appendix A**. 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. Groundwater features are presented in **Figure 1-2**.

1.5.3 Hydrology

Approximately 93 miles of streams and creeks and 34 acres of open water occur on Pelham Range (AMEC Earth & Environmental, 2001) which drains portions of the three drainage basins within the Middle Coosa River Watershed: the Cane Creek drainage basin, the Tallasseehatchee Creek drainage basin, and the Middle Choccolocco Creek drainage basin. The Cane Creek drainage basin receives a majority of the drainage from Pelham Range. Cane Creek flows in a westward direction from the Enclave and enters Pelham Range approximately 4.5 miles to the west. Several relatively large unnamed tributaries contribute to Cane Creek on Pelham Range. The Tallasseehatchee Creek drainage basin includes portions of the northern Pelham Range. Intermittent streams in the northwestern portion of Pelham Range contribute to Tallasseehatchee Creek. Cane Creek flows in a westward direction roughly bisecting Pelham Range. The runoff

from the operational ranges drains toward the center of the Pelham Range through perennial and intermittent tributaries flowing into Cane Creek which then flows westward off-range. Both Cane Creek and Tallasseehatchee Creek flow to the Logan Martin Reservoir. A small portion of southeastern Pelham Range is within the Middle Choccolocco Creek drainage basin and is drained by Coldwater Spring Branch which also flows to the Logan Martin Reservoir.

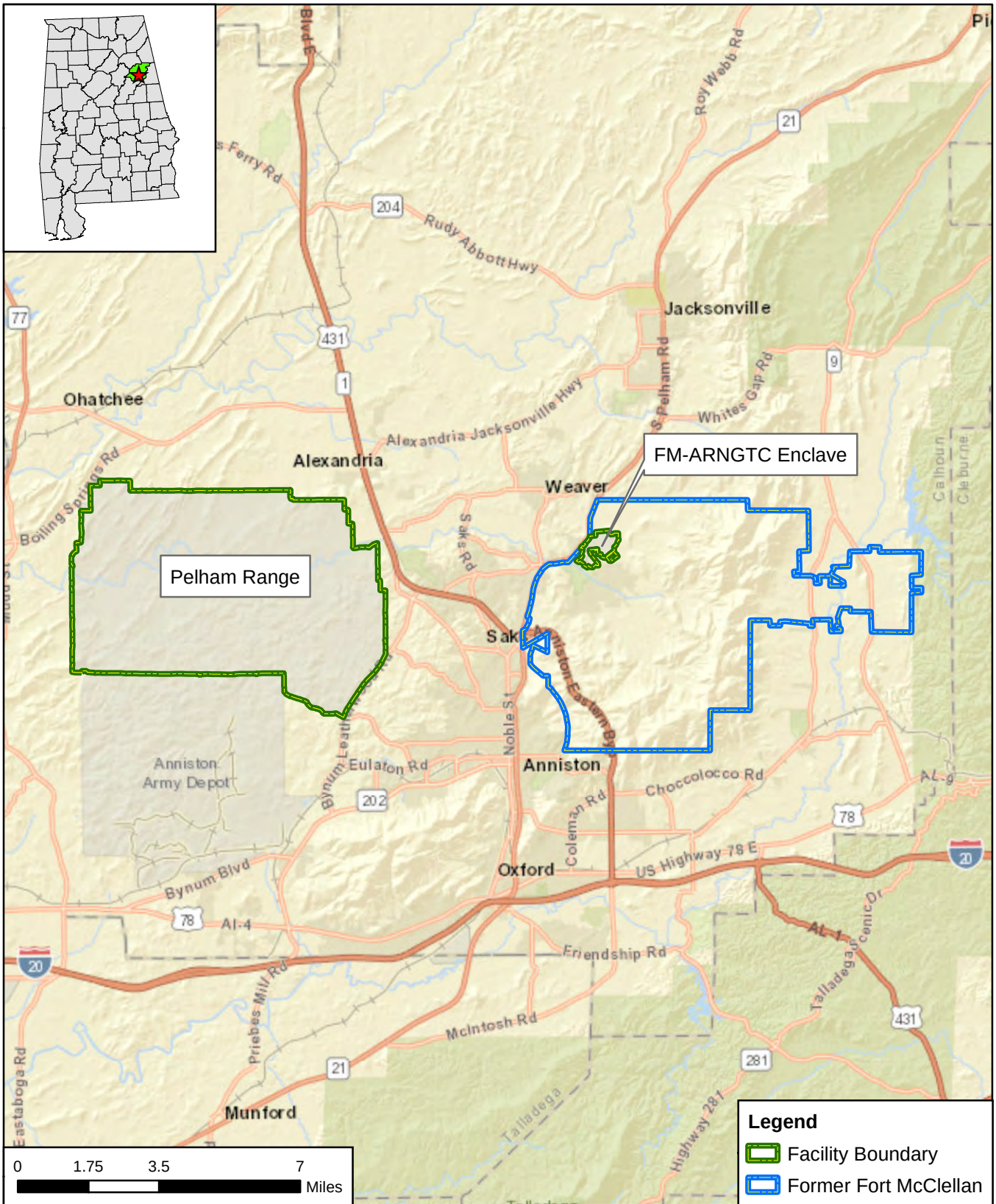
Pelham Range contains numerous seeps and springs due to the topography and underlying geology of the area. Ridges generally have rapid runoff, and lower slopes often support wet-weather seeps. Several relatively large springs are located on Pelham Range, including Willett Springs and Cabin Club Springs. Water quality surveys in the area indicate relatively good quality at most locations; the state has classified streams in this area as suitable for fish and wildlife use (AMEC Earth & Environmental, 2001). Surface water features are presented 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

Pelham Range covers approximately 34 square miles and training activities include the use of weapons firing points and impact areas, a demolition range, small arms firing ranges, and training and maneuver areas. The firing ranges and training areas on Pelham Range are actively used by ALARNG and other military entities such as the US Air Force and Anniston Army Depot. Reasonably anticipated land use is not expected to change from the current land use.



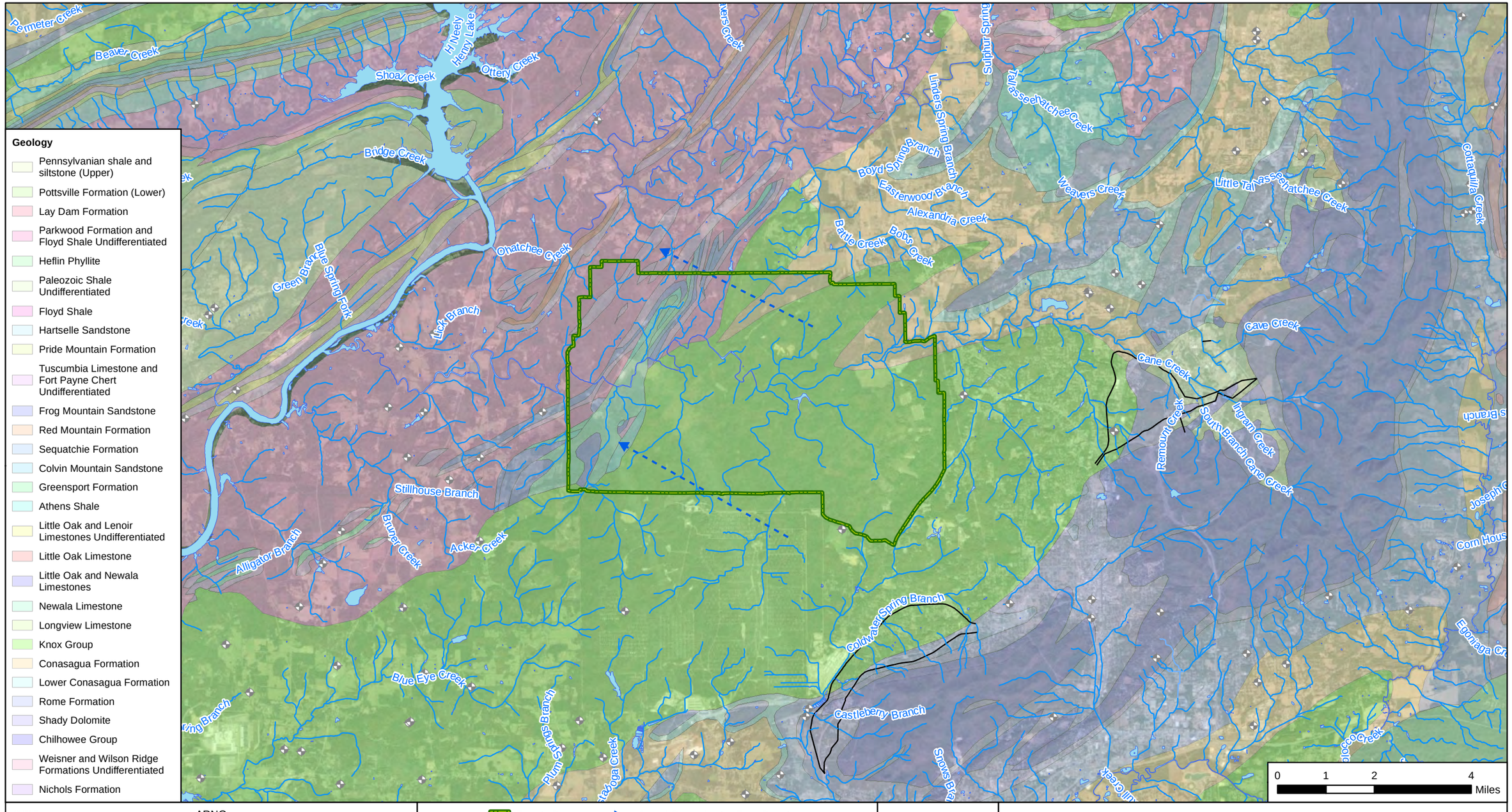
CLIENT	ARNG			
Preliminary Assessment for PFAS at Pelham Range, Anniston, AL				
REVISED	5/29/2020	GIS BY	MS	5/29/2020
SCALE	1:221,760	CHK BY	ST	5/29/2020
Base Map: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI,		PM	RG	5/29/2020

Facility Location

AECOM
12420 Milestone Center Drive
Germantown, MD 20876

Figure 1-1

C:\Users\stankevichm\OneDrive - AECOM Directory\ARNG_PFAS_GIS_60552172\MXDs\AL\Pelham_Range\Fig_1-1_PelhamRange_Facility_Location.mxd



CLIENT	ARNG			
PROJECT	Preliminary Assessment for PFAS at Pelham Range, Anniston, AL			
REVISED	5/29/2020	GIS BY	MS	5/29/2020
SCALE	1:126,720	CHK BY	ST	5/29/2020
Base Map: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community		PM	RG	5/29/2020

Facility Boundary
Water Body
Wetland
Stream/River
Canal/Ditch
Pipeline
Inferred Groundwater Flow Direction
USGS Inactive Monitoring Well

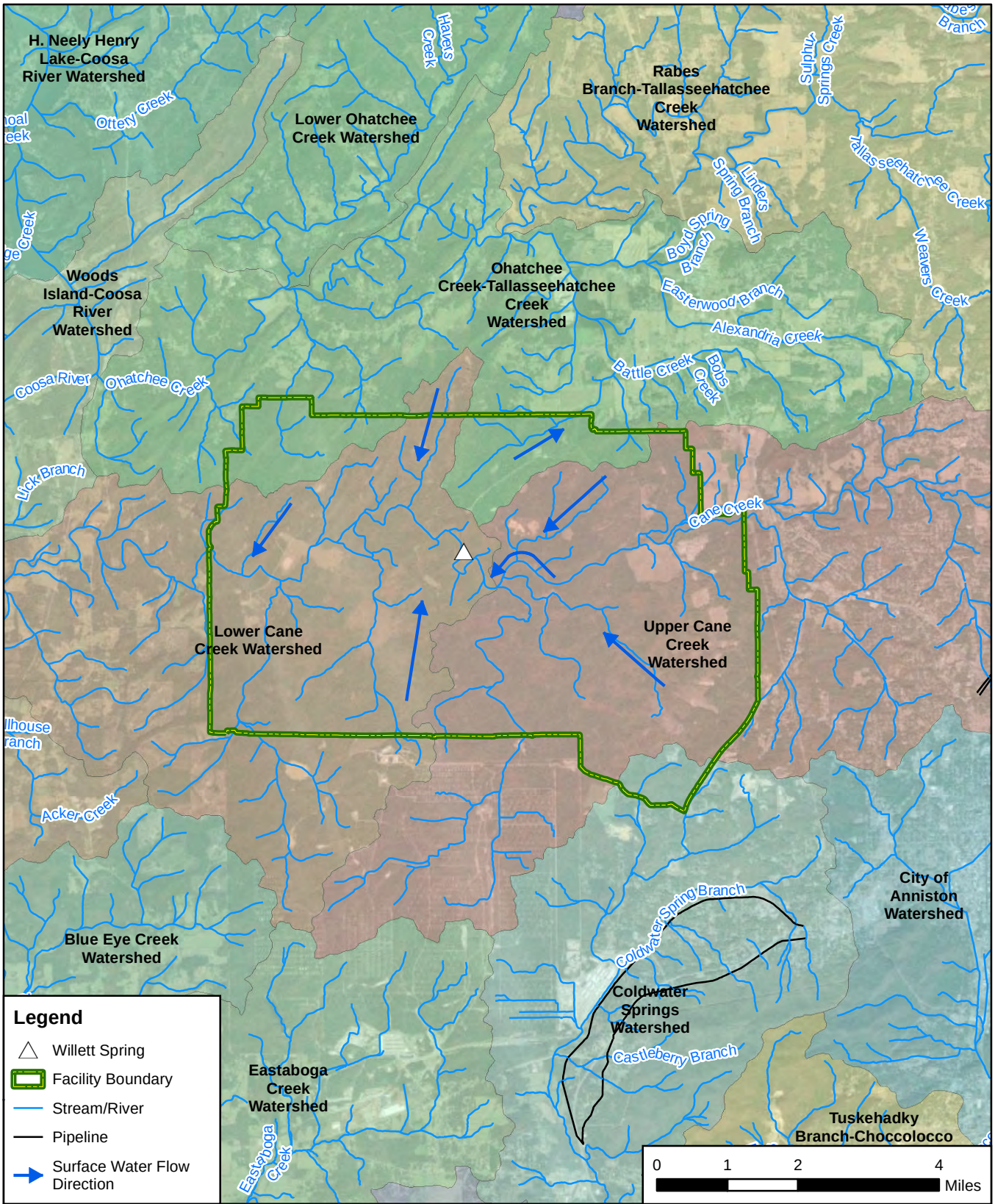
N

Groundwater Features

AECOM
12420 Milestone Center Drive
Germantown, MD 20876

Figure 1-2

C:\Users\stankevichm\OneDrive - AECOM Directory\ARNG_PFAS_GIS_60552172\MXDs\AL\Pelham_Range\Fig_1-2_PelhamRange_Groundwater.mxd



CLIENT	ARNG			
Preliminary Assessment for PFAS at Pelham Range, Anniston, AL				
REVISED	5/29/2020	GIS BY	MS	5/29/2020
SCALE	1:126,720	CHK BY	ST	5/29/2020
Base Map: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,		PM	RG	5/29/2020

Surface Water Features

AECOM
12420 Milestone Center Drive
Germantown, MD 20876

Figure 1-3

C:\Users\stankevichm\OneDrive - AECOM Directory\ARNG_PFAS_GIS_60552172\MXDs\AL\Pelham_Range\Fig_1-3_PelhamRange_Surface_Water.mxd

2. Fire Training Areas

No FTAs were identified within the facility during the PA through interviews (**Appendix B**) document review (**Appendix A**).

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**. Three non-FTAs where AFFF was stored and/or potentially released were identified during the PA. A description of each non-FTA is presented below and shown on **Figure 3-1**.

3.1 Fire Station

The Fire Station is located on the northeast portion of the facility at geographic coordinates 33°44’13.0” N and 85°54’34.7” W. Historical imagery from EDR™ Reports (**Appendix A**) show that the building was built between 2004 and 2006. Foam capable firetrucks with 150-gallon foam reservoirs are currently stored at the Fire Station. However, based on the interviewees only water has been used to extinguish fires and no AFFF has been used or stored at the Fire Station. One ALARNG personnel stated that the Hi Combat A™ Class A Foam stored in the Forestry Compound Maintenance Shed (**Section 3.3**) was rarely used as a foam additive on the firetrucks. The Class A Foam (non-AFFF) concentrate is not suspected to contain PFAS. The safety data sheet for the Hi Combat A™ Class A Foam is included in **Appendix A**.

3.2 Former Airstrip

The former airstrip is located on the northern portion of the facility at geographic coordinates 33°45'7.1" N and 85°56'47.9" W. The site was used as an airstrip by US Army prior to ALARNG property licensing in 1999; however, the details regarding US Army’s historical activities at the site are unknown. Historical imagery from EDR™ Reports (**Appendix A**) show the former airstrip existing as far back as 1972.

The former airstrip is currently a staging area for historical aircrafts. During the VSI, the airstrip was observed to be an unpaved, grassy area not improved with concrete or asphalt. The ALARNG interviewees (whose collective knowledge extends back to 1986) also reported that neither fire training activities nor crashes requiring emergency response have occurred at the former airstrip.

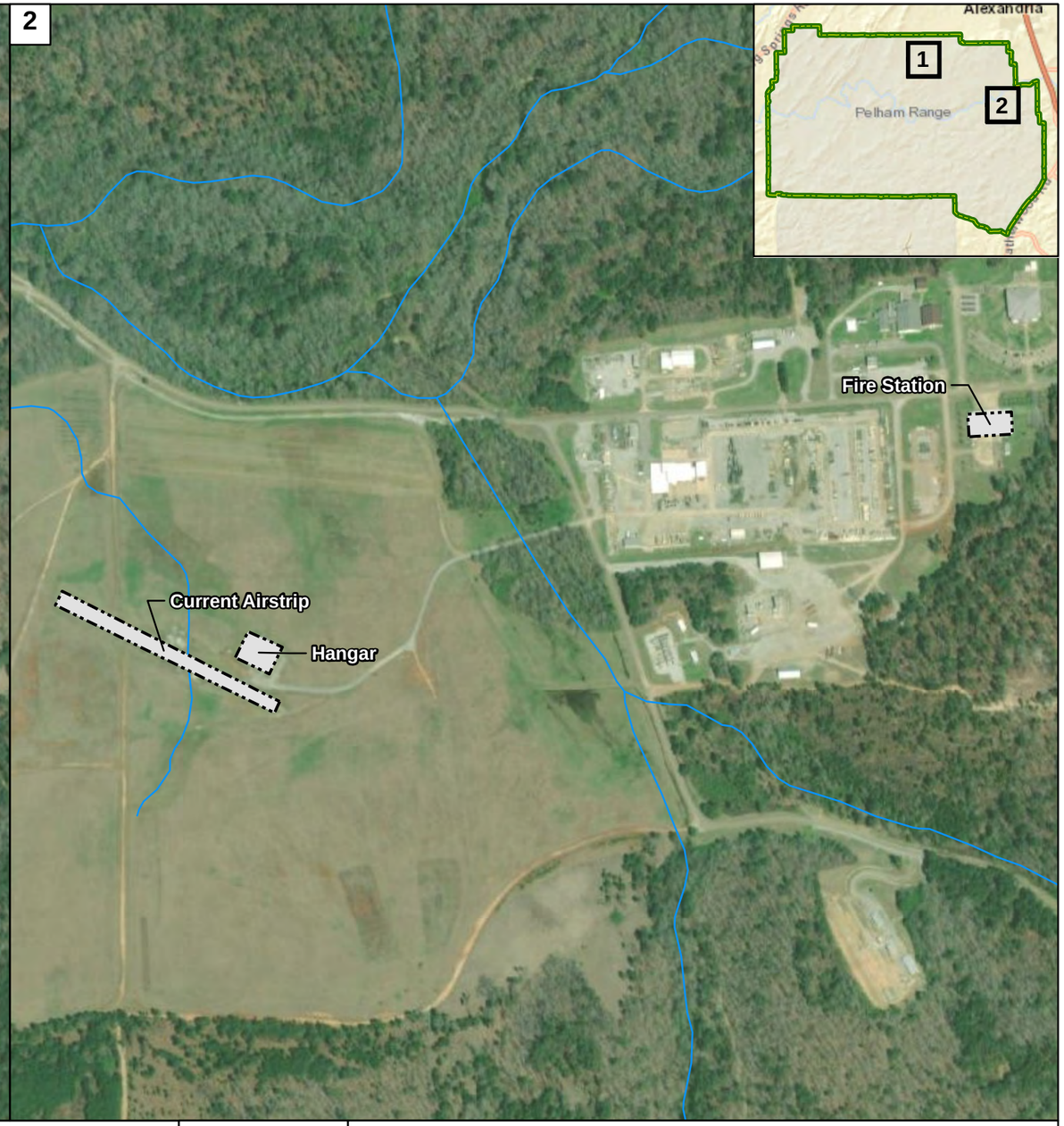
3.3 Forestry Compound Maintenance Shed

The Forestry Compound Maintenance Shed is on Gate 5 Road in the northeast portion of the facility. Geographic coordinates for the maintenance shed are 33°44'42.8" N and 85°55'59.8" W. Based on historical imagery from EDR™ Reports (**Appendix A**), the maintenance shed was constructed sometime between 1987 and 1992. The maintenance shed is a wooden structure that was previously used to store and mix herbicides, fungicides, and pesticides with no floor drains. A Site Investigation performed in 2002 at the Forestry Compound identified metals, volatile organic compounds, and chlorinated pesticides in site media; however, it was determined that the detected metals and chemical compounds posed no unacceptable risk to human health and the environment (IT Corporation, 2002).

The Forestry Compound is currently used for storage of road-building materials. Two 5-gallon buckets of Hi-Combat A™ Class A Foam were observed in the maintenance shed. One ALARNG personnel stated that the Class A Foam was rarely used as a foam additive on firetrucks. The Class A Foam (non-AFFF) concentrate is not suspected to contain PFAS. The safety data sheet for the Hi Combat A™ Class A Foam is included in **Appendix A**.

3.4 Current Airstrip and Hangar

The current airstrip is located on the northern portion of the facility at geographic coordinates 33°43'24.9" N and 85°54'26.7" W. Adjacent to the current airstrip is what appears to be a small hangar. Based on Google Earth aerial imagery, the airstrip and hangar were constructed sometime between 2010 and 2011. According to ALARNG interviewees, there are no staff and fire extinguishers located at the airstrip, and the airstrip is used for drones. Neither fire training activities nor crashes requiring emergency response have occurred at the current airstrip, and there are no fire dispensing systems located at the hangar. The current airstrip and hangar are not considered a suspected PFAS release area.



CLIENT	ARNG			
PROJECT	Preliminary Assessment for PFAS at Pelham Range, Anniston, AL			
REVISED	9/1/2020	GIS BY	MS	9/1/2020
SCALE	1:7,200	CHK BY	ST	9/1/2020
Base Map: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community		PM	RG	9/1/2020

Legend

- No Suspected Release
- Facility Boundary
- Stream/River

0 300 600 1,200 Feet

N

Non-Fire Training Areas

AECOM
12420 Milestone Center Drive
Germantown, MD 20876

Figure 3-1

C:\Users\stankevichm\OneDrive - AECOM Directory\ARNG_PFAS_GIS_60552172\MXDs\AL\Pelham_Range\Fig_3-1_PelhamRange_Non-Fire_Training_Areas.mxd

4. Emergency Response Areas

No emergency response areas were identified within the facility during the PA through interviews or EDR™ Reports. The Fire Station at the Pelham Range (described in **Section 3.1**) is the first responder for facility emergencies. Based on interviewees, informal mutual agreements are in place with the local county fire department; however, the local county fire department does not respond to brush fires within the facility.

5. Adjacent Sources

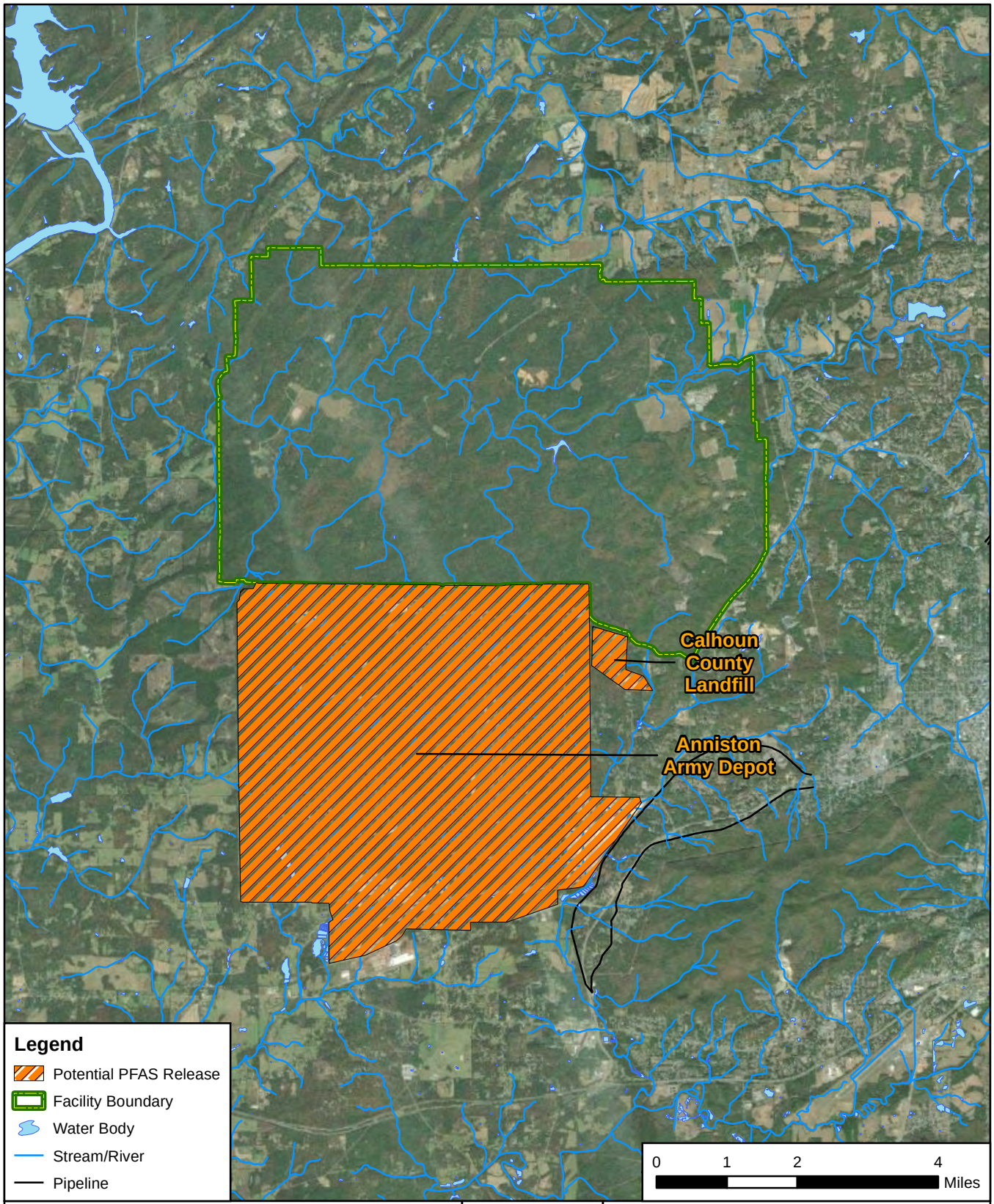
Two potential off-facility sources of PFAS adjacent to the facility, not under the control of the ALARNG, were identified during the PA. A description of each adjacent source is presented below and shown on **Figure 5-1**.

5.1 Anniston Army Depot

Anniston Army Depot is an active US Army installation lying contiguously south of Pelham Range. The installation was established in 1941 and occupies approximately 25 square miles, containing a maintenance center and munitions storage site (Anniston Army Depot, 2019). Anniston Army Depot was identified as an installation where the Department of Defense is “performing an assessment of PFAS use or potential release” (Defense.gov, 2019); therefore, Anniston Army Depot was identified as a potential adjacent source of PFAS.

5.2 Calhoun County Landfill

Calhoun County Landfill is adjacent to the southern boundary of Pelham Range and eastern boundary of Anniston Army Depot. The landfill is owned by Calhoun County and has a recycling and transfer station. The landfill was identified as a potential adjacent source of PFAS, because PFAS may be present in a variety of solid waste materials landfilled and have historically been discovered in landfills, leachates, and landfill gas (USEPA, 2018).



CLIENT	ARNG			
Preliminary Assessment for PFAS at Pelham Range, Anniston, AL				
REVISED	5/29/2020	GIS BY	MS	5/29/2020
SCALE	1:126,720	CHK BY	ST	5/29/2020
Base Map: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,		PM	RG	5/29/2020

N

Adjacent Sources

AECOM
12420 Milestone Center Drive
Germantown, MD 20876

Figure 5-1

C:\Users\stankevichm\OneDrive - AECOM Directory\ARNG_PFAS_GIS_60552172\MXDs\AL\Pelham_Range\Fig_5-1_PelhamRange_Adjacent_Sources.mxd

6. Conceptual Site Model

Based on the PA findings, no release areas were identified as AOIs at the Pelham Range; therefore, a conceptual site model (CSM) is not required for the facility. A CSM identifies three components necessary for potentially complete exposure pathways: (1) source, (2) pathway, and (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 Pelham Range or 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 the Pelham Range. The PA findings are based on the information presented in **Appendix A** and **Appendix B**.

7.1 Findings

The following areas discussed in **Section 3** were determined to have no suspected PFAS releases (**Table 7-1**):

Table 7-1: No Suspected Releases

No Suspected Release Area	Used by	Rationale for No Suspected Release Determination
Fire Station	ALARNG	No storage or use of AFFF. The firetrucks at the fire station are foam capable but have only carried a Class A, non-AFFF foam.
Former Airstrip	ALARNG / US Army	Interviewees (whose collective knowledge extends back to 1986) reported that neither fire training activities nor crashes requiring emergency response have occurred at the former airstrip.
Forestry Compound Maintenance Shed	ALARNG	There is no storage or use of AFFF. Two buckets of Class A, non-AFFF foam are stored within the shed.
Current Airstrip and Hangar	ALARNG	Interviewees (whose collective knowledge extends back to 1986) reported that neither fire training activities nor crashes requiring emergency response have occurred at the current airstrip. There are no fire dispensing systems located at the hangar.

Based on the documented absence of the use or release of PFAS-containing materials at Pelham Range, 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 at Pelham Range based on PA data.

Two potential off-facility PFAS release areas, Anniston Army Depot and Calhoun County Landfill, exist adjacent to Pelham Range. Because these areas include property upgradient of the facility, it is unknown whether or not the off-facility sources affect Pelham Range.

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. 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 was 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.

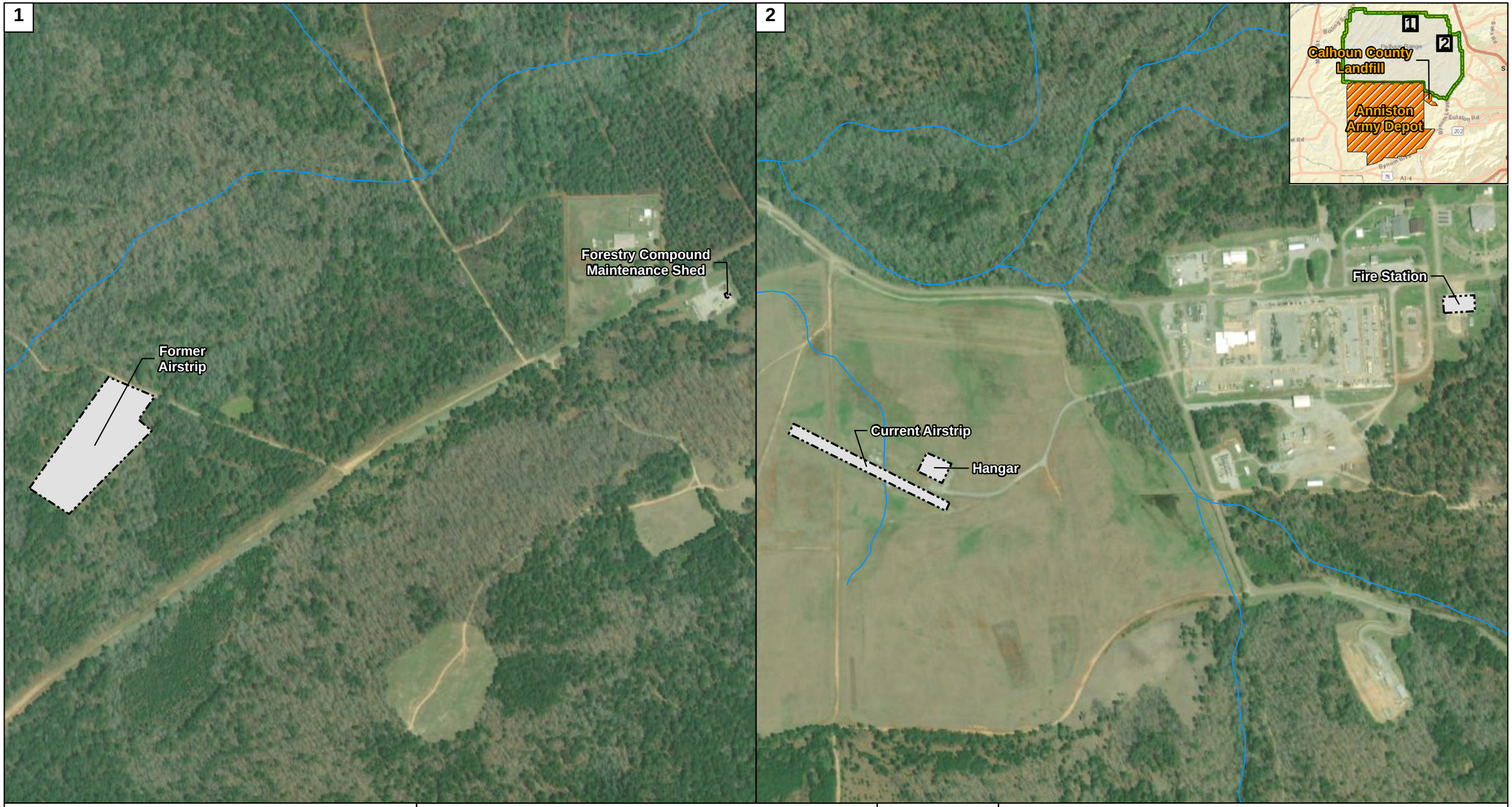
In order to minimize the level of uncertainty, readily available data regarding the use and storage of PFAS were reviewed, retired and current personnel were interviewed, multiple persons were interviewed for the same potential source area, and potential source areas were visually inspected. **Table 7-2** summarizes the uncertainties associated with the PA.

Table 7-2. Summary of Uncertainties

Location	Source of Uncertainty
Former Airstrip	Details regarding U.S. Army's historical activities at the site are unknown.
Current Airstrip and Hangar	No VSI was conducted for the current airstrip and adjacent hangar.
General	Pelham Range was formerly licensed to ALARNG in 1999. However, interviewee knowledge of ALARNG activities extends to 1986. It is unknown when ALARNG activities may have begun at Pelham Range or what might have occurred prior to 1986.

7.3 Potential Future Actions

Based on the documented absence of the use or release of PFAS-containing materials at Pelham Range since the beginning of the ALARNG property license (1999 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. Pelham Range will not move forward in the CERCLA process.



CLIENT	ARNG			
PROJECT	Preliminary Assessment for PFAS at Pelham Range, Anniston, AL			
REVISED	9/1/2020	GIS BY	MS	9/1/2020
SCALE	1:7,200	CHK BY	ST	9/1/2020
Base Map: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community		PM	RG	9/1/2020

Legend

- Potential PFAS Release
- No Suspected Release
- Facility Boundary
- Stream/River

0 300 600 1,200 Feet

N

Summary of Findings

AECOM
12420 Milestone Center Drive
Germantown, MD 20876

Figure 7-1

C:\Users\stankevichm\OneDrive - AECOM Directory\ARNG_PFAS_GIS_60552172\MXDs\AL\Pelham_Range\Fig_7-1_PelhamRange_Summary.mxd

8. References

Agency for Toxic Substances and Disease Registry (ATSDR). 1999. http://www.atsdr.cdc.gov/HAC/pha/pha.asp?docid=834&pg=4#table5

AMEC Earth and Environmental, Inc. 2001. *Final Integrated Natural Resource Management Plan and Environmental Assessment for the Fort McClellan Army National Guard Training Center.*

Anniston Army Depot. 2005. *Installation Action Plan (IAP) FY2006 for Alabama, Anniston Army Depot.*

Anniston Army Depot. 2019. *The Official Site of Anniston Army Depot, Pit Crew of the American Warfighter.* https://www.anad.army.mil/. (Accessed 27 March 2020).

Defense.gov. 2019. *Installations Where DoD is Performing an Assessment of PFAS Use or Potential Release*. https://media.defense.gov/2020/Mar/17/2002265607/-1/-1/1/SPREADSHEET_OF_INSTALLATIONS_WHERE_DOD_PERFORMING_ASSESSMENT_OF_PFAS_USE_OR_POTENTIAL_RELEASE.PDF. (Accessed 27 March 2020).

Environmental Science & Engineering, Inc. 1998. *Final, Environmental Baseline Survey, Fort McClellan, Alabama (Volume I and II).*

Ewers Water Consultants Inc. 1994. *Final Report Groundwater Tracing Studies Anniston Army Depot, Anniston, Alabama.*

IT Corporation. 2002. *Final Site Investigation Report, Forestry Compound – Pelham Range, Parcel 84(7), Fort McClellan, Calhoun County, Alabama.* March.

National Oceanic and Atmospheric Administration. 2018. *NOWData – NOAA Online Weather Data, Monthly Climate Normals (1981-2010)- Anniston Metropolitan AP, AL.* https://w2.weather.gov/climate/xmacis.php?wfo=bmx. (Accessed 27 May 2020).

SAIC. 1998. *Report on the Findings for the Groundwater Tracer Test at the Anniston Army Depot Southeast Industrial Area, Anniston, Alabama.*

SAIC. 1999. *Work Plan for Phase One of the Offpost Remedial Investigation— Hydrogeologic Characterization of the Jacksonville Thrust Fault at Anniston Army Depot, Anniston, Alabama.*

SAIC. 2000. *Results of Extended Monitoring Period Groundwater Tracer Test Anniston Army Depot, Anniston, Alabama.*

Shaw Environmental, Inc. 2003. *Water Supply Well Report for Pelham Range.*

Shaw Environmental, Inc. 2004a. *Remedial Investigation Report Range K, Former Training Area Parcel 203(7), Fort McClellan, Calhoun County, Alabama.*

Shaw Environmental, Inc. 2004b. *Remedial Investigation Report Range J – Pelham Range, Parcel 202(7), Fort McClellan, Calhoun County, Alabama.*

URS Group, Inc. 2002. *Closure Report for Open Burn and Open Detonation Unit, Fort McClellan, Alabama.*

URS Group Inc., and Arcadis U.S., Inc. 2014. *Final Operational Range Phase II Assessment, Fort McClellan, Calhoun County, Alabama.* January.

United States (U.S.) Army. 2004. *Final Decision Document Water Supply Wells at Pelham Range.*

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.*

United States Geological Survey (USGS). 2019. *National Water Information System: Mapper.* https://maps.waterdata.usgs.gov/mapper (Accessed 1 June 2020).

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

USEPA, 2018. *Practical Methods to Analyze and Treat Emerging Contaminants (PFAS) in Solid Waste, Landfills, Wastewater/Leachates, Soils, and Groundwater to Protect Human Health and the Environment.*

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

Appendix A
Data Resources

Data resources will be provided separately on CD. Data resources for Pelham Range include:

Environmental Data Resources, Inc. Geocheck Report

- 2019 Environmental Data Resources, Inc. Geocheck Report for Pelham Range, AL

Material Safety Data Sheets

- Material Safety Data Sheet #AMSE225 – Hi Combat A™ Fire fighting foam

Miscellaneous

- Email from Karen Pinson (ALARNG) to Brett McKee (AECOM) Re: ARNG PFAS: Alabama Fort McClellan and Pelham Range

Previous ALARNG Pelham Range Investigations

- 1998 Final Environmental Baseline Survey, Fort McClellan, Alabama, Volumes I and II
- 2001 Ordnance and Explosives Chemical Warfare Materials, Pelham Range, Anniston, Alabama
- 2002 Final Site Investigation Report, Forestry Compound – Pelham Range, Parcel 84(7)
- 2002 Final Site Investigation Report for Pelham Range Sites for Recovered Chemical Warfare Material (RCWM)
- 2003 Final Water Supply Well Report for Pelham Range, Fort McClellan, Calhoun County, Alabama
- 2004 Final Remedial Investigation, Range J – Pelham Range, Parcel 202(7)
- 2004 Final Decision Document, Water Supply Wells at Pelham Range, Fort McClellan, Calhoun County, Alabama
- 2014 Operational Range Assessment, Phase II Assessment Report, Fort McClellan Army National Guard Training Center, Alabama

Unregulated Contaminants Monitoring Rule 3 (UCMR3)

- UCMR3 Dataset for Pelham Range, AL

Appendix B
Preliminary Assessment Documentation

Appendix B.1
Interview Records

PA Interview Questionnaire - Environmental Manager

Facility: Pelham Range
Interviewer: [redacted]
Date/Time: 4/11/19 1351

Interviewee: See PA Sign in Sheet **Title:** See PA Sign in Sheet **Phone Number:** See PA Sign in Sheet **Email:** See PA Sign in Sheet	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] (Environmental)
[redacted] (Station Chief / Readiness NCO)
(Maintenance)
[redacted] has been working at Pelham Range for 33 years, since 1986.

2. Where can I find previous facility ownership information?

Pelham Range was one part of Fort McClellan Army National Guard Training [redacted] center and it consists of 22,245 Acres. In 1995 BRAC Commission identified Ft McClelan for Closure and Army leased all of Pelham Range to ALARNG

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 According to [redacted] who is familiar with the property
Fire Training Areas dating back to 1986. He has no recollection of fire
Firefighting (Active Fire) training, Crashes at the facility & No use or storage of
Crash None AFFF.
Fire Suppression Systems (Hangers/Dining Facilities) No Hanger.
Fire Protection at Fueling Stations no fueling
Non-Technical/Recreational/ Pest Management None
Metals Plating Facility None
Waterproofing Uniforms (Laundry Facilities) None
Other

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 dispensing systems

PA Interview Questionnaire - Environmental Manager

Facility: Pelham Range
Interviewer: [redacted]
Date/Time: 4/11/19 1351

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)?

UA ~~this~~ Hi-Combat A Class A "Angus Foam liquid Concentrate" identified in maintenance shed. Does not contain AFFF/PFAS.

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?

NA See note above.

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?

No FTAs

PA Interview Questionnaire - Environmental Manager

Facility: Pelham Range
Interviewer: [redacted]
Date/Time: 4/11/19 1351

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?

NA No FTAs.

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 No recollection of FTAs.

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

NA No recollection of FTAs.

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?

NA

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 Crashes. There are two Air strips. The current air strip near the main buildings on Pelham Range used for Drones. There is a former Air strip with Stored aircrafts. No FTAs or Crashes at either location.

PA Interview Questionnaire - Environmental Manager

Facility: Pelham Range
Interviewer: [redacted]
Date/Time: 4/11/19 1351

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?

NA.

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. Any fires would have been treated with water only.

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?

There is a Station at the facility and they also have an agreement with the local fire department. According to ANG. the County Fire department does not respond to brush fires.

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)?

NA

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

No recollection of AFFF use or storage.

PA Interview Questionnaire - Environmental Manager

Facility: Pelham Range
Interviewer: [redacted]
Date/Time: 4/11/19 1351

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 reports for fort McClellan.

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

unknown.

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?

NA

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.?

NA

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: Pelham Range
Interviewer: [redacted]
Date/Time: 4/11/19 1351

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

NA

Preliminary Assessment Sign-In Sheet

Name	Position	Years at the Facility	Phone Number/Email	May AECOM use your name in the PA Report?
[redacted]	Environmental Manager			
[redacted]	Environmental Manager		[redacted]	
[redacted]	Station Cheif / Readiness NCO		[redacted]	yes
[redacted]	Maintenance inspector	Since 1986 33	[redacted]	yes
[redacted]			[redacted]	

Appendix B.2
Visual Site Inspection Checklists

Visual Site Inspection Checklist

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

Recorded by: [redacted]

ARNG Contact:

Date and Time: 4/11/19 1351

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

Source/Release Information

Site Name / Area Name / Unique ID: Pelham Range - Former Air Strip

Site / Area Acreage: Pelham Range - Former Air Strip

Historic Site Use (Brief Description): Landing Strip historically used. Lots unknown. Grass. Not improved with Concrete or asphalt.

Current Site Use (Brief Description): Historical Aircraft Staging

Physical barriers or access restrictions: Access into Pelham Range is 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

Area around Pelham Range is Rural and Residential

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:

NA

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

NA

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:

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.

6b. Will off-site reconnaissance be conducted? Y / N

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):

Area is relatively flat

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

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

Grass and pine trees

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

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

Some grass areas may be from vehicles driving on grass

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:

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:

Nearest residence are ≈ 1 mile North

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

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

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: 4/11/19 1351

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

Source/Release Information

Site Name / Area Name / Unique ID: Pelham Range - Forestry compound

Site / Area Acreage: Forestry compound

Historic Site Use (Brief Description): Storage building

Current Site Use (Brief Description): Storage building for equipment + 2 gallon jugs of High Concentrate Foam

Physical barriers or access restrictions: Access to Pelham Range Restricted to 2 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

Area Around Pelham Range is rural + residential

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:

NA

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

NA

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:

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.

6b. Will off-site reconnaissance be conducted? Y / N

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):

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

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

Grass + pine trees. Area is heavily wooded

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:

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:

Nearest residence ≈ 1 mile North

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

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

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: 4/11/19 1351

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

Source/Release Information

Site Name / Area Name / Unique ID: Relham Range - Fire Station

Site / Area Acreage: Relham Range - Fire Station

Historic Site Use (Brief Description): Fire Station relatively new.

Current Site Use (Brief Description): Fire station

Physical barriers or access restrictions: Access to Relham Range restricted by 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

Residential + Rural Property surrounding Relham Range.

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:

Station Chief did not have knowledge of AFFF use or Storage.

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:

Floor drain located in truck bay

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

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

Floor drain located in truck bay

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.

6b. Will off-site reconnaissance be conducted? Y / N

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):

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

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

area around Pelham range woodlot

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:

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:

Rural / Residential Properties around Pelham range.

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

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

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 • No AFFF use or storage identified. Hi-Combat A foam in forestry compound does not contain PFCs per MSDS.
• No AFFF storage in fire Station. Fire chief mention that only water used for fires. No knowledge of using foam. Trucks in Fire Station are [redacted] fire trucks + do have 2 150 gal foam reservoirs on trucks. ~~Fire Chief~~ Station Chief did not have knowledge of foam use.

Photographic Log

Photo ID/Name	Date & Location	Photograph Description
1	4/11/19 Former Air Strip	Looking southwest at former air strip
2	4/11/19 Forestry Compound	Looking Northeast toward forestry compound
3	4/11/19 Forestry Compound	two Containers of Hi-Combat A Class A foam in forestry compound
4	4/11/19 Fire Station	Looking South Back side of Fire Station at Pelham Range
5	4/11/19 Fire Station	Floor drain in truck bay at Fire Station.

Appendix B.3
Conceptual Site Model Information

Preliminary Assessment – Conceptual Site Model Information

Site Name: Pelham Range

Why has this location been identified as a site?

Facility includes a fire station and former airstrip

Are there any other activities nearby that could also impact this location?

Anniston Army Depot is adjacent to the facility

Training Events

Have any training events with AFFF occurred at this site? No

If so, how often? N/A

How much material was used? Is it documented? N/A

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? To local streams and tributaries primarily in Lower and Upper Cane Creek Watershed

Average rainfall? 53.3 inches

Any flooding during rainy season? None known

Direct or indirect pathway to ditches? Indirect

Direct or indirect pathway to larger bodies of water? Indirect

Does surface water pond any place on site? Yes

Any impoundment areas or retention ponds? Yes

Any NPDES location points near the site? None known

How does surface water drain on and around the flight line? No flight line

Preliminary Assessment – Conceptual Site Model Information

Groundwater:

Groundwater flow direction? Inferred northeast

Depth to groundwater? Shallow aquifer generally down to 50 feet

Uses (agricultural, drinking water, irrigation)? Non-potable use within facility only

Any groundwater treatment systems? No

Any groundwater monitoring well locations near the site? No

Is groundwater used for drinking water? No

Are there drinking water supply wells on installation? Only four non-potable wells

Do they serve off-post populations? No

Are there off-post drinking water wells downgradient? Yes, but considered inactive by USGS

Waste Water Treatment Plant:

Has the installation ever had a WWTP, past or present? No

If so, do we understand the process and which water is/was treated at the plant? N/A

Do we understand the fate of sludge waste? N/A

Is surface water from potential contaminated sites treated? N/A

Equipment Rinse Water

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

Not known, but only water or Class A foam has ever been used with firefighting equipment

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?

See answer above

3. Other?

Preliminary Assessment – Conceptual Site Model Information

Identify Potential Receptors:

Site Worker - Yes

Construction Worker - Yes

Recreational User - Potentially

Residential - No

Child - No

Ecological - Yes

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

Documentation

Ask for Engineering drawings (if applicable).

Has there been a reconstruction or changes to the drainage system? When did that occur?
No

Appendix C
Photographic Log

APPENDIX C – Photographic Log

Army National Guard, Preliminary Assessment for PFAS	Pelham Range	Anniston, Alabama

Photograph No. 1

Description:

Looking southwest

General view of the former air strip at Pelham Range

Photo date 4/11/19

Photograph No. 2

Description:

Looking Northeast

General view of Forestry Compound

Photo Date: 4/11/19

APPENDIX C – Photographic Log

Army National Guard, Preliminary Assessment for PFAS	Pelham Range	Anniston, Alabama

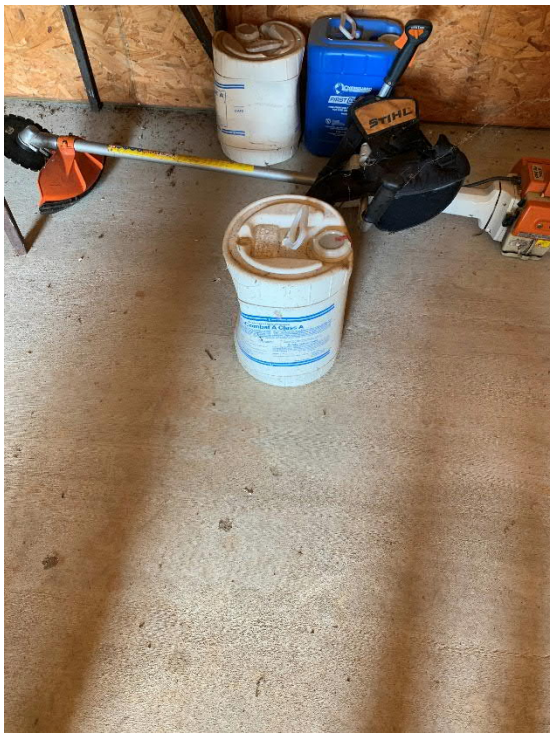
Photograph No. 3

Description:

Looking Northeast

Two 5-gallon containers of Hi-Combat A foam located in the Forestry Compound

Photo Date: 4/11/19



Photograph No. 4

Description:

Looking South

General view of the back side of the fire station at Pelham Range

Photo Date: 4/11/19

APPENDIX C – Photographic Log

Army National Guard, Preliminary Assessment for PFAS	Pelham Range	Anniston, Alabama

Photograph No. 5

Description:

Unknown direction

Floor drain located inside the fire station truck bay

Photo Date: 4/11/19