Final
Preliminary Assessment Report
Edgemeade Mountain Home Training Site
Mountain Home, Idaho

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

March 2020

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Acronyms and Abbreviations

AECOM	AECOM Technical Services, Inc.
AFFF	aqueous film forming foam
amsl	above mean sea level
AOI	area of interest
ARNG	Army National Guard
BLM	Bureau of Land Management
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CSM	conceptual site model
FTA	fire training area
IDARNG	Idaho Army National Guard
IED	Installations and Environment Division
PA	Preliminary Assessment
PFAS	per- and poly-fluoroalkyl substances
PFOA	perfluorooctanoic acid
PFOS	perfluorooctanesulfonic acid
SI	Site inspection
US	United States
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
VSI	visual site inspection

Executive Summary

The United States (US) Army Corps of Engineers (USACE) Baltimore District on behalf of the Army National Guard (ARNG)-Installations & Environment Division (IED), Cleanup Branch contracted AECOM Technical Services, Inc. (AECOM) to perform *Preliminary Assessments (PAs) and Site Inspections (SIs) for Perfluorooctanesulfonic acid (PFOS) and Perfluorooctanoic acid (PFOA) Impacted Sites at ARNG Facilities Nationwide*. 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 during firefighting activities or training, 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.

AECOM completed a PA for PFAS at the Idaho (ID) ARNG Edgemeade Mountain Home Training Site in Mountain Home, ID to assess potential PFAS release areas and exposure pathways to receptors. The performance of this PA included the following tasks:

- Reviewed data resources to obtain information relevant to suspected PFAS releases
- Conducted a 1-day site visit on 25 February 2019
- Interviewed current IDARNG personnel during the site visit, which included operations staff
- Completed visual site inspections (VSIs) at any potential PFAS release locations and documented with photographs

No areas of interest (AOIs) related to PFAS releases were identified at Edgemeade Mountain Home Training Site based on PA data. The summary of PA findings is shown on **Figure ES-1**.

Based on the absence of documented use/releases of PFAS-containing materials at Edgemeade Mountain Home Training Site, evidence does not support current or former ARNG activities having contributed to PFAS contamination in soil, groundwater, surface water, or sediment at the facility. The facility will not move forward in the CERCLA process.

CLIENT	ARNG			
NOTES	Preliminary Assessment for PFAS at Edgemead Mtn HTS, ID			
REVISED	6/19/2019	GIS BY	MS	6/19/2019
SCALE	1:6,000	CHK BY	PD	6/19/2019
Base Map: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,		PM	RG	6/19/2019

Summary of Findings

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Figure ES-1

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1. Introduction

1.1 Authority and Purpose

The United States (US) Army Corps of Engineers (USACE) Baltimore District on behalf of the Army National Guard (ARNG)-Installations & Environment Division (IED), Cleanup Branch contracted AECOM Technical Services, Inc. (AECOM) to perform *Preliminary Assessments (PAs) and Site Inspections (SIs) for Perfluorooctanesulfonic acid (PFOS) and Perfluorooctanoic acid (PFOA) Impacted Sites at ARNG Facilities Nationwide* 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 their facilities that used per- and poly-fluoroalkyl substances (PFAS) (a suite of related chemicals), primarily releases of aqueous film forming foam (AFFF) released during firefighting activities or training, although other sources of PFAS 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 Drinking Water Health Advisories for PFOA and PFOS in May 2016, but there are currently no promulgated national standards regulating PFAS in drinking water. In the absence of federal maximum contaminant levels, some states have adopted their own drinking water standards for PFAS. The state of Idaho does not currently have promulgated standards for PFAS in drinking water.

This report presents findings of a PA for PFAS at the IDARNG Edgemeade Mountain Home Training Site (also referred to as "the installation") in Mountain Home, ID, 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 USACE requirements and guidance.

This PA Report documents the potential locations where PFAS may have been released into the environment at or adjacent to the Edgemeade Mountain Home Training Site. 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 data resources to obtain information relevant to suspected PFAS releases
- Conducted a 1-day site visit on 25 February 2019
- Interviewed personnel associated with Edgemeade Mountain Home Training Site
- Completed visual site inspections (VSIs) at any possible PFAS release locations and documented with photographs
- If areas of interest (AOIs) were identified, developed a conceptual site model (CSM) to outline the potential release and pathway of PFAS for each AOI

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:

- **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 FTAs at the facility identified during the site visit.
- **Section 3** – **Non-Fire Training Areas:** describes other locations of PFAS releases at the facility identified during the site visit.
- **Section 4** – **Emergency Response Areas:** describes areas of AFFF release at the facility, specifically in response to emergency situations.
- **Section 5** – **Adjacent Sources:** describes sources of 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 at each AOI.
- **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 IDARNG Edgemeade Mountain Home Training Site is located about 2 miles east of the center of Mountain Home, ID (**Figure 1-1**), and is owned by the IDARNG. The installation consists of a 150.09-acre parcel of land with rolling, open terrain with ephemeral drainage channels (North Wind, 2010). The town of Mountain Home is located approximately 42 miles to the southeast of Boise, ID in the Snake River Valley. Interstate Highway 84 is 0.7 miles to the west, and the Mountain Home Reservoir is 1.2 miles to the north-northwest.

The property operated as a juvenile detention center from the 1960s until the 1990s. The IDARNG has been operating Edgemeade Mountain Home Training Site since the 1990s. The installation consists of two occupied buildings, with very few daily employees. High school students and approximately 70 members of the military attend academic classes and training activities on-site.

Regular operations at the installation include administrative work, flight simulations, academic classes, mine simulation training, and drilling activities. The main hangar was built in 2014.

1.5 Facility Environmental Setting

The Edgemeade Mountain Home Training Site is located at the gently sloping base of the Bennett Hills area and near the northern edge of the Snake River Basin. The Snake River lies about 13 miles south of the installation. The topography slopes gently to the west with

elevations between 3,300 feet (ft) above mean sea level (amsl) – 3,400 ft amsl. The installation lies within the Snake River Birds of Prey National Conservation Area, which is managed by the BLM and is home to over 700 pairs of nesting raptors (North Wind, 2010).

1.5.1 Geology

The Edgemeade Mountain Home Training Site is located in the western portion of the Snake River Plain, which extends approximately 400 miles east to west across southern Idaho. The Snake River Plain is a structurally controlled, fault-bounded basin which was driven by hot spot volcanic activity. In the western part of the plain, volcanic extrusions alternated with deposition of fluvial and lacustrine sediments during the early geologic history of the basin (USGS, 1996).

Lacustrine fine-grained sediments of the Chalk Hills Formation, which are evidence of ancient Lake Idaho, are separated from the overlying pebbly and oolitic sands by an erosional surface (Wood & Clemens, 2002). Cobble, gravel, and sand deposits from the early Snake River and basaltic volcanic deposits make up the present day surficial geology in the western Snake River Plain. Much of these volcanic deposits are manifested as fields of dormant shield volcanos that trend with a NW to SW strike, likely related to the fault structure in this area (Wood & Clemens, 2002).

The surficial geologic map of the Edgemeade Mountain Home Training Site area shows basalt flows of Pleistocene to Pliocene age covered by 3 – 10 ft of loess (IGS, 2019). Quaternary alluvial deposits lie to the west, and alluvial fan and bedrock deposits exist at the surface to the east (**Figure 1-2**).

1.5.2 Hydrogeology

Groundwater near the town of Mountain Home exists in two aquifers. The first is a shallow, perched aquifer found primarily in alluvium deposits of Quaternary age. Depth to water in the perched system varies and can be found as shallow as 10 ft below ground surface (bgs) (IDEQ, 1996). Data from the Idaho Department of Water Resources list three wells just outside of the northwest corner of the installation boundary, and one well within 0.5 miles of the western edge of the installation. The static water depths in these wells range between 102 to 198 ft bgs.

The deeper, regional aquifer provides water for municipal irrigation wells in the Mountain Home area. The most productive zones of this aquifer occur within basalt flows of the Bruneau Formation of the Idaho Group. Depth to water in the deep, regional aquifer varies between 200 to 400 ft bgs. Recharge to the regional aquifer occurs through precipitation on the volcanic mountains to the north of Mountain Home, through infiltration from the ephemeral streams in the area, and through percolation from the shallow perched aquifer. The perched aquifer recharges through percolation from Mountain Home Reservoir, local creeks, and various irrigation canals. The Idaho Department of Water Resources Geographic Information System (GIS) Application maps wells within the Mountain Home area with water levels ranging from 100 to over 200 ft bgs (IDWR, 2019).

Groundwater flow in both aquifers is generally to the south/southwest (**Figure 1-2**). Groundwater levels near Mountain Home fluctuate up to 10 ft seasonally as a result of irrigation in the local area (IDEQ, 1996).

The municipal water supply for the town of Mountain Home comes from wells drilled to depths of 800 to 1,000 ft bgs, each producing roughly 600 to 2,100 gallons per minute. The Edgemeade Mountain Home Training Site is supplied by this municipal water source. The EDR (**Appendix A**) shows a municipal supply well located approximately 2,730 feet to the northwest of the Edgemeade Mountain Home Training Center buildings.

1.5.3 Hydrology

Edgemeade Mountain Home Training Site is located within the CJ Strike Reservoir – Snake River watershed, which is within the Middle Snake sub-basin. This sub-basin covers 1,281,280 acres of semi-arid land in the greater Snake River basin. Drainage in this basin is characterized by low-volume rangeland streams that run through sagebrush steppe country (IDEQ, 2019).

There is no surface water present within the boundaries of the Edgemeade Mountain Home Training Site. Drainage at the site is ephemeral. The Snake River flows about 13 miles to the south of the installation, and the Mountain Home Reservoir, which was formed by impoundment of Rattlesnake Creek, is approximately 1.2 miles to the north-northwest. There is no direct connection between the installation and these surface water features (North Wind, 2010). **Figure 1-3** depicts the surface water features in the Edgemeade Mountain Home Training Site area.

1.5.4 Climate

The climate at the site and surrounding area is characterized as semiarid. Winds are typically low, averaging less than 10 miles per hour. The average precipitation in Mountain Home is 10.55 inches, with the majority of precipitation falling from November to March. The average annual temperature is about 51.4° F, with highs in the summer around 89.7° F and lows in the winter around 22.8° F (NOAA, 2019).

1.5.5 Current and Future Land Use

The Edgemeade Mountain Home Training Site is used for administrative work, flight simulations, academics, training, and drilling. The training mostly consists of mine identification and vehicle maneuvering. There are no current expansion plans for the facility and, in general, the future use of the facility is not expected to change.

CLIENT	ARNG			
NOTES	Preliminary Assessment for PFAS at Edgemead Mtn HTS, ID			
REVISED	4/24/2019	GIS BY	MS	4/24/2019
SCALE	1:126,720	CHK BY	PD	4/24/2019
Base Map: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI,		PM	RG	4/24/2019

N

Facility Location Map

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12420 Milestone Center Drive
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Figure 1-1

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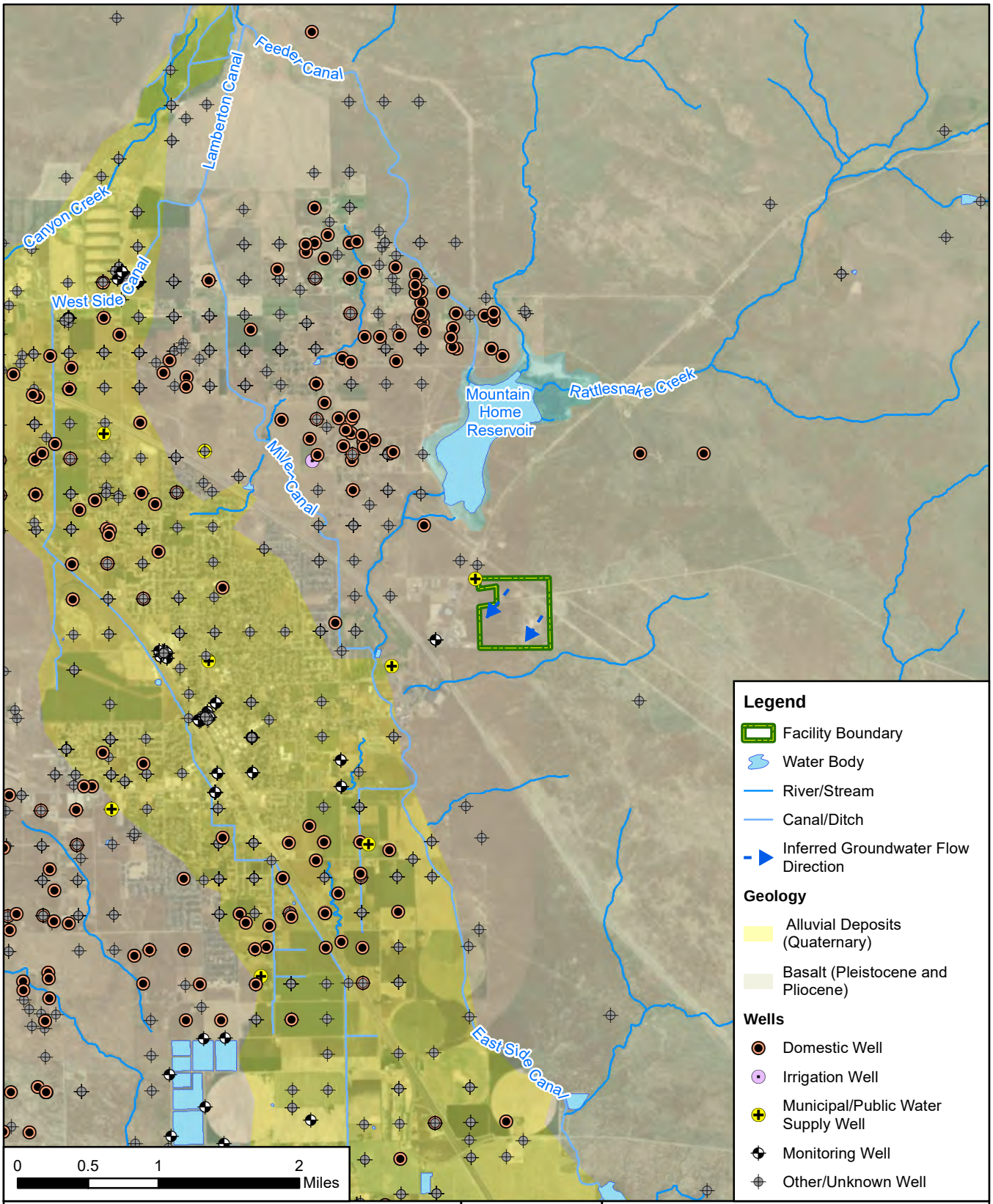

CLIENT	ARNG			
NOTES	Preliminary Assessment for PFAS at Edgemead Mtn HTS, ID			
REVISED	5/2/2019	GIS BY	MS	5/2/2019
SCALE	1:63,360	CHK BY	PD	5/2/2019
Base Map: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,		PM	RG	5/2/2019

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Groundwater Features

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Figure 1-2

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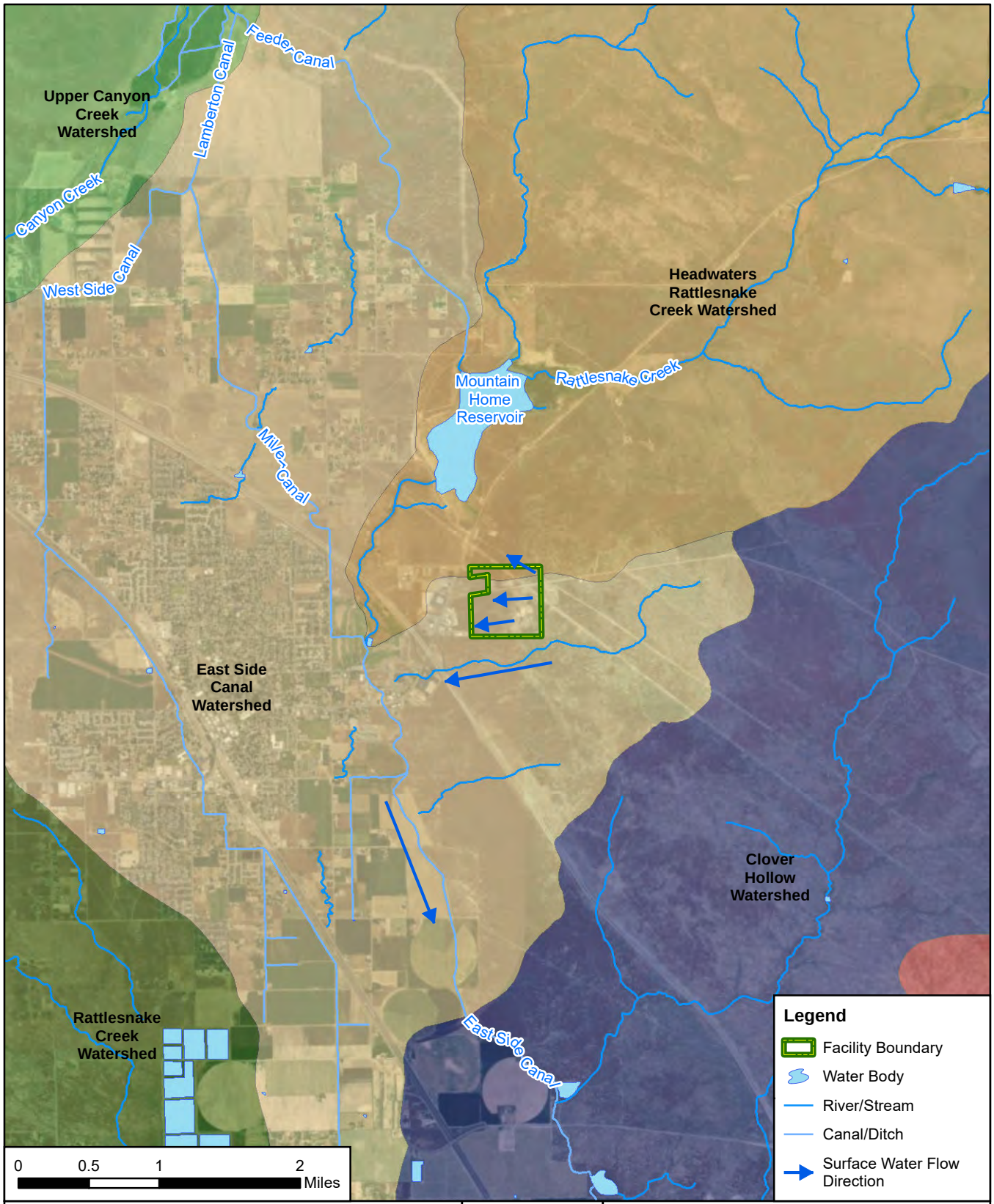

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REVISED	5/2/2019	GIS BY	MS	5/2/2019
SCALE	1:63,360	CHK BY	PD	5/2/2019
Base Map: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,		PM	RG	5/2/2019

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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 at the IDARNG Edgemeade Mountain Home Training Site during the PA. Staff at the installation reported no knowledge of a fire department on-site from 2013 to present. Aerial photos from the EDR report show a steady removal of buildings from the beginning of IDARNG operations in the 1990s until 2013, with no apparent new construction or building renovations. Therefore, it is unlikely that the IDARNG built or retrofitted a fire station and maintained a fire department during this time.

3. Non-Fire Training Areas

No non-FTAs with potential AFFF releases were identified at the IDARNG Edgemeade Mountain Home Training Site during the PA. According to interviews with staff at the installation, the IDARNG has not stored, mixed, or used AFFF at the Edgemeade Mountain Home Training Site from at least 2013 to present. Based upon the reported historic use of the installation and review of the EDR report, it is unlikely that AFFF was present on-site from the 1990s to 2013.

4. Emergency Response Areas

No instances of emergency response firefighting were identified at the IDARNG Edgemeade Mountain Home Training Site during the PA. Fire suppression systems in the buildings carry water, and all fire extinguishers on-site were identified as ABC rated (non-AFFF).

In the event that firefighting support is needed at Edgemeade Mountain Home Training Site, the local Mountain Home Fire Department would respond. None of the staff interviewed during the PA site visit were aware of any event at the installation in which the Mountain Home Fire Department responded. It was not determined what type of fire suppression the local fire department uses or has used in the past.

5. Adjacent Sources

Based on interviewee knowledge and review of the EDR report, no off-facility PFAS sources adjacent to the Edgemeade Mountain Home Training Site were identified during the PA.

6. Conceptual Site Model

Based on the PA findings, no PFAS release areas are likely to have occurred, thus, no AOIs were identified at the Edgemeade Mountain Home Training Site. A CSM identifies three components necessary for potentially complete exposure pathways related to a site: (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, no PFAS sources originate at the Edgemeade Mountain Home Training Site or from activities associated with the installation. No complete exposure pathway for PFAS has been identified at the installation or the surrounding community.

7. Conclusions

This report presents a summary of available information gathered during PA efforts on the use and storage of AFFF at Edgemeade Mountain Home Training Site. The PA findings are based on personnel interviews, historical reports, historical documents, and the VSI.

7.1 Findings

No AOIs related to PFAS releases were identified at Edgemeade Mountain Home Training Site based on PA data. Based on the absence of AFFF releases or spills at the Edgemeade Mountain Home Training Site, evidence does not support the potential for PFAS contamination in soil, groundwater, surface water, or sediment for any receptor.

A summary of PA findings is presented in **Figure 7-1**.

7.2 Uncertainty

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 on the use of PFAS in training, other non-traditional activities, or on its disposition were not typically kept by the facility or available during the PA.

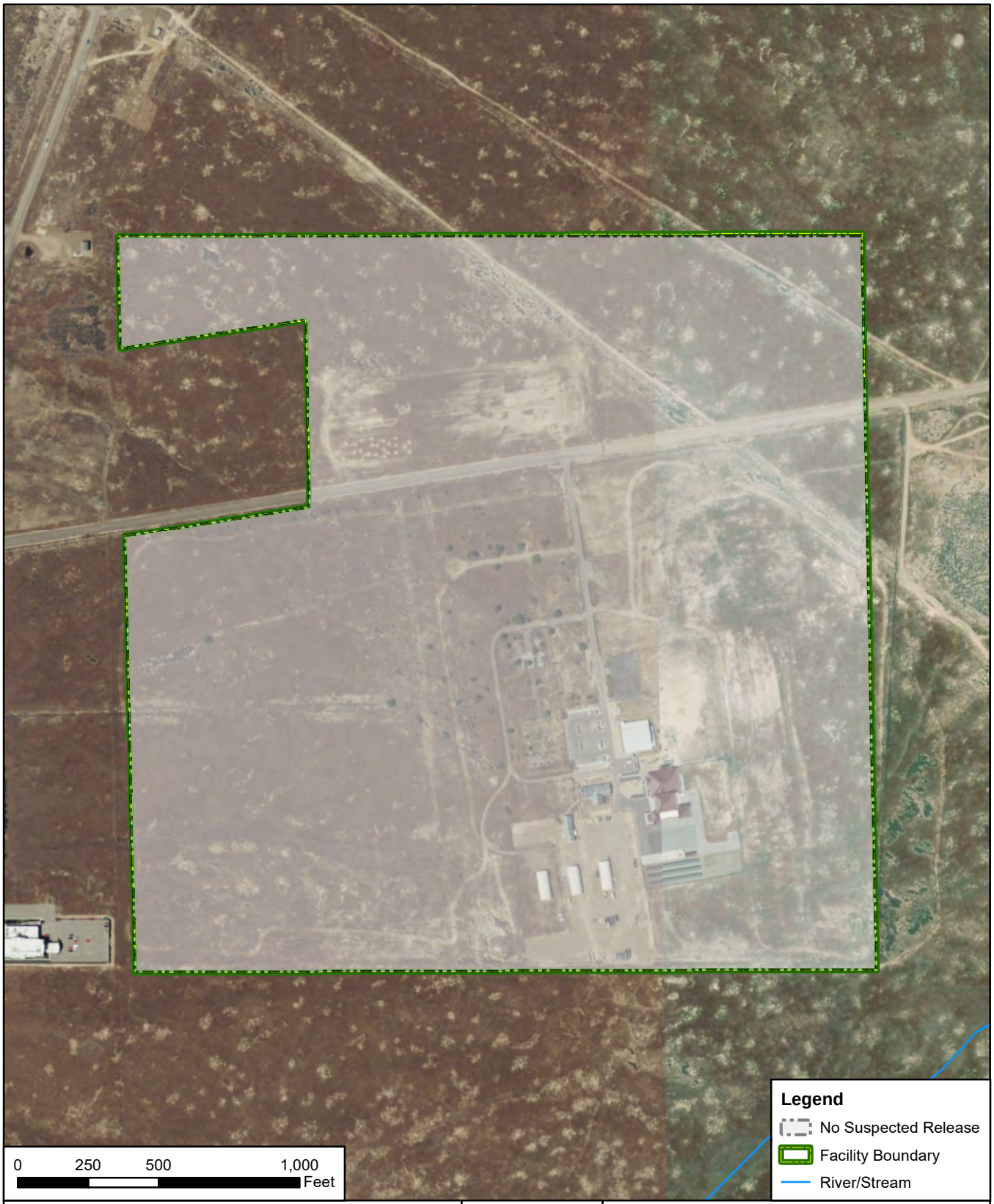
The conclusions of this PA are predominantly based on the information provided during interviews with personnel who had direct knowledge on whether PFAS was used at the facility. Gathered information has a degree of uncertainty due to the absence of written documentation, the limited number of personnel with direct knowledge due to staffing changes, the time passed since PFAS was first used (early 1970s), and a reliance on personal recollection. 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.

Information on the operations at Edgemeade during ownership by the juvenile detention center was not obtained. No personnel with direct knowledge of operations at the installation from the 1990s until 2013 were available for interview. However, it is unlikely that any PFAS-producing activities were conducted as a part of those historical operations.

No AOIs were identified at Edgemeade Mountain Home Training Site. Based on the historical and current use of the facility, minimal uncertainty is associated with the findings of this PA.

7.3 Potential Future Actions

Based on the documented absence (1990s – present) of the use or release of PFAS-containing materials at Edgemeade Mountain Home Training Site, 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. Edgemeade Mountain Home Training Center will not move forward in the CERCLA process.



CLIENT	ARNG			
NOTES	Preliminary Assessment for PFAS at Edgemead Mtn HTS, ID			
REVISED	6/19/2019	GIS BY	MS	6/19/2019
SCALE	1:6,000	CHK BY	PD	6/19/2019
Base Map: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,		PM	RG	6/19/2019

Summary of Findings

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Figure 7-1

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8. References

Idaho Department of Environmental Quality (IDEQ). 2019. *Snake River (Middle) – Succor Creek Subbasin*. Available at http://www.deq.idaho.gov/water-quality/surface-water/tmdls/table-of-sbas-tmdls/snake-river-middle-succor-creek-subbasin/?_sm_au_=iVVvjN2JMS4QHn0w (Accessed March 2019).

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Idaho Geological Survey (IGS). 2019. https://www.idahogeology.org/webmap. Accessed 21 March 2019.

National Oceanic and Atmospheric Administration. National Centers for Environmental Information Data. Available at https://www.ncdc.noaa.gov/cdo-web/datatools/normals. Accessed May 2019.

North Wind, Inc (North Wind). 2010. *Final Environmental Assessment for Construction and Operation of the Edgemeade Readiness Center Facility and the Tactical Unmanned Aerial System Storage and Maintenance Facility Idaho Army National Guard Elmore County, Idaho.* July.

USGS. 1996. *Summary of the Snake River Plain Regional Aquifer-System Analysis in Idaho and Eastern Oregon*. July.

U.S. Environmental Protection Agency (USEPA). September 1991. Guidance for Performing Preliminary Assessments Under CERCLA.

Wood & Clemens. 2002. *Geologic and Tectonic History of the Western Snake River Plain, Idaho and Oregon*

Appendix A
Data Resources

Data Resources will be provided separately on CD. Data Resources for the Edgemeade Mountain Home Training Site include:

Prior Environmental Reports

- 1996 An Evaluation of Bacteria in Ground Water Near Mountain Home, Elmore County, Idaho
- 2010 Final Environmental Assessment for Construction and Operation of the Edgemeade Readiness Center Facility and the Tactical Unmanned Aerial System Storage and Maintenance Facility, Idaho Army National Guard, Elmore County, Idaho
- 2013 Integrated Cultural Resources Management Plan for Sites and Training Installations of the Idaho Army National Guard, Fiscal Years 2013-2017

Edgemeade Mountain Home Training Site EDR Report

- 2019 Edgemeade Mountain Home Training Site EDR Report
- 1990 Edgemeade Land License for National Guard Purposes

Appendix B
Preliminary Assessment Documentation

Appendix B.1
Interview Records

Preliminary Assessment Sign-In Sheet

Name	Position	Years at the Facility	Phone Number/Email	May AECOM use your name in the PA Report?
[redacted]				
	TNCO	6+	[redacted]	YES
	UAS Operations Officer	4+		[redacted] Yes

PA Interview Questionnaire - Other

Facility: Edgemeade
Interviewer: [redacted]
Date/Time: 2/25/19 @ 8:00 am

on sign-in sheet

Interviewee: Chief [redacted] + Sgt. [redacted]
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

Roles or activities with the Facility/Years working at the Facility:

~~[redacted]~~ Sgt. [redacted] - 6+ years
2013 CW2 [redacted] = 4+ years
~~[redacted]~~
Unit started here 2014 when building finished
Unit used to be at Cowen

PFAS Use: Identify accidental/intentional release locations, time frame of release, frequency of releases, storage container size (maintenance, fire training, firefighting, buildings with suppression systems (as builts), fueling stations, crash sites, pest management, recreational, dining facilities, metals plating, or waterproofing). How are materials ordered/purchased/disposed/shared with others?

	Known Uses
Sgt. [redacted]: no foam here, never has been	Use
Org storage building = police use	Procurement
	Disposition
Main building and new building have	Storage (Mixed)
Water fire suppression sprinkler systems	Storage (Solution)
- Other buildings have no suppression	Inventory, Off-Spec
	Containment
	SOP on Filling
- No fire station or designated fire training	Leaking Vehicles
areas on-site.	Nozzle and Suppression System Testing
	Dining Facilities
	Vehicle Washing
	Ramp Washing
	Fuel Spill Washing and Fueling Stations
	Chrome Plating or Waterproofing

PA Interview Questionnaire - Other

Facility: Edgemeade
Interviewer: [redacted]
Date/Time: 8:00 AM

- City water = potable source
- Two 20,000 gal tanks for rainwater collection (landscaping)
  → usually not enough water to use them
- [redacted] not sure who the well belongs to (well on site map)
- Five extinguishers around both main buildings
- Old extinguishers in storage in building 13 [redacted]
  Building 13 not currently used. (Hantavirus issue)

Day to day (@ Edgemeade):
- Administrative
- Flight ops at Range 3 (off-site)
- Flight simulator
- Academics
- Training / drilling

- We are within 2 miles of the Boise airport / Gowen Field
- Five extinguishers under contract, serviced quarterly by someone else. ANG does visual [redacted] inspections.
- Five extinguisher training
  - Have been released - only powder, no foam

PA Interview Questionnaire - Other

Facility: Edgewood
Interviewer: [redacted]
Date/Time: 8:00 AM

To the west (off-site):
- gas stations (2)
- hotels (3)
- Subway
- restaurants (3)
- laser cutters (metal) : probably no metal plating
- School
- trailer park

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: 2/25/19

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

Source/Release Information

Site Name / Area Name / Unique ID: "Admin Building" / Building 13

Site / Area Acreage:

Historic Site Use (Brief Description): Gym and locker room

Current Site Use (Brief Description): Abandoned, not used.

Physical barriers or access restrictions:

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):

N/A

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

3a. Indicate what businesses are located near the site hotels

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:

N/A

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

N/A

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

N/A

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

N/A

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:

One well on site map. Base personnel are unfamiliar with it.

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):

2014 new building finished

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

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

Desert conditions. Some sage brush

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:

Rainwater collection tanks. Usually not used.

Receptor Information

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

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

ARNG Property

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:

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 - Fire extinguishers are non-AFFF
- Building not in use
- Hantavirus issue

Photographic Log

Photo ID/Name	Date & Location	Photograph Description

Visual Site Inspection Checklist

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

Recorded by: [redacted]

ARNG Contact:

Date and Time: 2/25/19

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

Source/Release Information

Site Name / Area Name / Unique ID: Armory Building

Site / Area Acreage:

Historic Site Use (Brief Description): Juvenile correction facility

Current Site Use (Brief Description): Storage

Physical barriers or access restrictions:

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):

N/A

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

3a. Indicate what businesses are located near the 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:

None. Water only.

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

N/A

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

N/A

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

N/A

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:

One monitoring well on site map. Base personnel unfamiliar with it

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):
New building in 2014

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:
Rainwater collection tanks

Receptor Information

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

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

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:

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 Fire extinguishers are non-AFFF

Photographic Log

Photo ID/Name	Date & Location	Photograph Description

Appendix B.3
Conceptual Site Model Information

Preliminary Assessment – Conceptual Site Model Information

Site Name: Edgemeade Mountain Home Training Site

Why has this location been identified as a site?

"Hangar" building on-site. (During PA it was discovered that this is not a true hangar. No aircraft.)

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

No

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? N/A. Ephemeral drainage only.

Average rainfall? 9.98 inches

Any flooding during rainy season? No

Direct or indirect pathway to ditches? High rate of inflitration

Direct or indirect pathway to larger bodies of water? No

Does surface water pond any place on site? No

Any impoundment areas or retention ponds? Rainwater collection tanks for landscaping. Not used.

Any NPDES location points near the site? Mtn Home Air Force Base. 12 miles to the SW.

How does surface water drain on and around the flight line? N/A

Preliminary Assessment – Conceptual Site Model Information

Groundwater:

Groundwater flow direction? South to southwest

Depth to groundwater? Varies. 10 ft bgs – 400 ft bgs.

Uses (agricultural, drinking water, irrigation)? Nearby Mtn Home has wells for municipal potable purposes.

Any groundwater treatment systems? No

Any groundwater monitoring well locations near the site? No

Is groundwater used for drinking water? Not on-site.

Are there drinking water supply wells on installation? GIS shows one, however, site personnel report potable water comes from a municipal source.

Do they serve off-post populations? N/A

Are there off-post drinking water wells downgradient ? Yes, 1 + miles away.

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?

No

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?

N/A

3. Other?

Preliminary Assessment – Conceptual Site Model Information

Identify Potential Receptors:

Site Worker N/A (no AFFF releases or PFAS sources)

Construction Worker N/A

Recreational User N/A

Residential N/A

Child N/A

Ecological N/A

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

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	Edgemeade Mountain Home Training Site	Mountain Home, Idaho

Photograph No. 1

Description:

Armory Building ABC fire extinguisher

(February 25, 2019)

Photograph No. 2

Description:

Armory Building water fire suppression system

(February 25, 2019)

APPENDIX C – Photographic Log

Army National Guard, Preliminary Assessment for PFAS	Edgemeade Mountain Home Training Site	Mountain Home, Idaho

Photograph No. 3

Description:

Fire suppression water sprinklers

(February 25, 2019)