



# FINAL PRELIMINARY ASSESSMENT OF PER- AND POLYFLUOROALKYL SUBSTANCES

#### **Charles Melvin Price Support Center, Illinois**

Prepared For:

U.S. Army Corps of Engineers, Baltimore District 2 Hopkins Plaza Baltimore, Maryland 21201

September 2022



#### PRELIMINARY ASSESSMENT OF PFAS AT CHARLES MELVIN PRICE SUPPORT CENTER, ILLINOIS

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Prepared for:

U.S. Army Corps of Engineers

Contract No.: W912DR-13-D-0019

Delivery Order No.: W912DR17F0396

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#### **EXECUTIVE SUMMARY**

The United States Army (Army) is performing preliminary assessments (PAs) on the current or potential historical use of per- and polyfluoroalkyl substances (PFAS) with a focus on perfluorooctane sulfonate (PFOS), perfluorooctanoic acid (PFOA), and perfluorobutanesulfonic acid (PFBS), at Army installations nationwide. The PA identifies areas of potential interest (AOPIs) where PFAS-containing materials were used, stored, and/or disposed, or areas where known or suspected releases to the environment occurred. This Charles Melvin Price Support Center (CMPSC) PA was completed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, The National Oil and Hazardous Substance Pollution Contingency Plan, and Army/Department of Defense policy and guidance.

CMPSC occupied 1,183 acres in Madison County, Illinois, approximately 5 miles northeast of St. Louis, Missouri. The installation is situated in an urbanized and industrial area, and is surrounded by the towns of Granite City, Madison, and Venice, Illinois. CMPSC was primarily used for training personnel, maintenance of equipment, and issuing supplies. This PA focuses on the entire installation.

Based on the results of the PA for the entire installation, no AOPIs were identified. Therefore, further investigation for PFAS at CMPSC is not warranted at this time.

#### 1 INTRODUCTION

The United States (U.S.) Army (Army) is performing preliminary assessments (PAs) on the current or potential historical use of per- and polyfluoroalkyl substances (PFAS) with a focus on perfluorooctane sulfonate (PFOS), perfluorooctanoic acid (PFOA), and perfluorobutanesulfonic acid (PFBS), at Army installations (installations) nationwide. The Army is the lead agency under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and Executive Order 12580 and is conducting the PA consistent with its authority under CERCLA, 42 United States Code §§ 9600, et seq. (as amended), and the Defense Environmental Restoration Program, 10 United States Code §§ 2701, et seq. The purpose of this PA is to identify locations that are areas of potential interest (AOPIs) at Charles Melvin Price Support Center (CMPSC) based on the use, storage and/or disposal of PFAS-containing materials, in accordance with the 2018 Army Guidance for Addressing Releases of Perand Polyfluoroalkyl Substances (Army 2018). This report provides the PA for CMPSC and was completed in accordance with the CERCLA, The National Oil and Hazardous Substances Pollution Contingency Plan, and Army/Department of Defense (DoD) policy and guidance.

#### 1.1 Project Background

PFAS are a class of compounds that have been used in a wide range of industrial applications and commercial products due to their unique surface tension/leveling properties. Due to industry and regulatory concerns about the potential health effects and adverse environmental impacts, there has been a reduction in the manufacture and use of PFAS worldwide. In the U.S., significant reductions in the production, importation, and use of PFOS and PFOA (two individual compounds in the PFAS class) occurred between 2001 and 2015 (Interstate Technology Regulatory Council 2017). PFBS replaced PFOS in some applications and is currently used and manufactured in the U.S.

In 2016, the United States Environmental Protection Agency (USEPA) established a lifetime health advisory of 70 nanograms per liter in drinking water for PFOS or PFOA and for the sum of PFOS and PFOA when both are present (USEPA 2016). On 15 October 2019, the Office of the Secretary of Defense (OSD) provided guidance on the investigation of PFOS, PFOA, and PFBS at DoD restoration sites (OSD 2019). The DoD guidance provides risk screening levels for PFOS, PFOA, and PFBS in groundwater (tap water) or soil, calculated using the USEPA's Regional Screening Level calculator for residential and industrial/commercial worker receptor scenarios. Following the issuance of the 2019 OSD memo, on 08 April 2021, USEPA published an updated toxicity assessment for PFBS (USEPA 2021). Based on the updated toxicity assessment for PFBS, the OSD issued a memorandum on 15 September 2021 to include updated PFBS risk screening levels. On 6 July 2022, the OSD issued a memorandum providing technical guidance on the investigation of PFOS, PFOA, PFBS, perfluorononanoic acid (PFNA), perfluorohexane sulfonate (PFHxS), and hexafluoropropylene oxide dimer acid (HFPO-DA, or GenX), based on information gathered by the USEPA. The 6 July 2022 memorandum accounts for the May 2022 USEPA screening levels for PFOS, PFOA, PFNA, PFHxS and HFPO-DA. The USEPA has provided screening levels for these PFAS compounds using, updated, final, peer reviewed information. The July 2022 Memorandum: Investigating Per- and Polyfluoroalkyl Substances within the Department of Defense Cleanup Program is provided for reference as **Appendix A**.

#### 1.2 PA Objectives

During the PA, investigators collect readily available information and conduct site reconnaissance. This PA will evaluate and document areas where PFAS-containing materials were used, stored, and/or disposed, so the Army can distinguish between sites that pose little or no threat to human health and the environment and sites that require further investigation.

#### 1.3 PA Process Description

For CMPSC, the PA development process is described in **Sections 1.3.1** through **1.3.3** below. **Section 3** provides a summary of the PA activities completed at CMPSC. The PA processes are documented in the PA Quality Control Checklist included as **Appendix B**. The Army PA operations security requirements package, which includes the antiterrorism/operations security review cover sheet, is included as **Appendix C**.

#### 1.3.1 Pre-Site Visit

First, an installation kickoff teleconference was held between applicable points of contact from United States Army Environmental Command (USAEC), United States Army Corps of Engineers (USACE), and Arcadis U.S., Inc. The kickoff call occurred on 09 February 2021, to discuss the goals and scope of the PA, project scheduling, installation access, timeline for the site visit (if a site visit were to occur), access to installation-specific databases, and to request available records.

A records review was conducted to obtain electronically available documents from the installation and external sources for review. The purpose of the records research was to identify any area on the installation that may have been a location where PFAS-containing materials were used, stored, and/or disposed, as well as to gather information on the physical setting and site history at CMPSC.

A research summary report (RSR) was prepared to document and summarize all information regarding the current and historical use, storage, and/or disposal of PFAS-containing materials obtained during the research activities conducted from February through July 2021. This report included the following:

- A list of interviewed personnel, affiliation, roles, and contact information
- Interview logs detailing all interviews that took place during the PA
- A list of the data sources collected and reviewed
- A table of sites identified during research with description and relevance
- An operations timeline
- A site figure with potential AOPIs

#### 1.3.2 Preliminary Assessment Site Visit

The installation is not active, has been largely commercialized, and some buildings and/or facilities of interest are reported to have been demolished. Therefore, a site visit was not conducted.

#### 1.3.3 Post Research

After the RSR was submitted, a teleconference was scheduled to discuss the preliminary findings and finalize the list of any potential AOPIs. The post-RSR teleconference took place 01 February 2022 and determined that site-inspection phase sampling was not warranted.

#### 2 INSTALLATION OVERVIEW

The following subsections provide general information about CMPSC, including the location and layout, the installation mission(s) over time, a brief site history, current and projected land use, climate, topography, geology, hydrogeology, surface water hydrology, potable wells within a 5-mile radius of the installation, and applicable ecological receptors.

#### 2.1 Site Location

CMPSC occupied 1,183 acres in Madison County, Illinois, approximately 5 miles northeast of St. Louis, Missouri (**Figures 2-1 and 2-2**). The installation is situated in an urbanized and industrial area, and is surrounded by the towns of Granite City, Madison, and Venice, Illinois. To the north and west, the installation is bordered by the Mississippi River, to the south by the town of Venice, and to the east and northeast by the towns of Madison and Granite City, respectively (e<sup>2</sup>M 2006).

#### 2.2 Mission and Brief Site History

In April of 1942, the DoD purchased the site and began construction of the Granite City Engineers Depot (GCED), activating the installation in August of that year. The missions of the installation during World War II included training personnel in engineer supply operations, instruction of personnel in maintenance of engineering equipment, and training in the operation of a depot (e<sup>2</sup>M 2006).

In 1943, GCED was assigned a three-fold training mission with the establishment of the following schools: an Engineer Supply School to train officers in the handling, storing, processing, packing, marking, and the administrative procedures involved in supply operations; an Engineer Maintenance School to instruct selected officers and enlisted men on the maintenance of engineering equipment; and the training of personnel assigned to Table Organization and Equipment units in the actual operation of a depot (e<sup>2</sup>M 2006).

In 1944, barge loading facilities were added to enable the shipment of supplies and equipment up and down the Mississippi River. With the end of hostilities in 1945, the loading facilities were taken out of service. In 1962, the GCED was transferred from the USACE and placed under the U.S. Army Supply and Maintenance Command and subsequently renamed the Granite City Army Depot (GCAD). Later in the decade, the installation command changed again as it was placed under the authority of the U.S. Army Materiel Command. While the mission of GCAD did not essentially change under the new commands, the installation did take on the mission of the Marion Engineer Depot to maintain and repair cryogenic equipment. In general, the mission of the installation during this time included the following activities: provide maintenance, repair, and overhaul of construction, topographic, electronic, and cryogenic equipment; receive, store, issue, and maintain supplies and equipment; and provide training for soldiers, reservists, and Army National Guard members (e<sup>2</sup>M 2006).

In the 1970s, the installation again saw change when it was transferred to the Commanding General, U.S. Army Aviation Systems Command, and renamed Headquarters and Installation Support Activity, Granite City. In 1975, the name of the installation was once again changed to the St. Louis Area Support Center, and in 1977 the command was turned over to the U.S. Army Troop Support and Aviation Materiel Readiness Command. Finally, in 1988 the installation underwent its final name change when it became

the Charles Melvin Price Support Center, in recognition of the so-named Illinois Congressman (e<sup>2</sup>M 2006).

In 1999, CMPSC was identified as excess by the Army. Conveyance legislature was signed into law on 30 October 2000 and the Army inactivated CMPSC in July 2001. The FY01 National Defense Authorization Act (Public Law 106-398, Sec. 2833) gave the Army authority to convey CMPSC to TCRPD under public benefit conveyance. The remaining property, except for Parcel E, was conveyed to TCRPD (HQDA 2019).

#### 2.3 Current and Projected Land Use

Parcel E (former CMPSC 002 Building 231) is a 4.43-acre parcel and the only remaining Army-owned property. Parcel E's Building 231 was a former electronic maintenance facility, later became a commissary and is now demolished. There is no current use at Parcel E, which remains undeveloped since the demolition of Building 231 in 2021. Directly adjacent to Parcel E are: residential homes to the north and west; a commercial business to the south; Parcel A, a commercial business, and empty lots to the east. While Parcel E is currently owned by the Army, it is a candidate for divestiture or transfer in the future. Upon transfer to another entity, this property will be restricted to commercial and industrial use as per the 2013 Decision Document and its associated 2014 Land Use Control Work Plan. Additionally, the 2013 Decision Document prohibits groundwater use as a drinking water source on Parcel E (USACE 2018).

#### 2.4 Climate

CMPSC is located in an area that experiences limited periods of extreme cold, extreme heat, or high humidity. Winters are brisk but seldom severe. Temperatures drop to 0 degrees Fahrenheit (°F) or below an average of 2 to 3 days per year, while maximum winter temperatures remain as cold as 32 °F or lower less than 20 to 25 days per year. Snowfall averages less than 20 inches per winter season, with recorded variances ranging between 0.7 inches and 35.2 inches. Snowfall of 1 inch or more is received between 5 to 20 days in most winters (e<sup>2</sup>M 2006).

During the summer months, the mean temperature is 74.1 °F. Maximum temperatures of 90 °F or higher occur an average of 35 to 40 days per year. Extremely hot days of 100 °F or more are expected on no more than 5 days per year. Average wind velocity is 10.8 miles per hour (e<sup>2</sup>M 2006).

Annual precipitation for the St. Louis area is a little over 35 inches. The three winter months are the driest, with an average total of approximately 6 inches of precipitation. The spring months of April to June are normally the wettest, with normal total precipitation of nearly 12 inches. Thunderstorms occur between 40 and 50 days per year. During any year there are usually a few of these that can be classified as severe storms with hail and damaging winds (e<sup>2</sup>M 2006).

#### 2.5 Topography

CMPSC is located along the southwest boundary of the High Plains Section of the Central Lowlands Physiographic Province (**Figure 2-3**). The flood plain is relatively flat with a gentle slope towards the Mississippi River. Locally, the flood plain is known as the "American Bottoms" and extends approximately

30 miles north to south. Elevations range from approximately 416 feet above mean seal level along the eastern boundary of the installation to approximately 406 feet above mean seal level in its lowest areas along the Mississippi River. During periods of high river stage, these low areas are prone to flooding (e<sup>2</sup>M 2006).

#### 2.6 Geology

In general, the installation is underlain by cohesive fine-grained alluvial deposits, which grade into coarser glacial valley-train deposits that extend to bedrock. The total thickness of the valley fill material varies from approximately 60 feet below ground surface (bgs) along the Mississippi River to as much as 100 feet bgs along the eastern boundary of the installation. Bedrock is typically a light-colored limestone or dolomite with zones of shale or shale partings, which dip gently to the northeast. Although less prominent, localized occurrences of sandstones and shale can also be components. The stratigraphic bedrock units underlying the installation, in descending order, include the Sainte Genevieve Formation (60 to 200 feet thick), St. Louis Formation (150 to 500 feet thick), and underlying older Mississippian aged bedrock (e<sup>2</sup>M 2006).

#### 2.7 Hydrogeology

Groundwater in the American Bottoms occurs in the alluvial deposits, the underlying Sainte Genevieve Formation, and older Mississippian-aged bedrock. At the former CMPSC, groundwater in the alluvial deposits is generally present 12 to 20 feet bgs. Underlying the floodplain of the American Bottoms are thick, extensive sand and gravels of the Henry Formation that are capable of yielding large quantities of groundwater. The Cahokia Formation, overlaying the Henry, has limited groundwater potential because of the finer and discontinuous nature of the sand bodies; however, small supplies are readily available. The Cahokia and Henry Formations are recharged from downward percolation of rainfall and flood waters and seepage from the Mississippi River and its tributaries, which cross the flood plain. The groundwater elevation is dependent upon the relative levels of the Mississippi River, climate, season of the year, and local pumping demand. A cone of depression, caused by localized pumping of commercial and industrial wells, exists in the Granite City area, and affects the groundwater flow patterns at the installation. Additionally, the level of the Mississippi River has substantial influence on the direction of groundwater flow and groundwater generally discharges to the river (USACE 2018).

#### 2.8 Surface Water Hydrology

Surface water systems are linked to the Mississippi River. CMPSC contains one surface water body, Golf Course Creek. The creek is a drainage ditch that traverses the CMPSC former golf course from northeast to southwest. The creek originates from several wetlands lying approximately 3 miles northeast of CMPSC. Before entering the installation, the creek receives surface runoff from the northwest side of Granite City, which includes a cemetery, steel mill, industrial park, and residential area. The creek then serves as a surface water runoff channel from the northwest side of the site and discharges to Chain of Rocks Canal through a manually controlled gate valve (EMR, Inc. 2005).

#### 2.9 Relevant Utility Infrastructure

The following subsections provide general information regarding the installation's stormwater and wastewater management systems, as well as information on how the utility infrastructures may influence the fate and transport of PFAS at CMPSC.

#### 2.9.1 Stormwater Management System Description

Surface water runoff from the northeast side of the site flows into a combined sewer and storm water drain and then into the Granite City Sewage Treatment Plant. After treatment, the water discharges to the Chain of Rocks Canal (EMR, Inc. 2005). The Lift Station and Sewage Lift occupied Buildings 408 and 499. At Building 408, excess surface water and stormwater were transferred to the Mississippi River (Tetra Tech 2001).

Surface runoff and building roof drainage from the area between C Street and E Street drain toward a concrete main sewer line that runs west on the north side of D Street and ends at the Building 408 pump station. This stormwater collection system also serves the area to the north between Tri-City Port District property and the levee (EMR, Inc. 2005).

The southern third of CMPSC is drained by storm sewers separate from the sanitary sewer. Stormwater collected in the south third of the installation was not associated with industrial activity or combined with sanitary sewage. CMPSC formerly had a National Pollutant Discharge Elimination System (NPDES) permit for the combined sewer lines, which were equipped with stormwater overflow weirs that allowed discharge of combined sanitary and stormwater to flood control stormwater lift stations during severe weather conditions. The NPDES permit was allowed to expire after the sanitary sewer for the south third of CMPSC was separated from the storm sewers. Water in the storm sewers now either discharges directly to Chain of Rocks Canal or enters one of two flood control storm water lift stations before discharging to the Chain of Rocks Canal or the Mississippi River (EMR, Inc. 2005).

#### 2.9.2 Sewer System Description

Surface water runoff at CMPSC flows into a combined sewer and storm water system and then to the Granite City sewage treatment plant. Building 499 transferred wastewater to the Granite City sewage treatment plant through a gravity fed collection system during dry weather conditions and through a pumping system capable of transferring stormwater during wet weather conditions. After treatment, the water discharges to the Chain of Rocks Canal (Tetra Tech 2001). The CMPSC sanitary sewer directs wastewater into sanitary lift stations, which direct the wastewater to the wastewater main that feeds the Granite City Sewage Treatment Plant. CMPSC formerly had a NPDES permit for the combined sewer lines. The NPDES permit was allowed to expire after the sanitary sewer for the south third of CMPSC was separated from the storm sewers (EMR, Inc. 2005).

#### 2.10 Potable Water Supply and Drinking Water Receptors

Groundwater at CMPSC is not used for drinking water. On July 17, 2001, Granite City issued Ordinance No. 7529, which specifically prohibits the use of groundwater as a potable water supply within the corporate city limits (USACE 2018). An irrigation well was used to provide water for watering the former

golf course, which was located directly north of the Granite City Sewer Canal. Illinois State Water Survey records indicate that 91 wells are known to be located within 2 miles of CMPSC in Illinois. The 91 wells include 44 commercial and industrial wells, 5 monitoring wells, 33 domestic potable water wells, and other wells whose uses are not identified (EMR, Inc. 2005).

The principal source of drinking water at CMPSC is the Mississippi River. Drinking water is supplied by the Illinois-American Water Company (IAWC), a privately held utility company. The IAWC water intake is located approximately 3 miles north of the installation in the Mississippi River. IAWC disinfects, clarifies, and filters the water; adds chlorine and fluorine; and distributes the water for use (EMR, Inc. 2005).

An Environmental Data Resources, Inc. (EDR) report includes search results from a variety of environmental, state, city, and other publicly available databases for a referenced property. An EDR report was generated for CMPSC, which along with state and county GIS provided by the installation identified several off-post public and private wells within 5 miles of the installation boundary (**Figure 2-4**). The EDR report providing well search results provided as **Appendix E**.

#### 2.11 Ecological Receptors

The PA team collected information on ecological receptors that was available in the installation documents reviewed. The following information is provided for future reference should the Army decide to evaluate exposure pathways relevant to the ecological receptors.

Bald eagles are sighted within CMPSC during the winter months at the golf course's wooded area. Seven federally-listed threatened or endangered species, two Category 1 species, and two species classified as "species at risk" have ranges that include Madison County. The federally-listed threatened or endangered species are the bald eagle (Haliaeetus leucocephalas), least tern (Sterna antillarum), Indiana bat (Myotis sodalist), gray bat (Myotis grisescens), pallid sturgeon (Scaphirynchus albus), decurrent false aster (Boltonia decurrens), and eastern prairie fringed orchid (Plantanthera lucophaea). Three state-listed species including the yellow headed blackbird (Xanthocephalus xanthocephalus), pied-billed grebe (Podilymbus podiceps), and common-moorhen (Gallinula chloropus) are known to be present at the Horseshoe Lake Natural Area Inventory site, approximately 1.5 miles southeast of CMPSC. Another 114 state-protected species have ranges that include Madison County (EMR, Inc. 2005).

#### 2.12 Previous PFAS Investigations

PFAS sampling has not previously been conducted at CMPSC.

#### 3 SUMMARY OF PA ACTIVITIES

To document areas where any potential current and/or historical PFAS-containing materials were used, stored and/or disposed at CMPSC, data were collected from three principal sources of information:

- 1. Records review
- 2. Personnel interviews
- 3. Site reconnaissance

These sources of data, along with their relative application to this PA, are discussed below. The specific findings of records review, personnel interviews, and site reconnaissance relevant to PFAS-containing materials at CMPSC are described in **Section 4**.

#### 3.1 Records Review

The records reviewed for this PA included, but were not limited to, various Installation Restoration Program administrative record documents, compliance documents, CMPSC former fire department documents, CMPSC former directorate of public works documents, and GIS files. Internet searches were also conducted to identify publicly available and other relevant information. A list of the specific documents reviewed for CMPSC is provided in **Appendix F**.

#### 3.2 Personnel Interviews

The list of roles for personnel interviewed during the PA process for CMPSC is presented below.

- Granite City Regional Wastewater Treatment Plant, Superintendent
- Tri-City Regional Port District, Executive Director

The compiled interview logs provided in **Appendix G**.

#### 3.3 Site Reconnaissance

Site reconnaissance and visual surveys were not conducted at the preliminary locations identified at CMPSC during the records review process, due to the site not being active, largely commercialized, and due to some buildings and/or facilities of interest being demolished. Preliminary locations of potential use, storage, and/or disposal of PFAS-containing materials were then evaluated in the PA (during records review and personnel interviews) and were categorized as AOPIs or as areas not retained for further investigation at this time based on a combination of information collected (e.g., records reviewed, personnel interviews, internet searches). A summary of the observations made, and data collected through records reviews (**Appendix F**) and personnel interviews (**Appendix G**) during the PA process for CMPSC are presented in **Section 4**. Further discussion regarding rationale for not retaining areas for further investigation is presented in **Section 5.1**.

### 4 POTENTIAL PFAS USE, STORAGE, AND/OR DISPOSAL AREAS

CMPSC was evaluated for all potential current and historical use, storage, and/or disposal of PFAS-containing materials. There are a variety of PFAS-containing materials used in relation to current and historical Army operations. However, the use, storage, and/or disposal of aqueous film-forming foam (AFFF) is the most prevalent potential source of PFAS chemicals at DoD facilities. As such, this section is organized to summarize the AFFF-related uses first, and all remaining potential PFAS-containing materials in the subsequent section.

#### 4.1 AFFF Use, Storage, and Disposal Areas

AFFF was developed in the mid-1960s in response to a need for firefighting foams better suited to extinguish Class B, fuel-based fires. AFFF formulations consist of water, an organic solvent, up to 5 percent (%) hydrocarbon surfactants, and 1 to 3% PFAS (Interstate Technology Regulatory Council 2020). AFFF concentrate is designed to be diluted with water to become a 1, 3, or 6% foam. AFFF releases at DoD facilities may have occurred during firefighter training, emergency response actions, equipment testing, or accidental releases. The military still primarily uses AFFF for Class B fires; however, the current formulations of AFFF contain significantly lower amounts of PFOS, PFOA, and their precursors, and significant operational changes have been implemented to restrict uncontrolled releases and non-essential use of PFAS-containing foams. Army installations may still house AFFF, commonly stored in closed containers (e.g., 55-gallon drums, 5-gallon buckets), within designated storage buildings or at firehouses.

Information gathered from the PA research indicates that AFFF was not used, stored, or disposed at CMPSC.

#### 4.2 Other PFAS Use, Storage, and/or Disposal Areas

Following document research and personnel interviews at CMPSC, other potential PFAS source types were either not identified at the installation or did not prompt further research or constitute categorization as AOPIs.

Further discussion regarding areas not retained for further investigation is presented in **Section 5.1**.

#### 4.3 Readily Identifiable Off-Post PFAS Sources

An exhaustive search to identify all potential off-post PFAS sources (i.e., not related to operations at CMPSC) is not part of the PA. However, potential off-post PFAS sources within a 5-mile radius of the installation that were identified during the records search and site visit are described below.

Nearby community fire departments within close proximity of CMPSC could potentially be off-post PFAS sources if they use AFFF. Twenty-four fire departments and/or fire stations appear to be 0.4 and 5 miles from the installation boundary.

#### 5 SUMMARY AND DISCUSSION OF PA RESULTS

The preliminary locations evaluated for potential use, storage, and/or disposal of PFAS-containing materials at CMPSC, were further refined during the PA process and identified either as an area not retained for further investigation or as an AOPI. In accordance with the established process for the PA, no areas have been identified as AOPIs. The process used for refining these areas is presented on **Figure 5-1**, below.

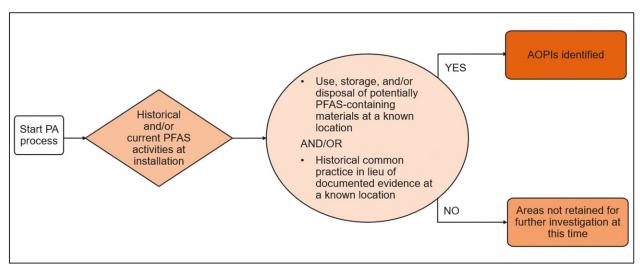


Figure 5-1: AOPI Decision Flowchart

The areas not retained for further investigation are presented in **Section 5.1**. Data limitations for this PA at CMPSC are presented in **Section 6**.

#### 5.1 Areas Not Retained for Further Investigation

Through the evaluation of information obtained during records review and/or personnel interviews, the areas described below were categorized as areas not retained for further investigation at this time.

A brief site history and rationale for areas not retained for further investigation is presented in **Table 5-1**, below.

Table 5-1. Installation Areas Not Retained for Further Investigation

Area Description	Dates of Operation	Relevant Site History	Rationale
Building 211 – Former Plating Operations/Gas Station	Unknown	Metal plating operations occurred in this building, which was later replaced by a gas station. This building was vacant at the time of this report.	The AOPI was eliminated because no evidence indicated that the metal plating operations used, stored, or disposed of PFAS-containing materials at this location. Information regarding the timeline of

Area Description	Dates of Operation	Relevant Site History	Rationale
			use, type of metal plating operations (e.g., chromium), and potential excavation details from the construction of the gas station were not available.
Building 231 – Former Plating Operations	Unknown to 1970 or 1971	Building 231 was an electronic maintenance shop that had chromium and cadmium plating, cleaning, and other operations. The building housed three solution tanks, which were approximately 4.9 feet x 6.6 feet x 6.6 feet and used for electroplating small metal parts. Operations primarily consisted of chromium electroplating, but other metals were occasionally used in the plating operations, including cadmium. Waste from this building discharged to the sanitary sewer. Building 231 was turned into the Commissary and Warehouse that stored and sold food to military personnel. It was demolished in 2021.	The AOPI was eliminated because no evidence indicated that the metal plating operations used, stored, or disposed of PFAS-containing materials at this location. Additionally, widespread use of fluorinated mist suppressants occurred starting in the late 1980s and early 1990s.
Building 305 & 311 – Former CMPSC Fire Station & Maintenance Shed	Building 305 - Unknown to present Building 311 – Unknown to 1998	Building 305 is a 6,500 square foot building and included the former fire station administrative offices; living quarters consisting of a dormitory, kitchen, and dining area; and the following six vehicles: aerial pumper truck, structure pumper truck, mini-pumper truck, ambulance, fire chief sedan, and utility pickup truck. The former fire station provided emergency	The AOPI was eliminated because no documentation or information from interviews that indicated AFFF was used, stored, or disposed at this location.

#### PRELIMINARY ASSESSMENT OF PFAS AT CHARLES MELVIN PRICE SUPPORT CENTER, ILLINOIS

Area Description	Dates of Operation	Relevant Site History	Rationale
		response services for the installation and community during fires and other lifethreatening events.  Building 311 stored lockers and excess fire suppression equipment. It was demolished in November 1998.	

#### 6 CONCLUSIONS AND RECOMMENDATIONS

The PFAS PA at CMPSC evaluated preliminary locations for the use, storage, and/or disposal of PFAS-containing materials, in accordance with the 2018 Army Guidance for Addressing Releases of Per-and Polyfluoroalkyl Substances (Army 2018). A combination of document review and internet searches were used to identify preliminary locations of suspected use, storage, and/or disposal of PFAS-containing materials at CMPSC. Following the evaluation, no AOPIs were identified. Therefore, further investigation for PFAS at CMPSC is not warranted at this time.

Data collected during the PA (**Sections 3** through **5**) were sufficient to draw conclusions and recommendations summarized above. The data limitations relevant to the development of this PA at CMPSC are discussed below.

Data limitations were encountered during the PA process. There were limited personnel to interview and the personnel that were interviewed indicated that there was no information available. Additionally, the installation is not active, has been largely commercialized, and some buildings and/or facilities of interest are reported to have been demolished. Therefore, a site visit was not conducted and site records were limited.

Documentation specific to AFFF may have been limited (e.g., each AFFF use; procurement records, documentation of AFFF used during crash responses or fire training activities) due to lack of recordkeeping requirements for the full timeline of common AFFF practices.

A comprehensive well survey was not completed as part of this PA; therefore, the information reviewed regarding off-post wells is limited to what is contained in the off-post well search results (**Appendix E**).

The searches for ecological receptors and off-post PFAS sources were not exhaustive and were limited to easily identifiable and readily available information evaluated during the relevant records review, personnel interviews, and site reconnaissance.

Finally, PFAS sampling has not previously been undertaken at CMPSC. Therefore, no PFOS, PFOA, and/or PFBS analytical data were available.

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#### **ACRONYMS**

°F degrees Fahrenheit

% percent

AFFF aqueous film-forming foam

AOPI area of potential interest

Army United States Army

bgs below ground surface

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act of 1980

CMPSC Charles Melvin Price Support Center

DoD Department of Defense

EDR Environmental Data Resources, Inc.

GCAD Granite City Army Depot

GCED Granite City Engineers Depot

GIS geographic information system

IAWC Illinois-American Water Company

installation United States Army or Reserve installation

NPDES National Pollutant Discharge Elimination System

OSD Office of the Secretary of Defense

PA preliminary assessment

PFAS per- and polyfluoroalkyl substances

PFBS perfluorobutanesulfonic acid

PFOA perfluorooctanoic acid

PFOS perfluorooctane sulfonate

RSR research summary report

U.S. United States

USACE United States Army Corps of Engineers

USAEC United States Army Environmental Command

USEPA United States Environmental Protection Agency

### **FIGURES**





## Figure 2-1 Site Location



Former Installation Boundary

Data Sources: ESRI, ArcGIS Online, StreetMap Data

Coordinate System: WGS 1984, UTM Zone 16 North



#### Figure 2-2 Site Layout



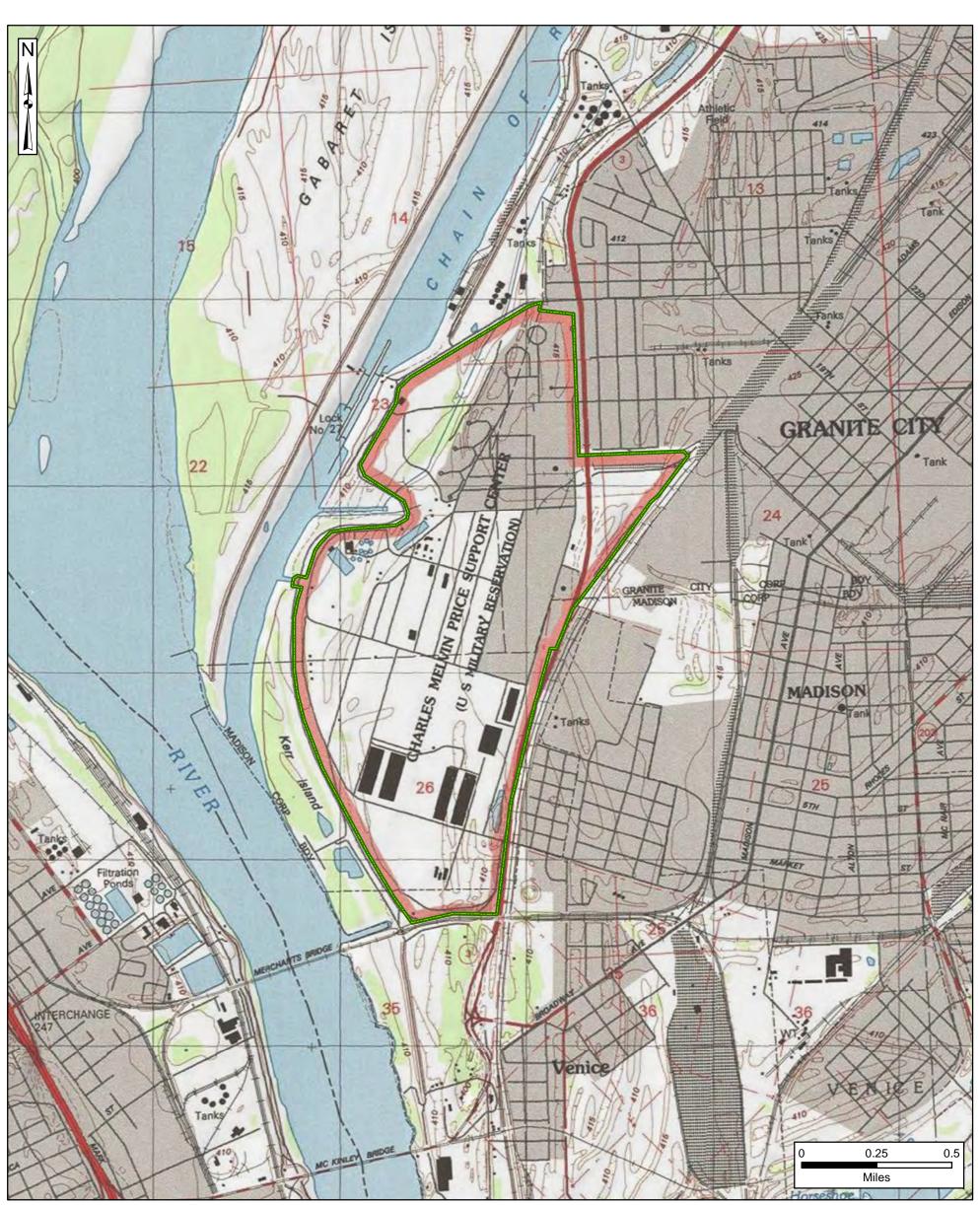


River/Stream (Perennial)





#### Figure 2-3 Topographic Map



Former Installation Boundary

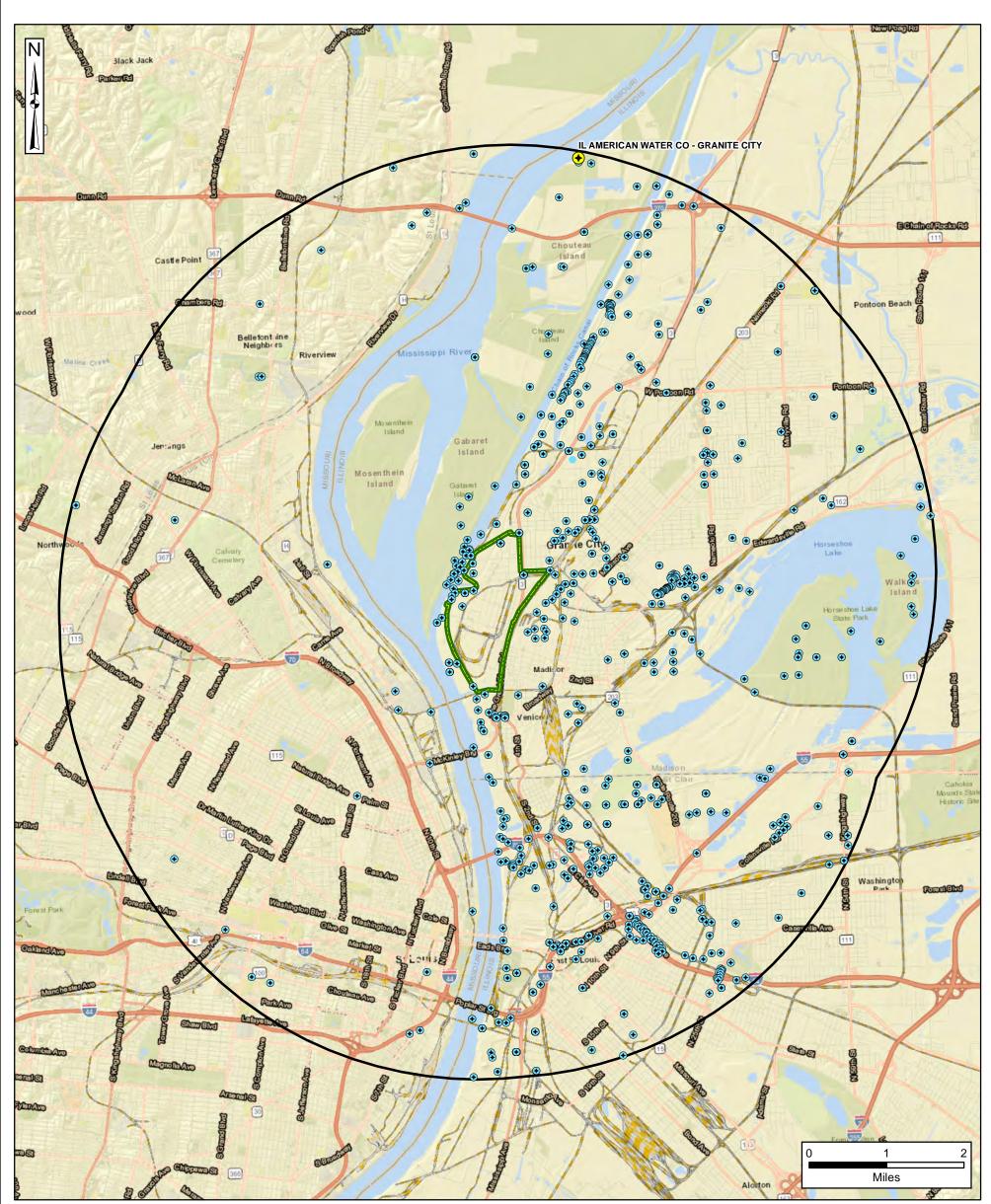
Note:

Elevation contour labels are in feet.



# Illinois

# Figure 2-4 Off-Post Potable Supply Wells



Former Installation Boundary

5-Mile Radius

• Public Water Supply System Well

State Water Well

Data Sources: EDR, Well Data, 2021 ESRI, ArcGIS Online, StreetMap Data



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