

DRAFT FINAL

**Focused Feasibility Study for
PFAS at FTMM-53, Building 699,
Parcel 52 at Fort Monmouth**

Oceanport, Monmouth County, New Jersey

U. S. Army Base Realignment and Closure

June 2026

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Acronyms

Aboveground Storage Tanks	ASTs
Aqueous Film Forming Foam	AFFF
Area of Potential Interest	AOPI
Base Realignment and Closure	BRAC
Classification Exception Area	CEA
Comprehensive Environmental Response, Compensation, and Liability Act	CERCLA
Department of Defense	DoD
Focused Feasibility Study	FFS
Fort Monmouth	FTMM
Fort Monmouth Economic Revitalization Authority	FEMRA
Groundwater Quality Standards	GWQS
Land Use Controls	LUCs
Land Use Control Implementation Plan	LUCIP
light non-aqueous phase liquid	LNAPL
long term monitoring	LTM
Maximum Contaminant Limit	MCLs
Monitored Natural Attenuation	MNA
per-and polyfluoroalkyl substances	PFAS
Preliminary Assessment	PA
National Oil and Hazardous Substances Pollution Contingency Plan	NCP
New Jersey Department of Environmental Protection	NJDEP
Remedial Action Report	RAR
Remedial Investigation Report/Remedial Action Workplan	RIR/RAWP
Remedial Investigation	RI
screening level	SL
Technical Requirements for Site Remediation	TRSR
Underground Storage Tanks	USTs
Volatile organic compounds	VOCs
Well Restriction Area	WRA

1.0 Introduction

This Focused Feasibility Study (FFS) evaluates remedial alternatives for per- and polyfluoroalkyl substances (PFAS) at FTMM-53/Building 699, also designated as Parcel 52, located at the former Fort Monmouth. This report has been prepared in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, 42 U.S.C. §9601 *et. seq.*) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The primary purpose of this FFS is to identify and evaluate remedial alternatives to address risks to human health and the environment posed by PFAS in the site's groundwater, specifically exposure to contaminated groundwater as a potential drinking water source. It does not address groundwater itself, or other potentially contaminated media, as no other unacceptable risk has been identified except under the drinking water exposure pathway. This FFS is supported by information presented in the *Phase I Remedial Investigation (RI) Report for Per-And Polyfluoroalkyl Substances at Fort Monmouth, Monmouth County, New Jersey, April 2026* and is specific to FTMM-53/Building 699/Parcel 52.

2.0 Site Background

2.1 Site Description

Fort Monmouth (FTMM) is located in the central-eastern portion of New Jersey in Monmouth County, approximately 45 miles south of New York City, New York, 70 miles northeast of Philadelphia, Pennsylvania, and 40 miles east of Trenton, New Jersey. The Atlantic Ocean is approximately 3 miles to the east. FTMM was comprised of three areas: the main post, the Charles Wood Area, and the Evans Area. FTMM's main post and Charles Wood Area were selected for closure by the Base Realignment and Closure (BRAC) Commission in 2005 and officially closed on September 15, 2011. (The Evans Area was closed under BRAC in 1998 and has since been transferred from FTMM.)

FTMM-53/Building 699/Parcel 52 was a former gas station. The Army has performed remedial investigations and remedial action for petroleum products. Benzene, ethylbenzene, toluene, and xylenes, as well as PCE, have been detected historically, both in soil and groundwater, exceeding New Jersey Department of Environmental Protection (NJDEP) standards due to a 1980s release of gasoline from underground storage tanks (USTs) at Building 699. Remedial actions, including Air Sparging/Soil Vapor Extraction and groundwater pump and treat, have been implemented, and the groundwater currently is being addressed by a monitored natural attenuation (MNA) remedy under a Classification Exemption Area (CEA).

FTMM-53/Building 699/Parcel 52 is 1.186 acres situated in the central portion of the former Fort Monmouth installation on the main post. The parcel's physical characteristics, hydrogeology, and proximity to installation boundaries have been evaluated to understand the potential migration pathways of subsurface contaminants. The primary medium of concern at this parcel is the underlying groundwater aquifer, which is currently classified in a manner that assumes potential future potable use, necessitating a rigorous evaluation of exposure risks.

2.2 Site History

Fort Monmouth served as a critical Department of Defense (DoD) installation for decades, supporting various military operations, research, and logistics missions. Historical operations at or near Building 699 likely involved activities, storage, or incident responses that utilized PFAS-

containing materials (such as Aqueous Film Forming Foam, or AFFF). Over time, these legacy operations resulted in the release of PFAS compounds into the soil and their subsequent leaching into the underlying groundwater. Building 699 was identified as an area of potential interest (AOPI) in the *Preliminary Assessment of Per- and Polyfluoroalkyl Substances at Fort Monmouth, Monmouth County, New Jersey* (herein referred to as the Fort Monmouth PFAS PA [Leidos 2024]).

2.3 Previous Investigations and Remedial Actions

FTMM-53 was a former fueling station and repair facility for nonmilitary vehicles that was constructed in 1953. Gasoline was distributed from two remote pumping islands with a total of four dispensers. The tank system initially included four 4,000-gallon steel underground storage tanks (USTs) northwest of Building 699 that were removed in 1999. The Building 699 tank system included six 10,000-gallon USTs (NJDEP Registration Numbers: 81533-185 through 81533-190) used to store various grades of gasoline with two remote pumping islands. The six USTs were located northeast of the fueling island canopy based on the aerial photo of the site provided in the 2008 Site Investigation report (U.S. Army BRAC, 2008). On November 5, 1984, a tank tightness test identified a 0.333 gallon per hour leak in two of the USTs. In 1989, approximately 11,000 gallons of gasoline were released into soil surrounding the six gasoline USTs and associated piping northeast of the canopy.

The piping and dispensing islands were replaced and a light non-aqueous phase liquid (LNAPL) recovery well with a dual pump system was installed after a fuel release was identified in 1990. A groundwater remediation system was installed in 2001 consisting of multiple groundwater recovery, air sparging, and soil vapor extraction (SVE) wells and a groundwater and vapor treatment system. This system was operated until FTMM closure in 2011, and then again intermittently until active remediation was discontinued with NJDEP approval in 2013. Five hydraulic lifts were located in Building 699. A total of 6,733 gallons of LNAPL were recovered by the summer of 1990. These recovery wells are no longer active. The six USTs were removed in April 2007 and replaced with two 10,000-gallon aboveground storage tanks (ASTs) which were in use until base closure in 2011. The ASTs were pumped out, fuel piping was blown out with nitrogen, and any residual product was drummed and properly disposed of. The ASTs, associated piping, and the dispensing islands were removed in April 2019.

A Remedial Action Report (RAR) was prepared for FTMM-53 in 2019 to document the removal of the ASTs, fuel island and canopy, associated fuel piping, and aged remediation system at FTMM-53 (Parsons, 2019). The RAR also described the investigation of the hydraulic lifts performed in 2019. A Remedial Investigation Report/Remedial Action Workplan (RIR/RAWP) was prepared in 2018 to characterize the nature and extent of site-related contamination, describe previous remedial actions, and propose a final remedial action (Parsons, 2018). The RIR/RAWP identified fuel-related volatile organic compounds (VOCs) as contaminants of concern (COCs) in soil and groundwater. The RIR/RAWP sampling results indicated that additional active remediation is not required at FTMM-53 based on historical investigations/remediation work and expected future industrial and institutional/civic land use. NJDEP (2020) concurred with the recommendations of the RAR but also requested additional analytes for groundwater monitoring.

2.3.1 Description of Implemented Remedy to Date

The remedial approach for FTMM-53 was developed in accordance with N.J.A.C 7:26E

Subchapter 5 Remedial Action, and includes a site-wide Land Use Control Implementation Plan (Parsons, 2022)¹ to document the LUCs in the form of a Deed Notice to control exposure to COCs in soil, a CEA/WRA to control exposure to COCs in groundwater, and MNA to document the natural degradation of COCs over time. The use of LUCs and a CEA/WRA controls exposure to COCs in soil and groundwater, and MNA documents the natural degradation of COCs over time. LUCs will be used to prevent uncontrolled exposure of potential receptors to contaminated media.

A groundwater use restriction is established in the form of a CEA/WRA in accordance with NJDEP's Technical Requirements for Site Remediation (TRSR) (N.J.A.C. 7:26E) and Administrative Requirements for the Remediation of Contaminated Sites (N.J.A.C. 7:26C). The CEA/WRA is a groundwater use restriction to protect a hypothetical residential user from potential risk associated with groundwater as a potable water source. The CEA/WRA will remain in place until NJDEP GWQS are achieved. Groundwater at FTMM-53 is not used as a drinking water source. In 2024, the Army requested and received NJDEP approval of a Groundwater Classification Exception Area for benzene impacts associated with monitoring well 699RW11. The CEA is specific to benzene, is 100 feet in length with a duration of five years from the December 2023 sampling event.

MNA relies on natural processes to achieve applicable groundwater remediation standards. Based on the long-term monitoring (LTM) results reflecting decreased COC concentrations in groundwater and conclusions of the RIR/RAWP, MNA has been selected as an appropriate remedy for fuel hydrocarbon contamination in groundwater at FTMM-53. The site has an existing network of monitoring wells that have been sampled for site-related contaminants for 17 years. Fuel hydrocarbon concentrations in groundwater have decreased substantially since quarterly monitoring began in 1997. The groundwater contaminant plume is mature and stable to diminishing, and fuel hydrocarbon concentrations in groundwater have been reduced substantially due to a combination of in situ remediation and natural attenuation. media. The MNA program at FTMM-53 will be conducted in accordance with NJDEP's Site Remediation Program MNA Guidance (NJDEP, 2012) with periodic monitoring to evaluate changes in groundwater contaminant concentrations.

A Deed Notice will be prepared and filed pursuant to N.J.A.C. 7:26C-7.2 to address the presence of the fuel hydrocarbon contamination above NJDEP RDCSRS remaining in site soil (Parsons, 2022). The Deed Notice will serve to prevent potential exposure to soil contaminants that remain in-place at the site. Use of the site will be restricted to non-residential purposes with other appropriate land use prohibitions (for example, no use as a childcare facility, or as a public, private or charter school) in accordance with NJDEP requirements.

The Army will finalize the site wide LUCIP to document the controls and identify procedural responsibilities including groundwater monitoring and MNA reporting, and long-term stewardship responsibilities. When the property is transferred to private ownership out of federal control, the LUCs will be recorded against the property, and the new owner will be responsible for complying with the LUCs. Although the Army may later transfer its procedural responsibilities to another party by contract, property transfer agreement, or through other means, the Army retains ultimate responsibility for remedy integrity until groundwater contaminant concentrations are in

¹ The LUCIP will be updated and finalized in July 2026.

compliance with NJDEP GWQS. The major components of the remedial approach for FTMM-53 include land use controls(LUCs) in the form of a Deed Notice for fuel-contaminated soils, a Classification Exception Area (CEA)/Well Restriction Area (WRA) to control exposure to fuel-related volatile organic compounds (VOCs) in groundwater and monitored natural attenuation (MNA) to document the natural degradation of VOCs over time. The CEA/WRA will remain in place until NJDEP GWQS for contaminants of concern (COCs) are achieved at the site.

The Army is responsible for documenting and implementing the LUCs, which will occur through the filing of a deed notice at the time of property transfer. The Army will also be responsible for conducting reviews to ensure that the LUCs remain protective of human health and the environment. When the property is transferred out of federal control, the LUCs will be incorporated into the title, and the new owner will be responsible for complying with the LUCs. Although the Army may later transfer its procedural responsibilities to another party by contract, property transfer agreement, or through other means, the Army retains ultimate responsibility for remedy integrity.

3.0 Conceptual Site Model

This section summarizes the Conceptual Site Model (CSM) presented in the PFAS RI (Leidos, 2026). It provides the Army's current understanding of the releases, a description of identified and potential migration pathways, and the distribution of contaminants at and from the Site.

FTMM-53/Building 699/Parcel 52 is located on approximately 1.186 acres on the southern side of Saltzman Avenue in the central portion of the main post. Building 699 is currently vacant, and the former fueling equipment is no longer present. The parking lot itself is asphalt, and a grassy area is present to the south of the UST pad area. Storm drains are present on Saltzman Avenue. Stormwater is collected by the subsurface drainage system is discharged to Parkers Creek from an outfall located upstream of the MP STP (USACE 1985b).

The surficial soils at the Building 699 include medium- to fine-grained orange and tan sand and silty sand and clay to approximately 5 feet bgs. Deeper soils to 20 feet bgs are greenish, orange, and gray sandy clay with trace silts. The depth to water is typically between 6 and 9 feet bgs and flows to the south and southeast (Parsons 2018). During the Phase I RI, soils were investigated to 15 feet bgs and included medium-grained, poorly graded sands with some lesser silt and clays. Groundwater was encountered at approximately 6 to 10 feet bgs in soil borings and approximately 4.25 to 7.5 feet bgs in the existing monitoring wells near Building 699.

FTMM-53/Building 699/Parcel 52 was identified as an Area of Potential Interest (AOPI) in the Preliminary Assessment (Leidos, 2024). AFFF was reportedly used to contain a fuel spill in the parking lot east of Building 699. The primary release mechanism is the release of AFFF to surface soils to mitigate the fuel spill at Building 699. The secondary contaminant migration and fate and transport considerations include downward contaminant migration from surface soil to deeper subsurface soil and groundwater via desorption, dissolution, and percolation. Constituents could migrate to surface water due to runoff, dissolution, and adsorption to suspended sediment from stormwater. Interaction and potential connectivity between surface water and groundwater (i.e., discharge and recharge) present another potential migration pathway of constituents. Based on the mixed land use at Fort Monmouth and the surrounding area, and the residential, commercial, and industrial land use at the MP, the human receptors considered in the CSM are onsite workers with the potential to work at the AOPI (i.e.,

industrial/commercial and construction workers), residents evaluated for off-AOPI but on-post residential use, and off-post residents living in the vicinity of Fort Monmouth. Onsite workers are not likely to engage in soil-intrusive activities and are assumed to be exposed only to surface soil while performing routine maintenance and groundskeeping. Therefore, the surface soil exposure pathways are complete for the onsite worker, while the subsurface soil exposure pathways are incomplete. Construction workers are assumed to be exposed to subsurface soil during digging and excavating activities; therefore, soil exposure pathways are complete for the construction worker. Soil exposure pathways for on-post and off-post residents are incomplete because soil migration is not expected. Potable water at the main post is supplied by NJAWC, which sources its water from the groundwater in the Potomac-Raritan-Magothy Aquifer and surface water from the Glendola Reservoir, Manasquan River/Reservoir, Shark River, and Swimming River/Reservoir (NJAWC 2023). On-post groundwater is not used for drinking water, and limited, non-PFAS related CEAs exist on-post. Likewise, the groundwater ingestion pathway for construction workers is potentially complete; however, the pathway for dermal contact is complete because the depth to groundwater is within the typical construction zone and workers are expected to contact shallow groundwater during digging and excavation activities. Groundwater use is restricted at some, but not all, on-post parcels at the main post. Therefore, the groundwater exposure pathways for on-post residents are potentially complete at parcels with use restrictions and complete at parcels with no restrictions.

4.0 Nature and Extent of PFAS Contamination at FTMM-53

FTMM-53/Building 699/Parcel 52 was identified as an AOPI in the Preliminary Assessment and is referenced as Building 699 Fuel Spill AOPI in the RI (Leidos, 2026). The Phase I Remedial Investigation (RI) was conducted to determine the potential impact of AFFF release at FTMM 53/Building 699/Parcel 52. According to a personnel interview, fuel (gasoline) was released by a tanker truck refilling an UST located at the Building 699 Gasoline Service Station at the main post. The fuel flowed from the UST pad area and into the parking lot east of Building 699. The fire department reportedly used AFFF to contain the fuel spill (Leidos 2024). The groundwater Investigation at Building 699 detected the presence of PFAS in all four of the groundwater monitoring wells sampled within the AOPI. All nine target PFAS were detected at concentrations greater than the level of detection (LOD) and at least one PFAS COC was above its screening level in five of the nine groundwater samples collected. Building 699 PFAS results are shown in Table 1 and Table 2. PFAS COCs with detected concentrations that exceeded a screening level include HFPO-DA, PFDA, PFHxS, PFOA and PFOS and are summarized below:

- HFPO-DA was detected in the sample at location 699MW06 at a concentration of 3.14 J ng/L, which exceeds the SL.
- PFDA exceeded the SL at locations 699MW01 and 699MW06 at concentrations of 1.26 J and 1.83 J ng/L. The maximum detected concentration of PFDA was at location 699MW06.
- PFHxS exceeded the SL at all four locations at concentrations between 18.2 and 241 J ng/L. The maximum detected concentration of PFHxS was at location 699MW06.
- PFOA exceeded the SL at all four locations at concentrations between 14.4 and 93.9 J ng/L. The maximum detected concentration of PFOA was at location 699MW06.
- PFOS exceeded the SL at all four locations at concentrations between 19.7 and 337 ng/L. The maximum detected concentration of PFOS was at location 699MW06.

Table 1. Target PFAS Results and Screening for FTMM-53/Building 699 Fuel Spill AOPI

Location ID	Sample ID	Depth (feet)	Sample Date	HFPO-DA	PFBS	PFBA	PFDA	PFHxS	PFHxA	PFNA	PFOS	PFOA
Groundwater			Units	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
			Screening Levels	1.5	600	1800	0.52	10	990	5.9	4.0	4.0
699MW01	699MW01-202507	9	7/14/2025	0.727 UJ	0.937 J	11.2 J	1.26 J	24.8 J	12.5 J	1.47 J	64.0 J	40.5 J
699MW05	699MW05-202507	10	7/13/2025	0.716 U	1.26 J	5.37 U	1.34 U	18.6	5.14	0.794 J	20.2	14.6
	699MW05-202507FD	10	7/13/2025	0.723 U	1.25 J	5.42 U	1.36 U	18.2	4.90	0.802 J	19.7	14.4
699MW06	699MW06-202507	10	7/14/2025	3.14 J	10.1 J	21.2 J	1.83 J	241 J	31.9 J	5.39 J	337 J	93.9 J
FTMM-53-MW-01	FTMM-53-MW-01-202507	10	7/14/2025	0.738 UJ	2.48 J	4.06 J	1.38 UJ	36.2 J	5.18 J	2.99 J	38.4 J	85.2 J

Notes:

PFAS SLs used in DoD investigations are listed in the 2025 ASD memorandum titled Investigating Per- and Polyfluoroalkyl Substances within the Department of Defense Cleanup Program (DoD 2025a). These and subsequent SL updates for DoD investigations of PFAS are documented on the PFAS Task Force website, <https://www.acq.osd.mil/eie/eer/ecc/pfas/pfas101/rsi.html> (DoD 2025b).

DoD PFAS SLs are based on USEPA's RSL tables dated November 2024 except where the USEPA RSLs were below the MDLs of USEPA-approved analytical methods.

Bolded values denote detected concentrations.

Highlighted values indicate a value equal to or exceeding the screening level.

Qualifiers:

J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample (+/- indicates biased high or low).

Table 2. Building 699 AOP Target PFAS Detections

Groundwater Detections Over SL at MP-699						
COC	Screening Level (ng/L)	Samples Collected	Detection over SL	Max Concentration (ng/L)	Max Concentration Location	
HFPO-DA	1.5	5	1	3.14	699MW06	
PFBS	600	5	0	10.1	699MW06	
PFBA	1800	5	0	21.2	699MW06	
PFDA	0.52	5	5	1.83	699MW06	
PFHxS	10	5	5	241	699MW06	
PFHxA	990	5	0	31.9	699MW06	
PFNA	5.9	5	0	5.39	699MW06	
PFOS	4	5	5	337	699MW06	
PFOA	4	5	5	93.9	699MW06	

The evaluation of PFAS as an emerging contaminant found in groundwater has changed rapidly since the first data were collected for these compounds. The State of New Jersey currently has Groundwater Quality Standards (GWQS) for four PFAS compounds (PFOA, PFOA, PFNA and GenX). EPA recently established enforceable MCLs for six PFAS which includes two of the most widely found compounds: These standards apply to public water systems, industrial discharges, and site remediation activities. EPA has established MCL for PFOA and PFOS, as well as MCLs for four additional PFAS individually or as a mixture. EPA also recently updated its RSLs for PFAS based on current toxicological information. A comparison to the site-specific residential (tapwater) risk-based screening levels indicates that concentrations found in groundwater within the site source areas exceed risk-based screening levels. PFAS compounds are included as site COCs and potential complete groundwater exposure pathways were identified in the PFAS Phase I Report; however, the existing CEA remedy restricts groundwater use and include LUCs compliance monitoring and reporting requirements

4.1 Current and Potential Land Use

The current and reasonably anticipated future land uses of the Site form the basis for the exposure assumptions that are used for the risk assessment, are considered in the development of remedial action objectives and remedial alternatives and are considered in the selection of the appropriate remedial actions.

Building 699 was used as a full-service gas station and convenience store. The planned future land use at FTMM-53 is mixed use industrial and institutional/civic use according to the Fort Monmouth Reuse and Redevelopment Plan (EDAW, Inc., 2008). Institutional/civic uses may include schools (educational) and administrative uses. However, a Deed Notice will be prepared that will restrict the use of the property for nonresidential purposes, with other land use prohibitions (i.e., no use as a childcare facility, or as a public, private or charter school) in accordance with NJDEP requirements. The Army owns this property and intends to transfer it to the Fort Monmouth Economic Revitalization Authority (FMERA). FMERA intends to transfer the property to Netflix where it will be used as a parking lot.

Groundwater is not used as a potable or drinking water source by current outdoor workers or indoor workers at FTMM, because municipal water is provided for use and the site's groundwater is restricted per the Classification Exception Area (CEA).

Future land use assumptions allow the baseline risk assessment and the feasibility study to focus on the development of practicable and cost-effective remedial alternatives, leading to site activities which are consistent with the reasonably anticipated future land use.

The baseline risk assessment generally needs only to consider the reasonable anticipated future land use; however, it may be valuable to evaluate risks associated with other land uses. The NCP preamble (55 Fed. Reg. 8710) states that in the baseline risk assessment, more than one future land use assumption may be considered when decision makers wish to understand the implications of unexpected exposures. The magnitude of such potential impacts may be an important consideration in determining whether and how institutional controls should be used to restrict future use. If the baseline risk assessment evaluates a future use under which exposure is limited, it will not serve the traditional role, evaluating a "no action" scenario. A remedy, i.e. institutional controls to limit future exposure, will be required to protect human health and environment.

4.2 Risk Analysis

The risk results for residents drinking groundwater at Ft Monmouth Building 699 are shown in Table 3. The data shows the following conclusions:

- The cancer risk (3E-02) exceeds the upper bound of the target cancer risk range. This exceedance is due to PFOA and PFOS, with the PFOA responsible for the greater contribution.
- The noncancer HI (30,000 for the child) exceeds the target of 1. This exceedance is due to PFDA, PFHxS, PFOS, and PFOA, with PFHxS responsible for the greatest HQ.

Table 3. Residential Groundwater Ingestion Risks, FTMM-53(Bldg 699/Parcel 52)

Chemical	Concentration (ug/L)	Resident Cancer Ingestion Risk	Resident Noncancer Ingestion Child HQ	Resident Noncancer Ingestion Adult HQ
Hexafluoropropylene oxide dimer acid (HFPO-DA)	3.14E-03	-	5.22E-02	3.14E-02
Perfluorobutanesulfonic acid (PFBS)	1.01E-02	-	1.68E-03	1.01E-03
Perfluorobutanoic acid (PFBA)	2.12E-02	-	1.06E-03	6.35E-04
Perfluorodecanoic acid (PFDA)	1.83E-03	-	4.56E+01	2.74E+01
Perfluorohexanesulfonic acid (PFHxS)	2.41E-01	-	3.00E+04	1.81E+04
Perfluorohexanoic acid (PFHxA)	3.19E-02	-	3.18E-03	1.91E-03
Perfluorononanoic acid (PFNA)	5.39E-03	-	8.96E-02	5.38E-02
Perfluorooctanesulfonic acid (PFOS)	3.37E-01	1.71E-04	1.68E+02	1.01E+02
Perfluorooctanoic acid (PFOA)	9.39E-02	3.47E-02	1.56E+02	9.38E+01
Total Risk/HI	-	3E-02	3E+04	2E+04

HQ - Hazard Quotient

Bolded Cancer Risks - Risks exceed 1E-04

Bolded Noncancer Risks – HQs exceed 1

Incidental ingestion risk for a construction worker was not evaluated. This pathway is considered insignificant since dewatering trenches and the use of personal protective equipment is standard practice during construction activities. Such requirements reduce this exposure to an insignificant level.

Key points and assumptions used to determine risk are included below:

- The maximum detected concentration was used as the exposure point concentration (EPC) because data from only 4 wells were available. The maximum detected concentration may not accurately represent the exposure concentration of groundwater for a resident (a 95% UCL calculated with more samples is preferred).
- The updated January 2025 IRIS RfD was used for PFHxS (rather than the ATSDR RfD used in the November 2024 EPA RSL tables). All other toxicity values used in the risk calculations are from the November 2024 RSL tables).
- The EPA RSL calculator was used to estimate risks.
- The risks are for groundwater ingestion only and do not include dermal contact or inhalation exposure routes.

- EPA default exposure assumptions for resident ingestion of tapwater were used to calculate risk. Exposure assumptions and equations used to calculate risk are shown in Appendix A.

5.0 Identification and Screening of Technologies

5.1 Applicable or Relevant and Appropriate Requirements

The identification and evaluation of ARARs (40 CFR § 300.400(g) and 300.430(e)(2)(i)) is an integral part of the remediation process in complying with CERCLA. Part 121 of CERCLA specifies that remedial actions for cleanup of hazardous substances must comply with requirements or standards under Federal or more stringent state environmental or facility siting laws that are applicable or relevant and appropriate to the hazardous substances or circumstances at a site. Protection of human health and the environment is, in part, addressed by implementing ARARs. Only substantive portions of requirements are ARARs. Administrative requirements are not ARARs and do not apply to actions conducted entirely onsite.

Remedial actions on CERCLA sites must attain (or justify the waiver of) federal or more stringent state environmental standards, requirements, criteria, or limitations that are determined to be Applicable or Relevant and Appropriate Requirements (ARARs) per Section 121(d) of CERCLA. The NCP defines applicable requirements are those cleanup standards, criteria, or limitations promulgated under federal or State law that specifically address specific conditions or circumstances at the site. Only promulgated state standards that are identified by the State in a timely manner and that are equally or more stringent than federal requirements may be applicable. The NCP further defines relevant and appropriate requirements as those cleanup standards, standards of control, and other substantive environmental protection requirements, criteria, or limitations promulgated under federal or state law that, while not applicable, address problems or situations sufficiently similar to the circumstances of the proposed response action and are well suited to the conditions of the site.

The USEPA identifies three categories of ARARs. They are chemical-, action-, and location-specific:

- Chemical-specific ARARs are generally health- or risk-based values which, when applied to site specific conditions, result in numerical values. These values establish the acceptable concentration of a chemical that may be found in, or discharged to, the ambient environment.
- Location-specific ARARs are restrictions placed upon remedial activities of hazardous substances solely because they are occurring in a particular place.
- Action-specific ARARs are generally technology or activity-based requirements on actions taken with respect to hazardous substances. These requirements are triggered by the particular activities that are selected to accomplish a remedy. Thus, action-specific requirements do not in themselves determine the remedial alternative; rather, they indicate how a selected alternative must be achieved.

A third type of requirement, while not an ARAR, consists of non-promulgated advisories of guidance issued by the federal or state governments. These are “to be considered” (TBC) requirements. TBCs are not legally binding but may be used to establish remedial guidelines or targets in the absence of ARARs (40 CFR 300.400(g)(3)).

6.0 Remedial Action Objectives (RAOs)

Remedial Action Objectives are specific goals established to protect human health and the environment. Based on the findings of the RI and standard CERCLA risk assessment guidelines, the RAO for FTMM-53/Building 699/Parcel 52 is:

- **Prevent human exposure (specifically via ingestion) to PFAS-contaminated groundwater for potable purposes, which has been identified as the main exposure pathway that presents an unacceptable risk under CERCLA.**

7.0 Alternatives Analysis

This FFS evaluates two remedial alternatives: (1) No Action and (2) Land Use Controls - Groundwater Restriction. The evaluation is based on the nine criteria stipulated in 40 CFR 300.430(e), which are categorized as threshold, balancing, and modifying criteria.

7.1 Alternative 1: No Action

The No Action alternative is required by the NCP [40 CFR 300.430(e)(6)] to serve as a baseline for comparison. Under this alternative, no remedial actions would be taken to address the PFAS contamination in the groundwater at Building 699. The significant concentrations of PFOS (up to 337 ng/L) and PFOA (up to 93.9 ng/L) would remain in the groundwater, posing an unacceptable risk to human health through the ingestion of contaminated water.

Evaluation against the Nine Criteria [40 CFR 300.430(e)(9)(iii)]:

- **Overall Protection of Human Health and the Environment:** Not protective. It allows for the potential ingestion of groundwater with PFAS concentrations significantly above health advisory levels.
- **Compliance with ARARs:** Fails to comply with chemical-specific Applicable or Relevant and Appropriate Requirements (ARARs), such as state or federal drinking water standards and health advisories for PFOS and PFOA.
- **Long-Term Effectiveness and Permanence:** Provides no long-term effectiveness or permanence.
- **Reduction of Toxicity, Mobility, or Volume Through Treatment:** No treatment is involved; therefore, there is no reduction in toxicity, mobility, or volume.
- **Short-Term Effectiveness:** No short-term impacts as no action is taken.
- **Implementability:** Easiest to implement as it involves no action.
- **Cost:** \$0.
- **State Acceptance:** Not expected to be acceptable to state regulatory agencies due to unmitigated risk.
- **Community Acceptance:** Not expected to be acceptable to the community.

7.2 Alternative 2: Land Use Controls

This remedial alternative is developed in accordance with N.J.A.C 7:26E Subchapter 5 Remedial Action and will include a site-wide Land Use Control Implementation Plan (LUCIP) to document the LUCs to control exposure to PFAS COCs in groundwater via a CEA/WRA, and MNA to document the natural degradation of COCs over time. The CEA/WRA

is a groundwater use restriction to protect a hypothetical residential user from potential risk associated with groundwater as a potable water source. The site has an existing network of monitoring wells that have been sampled for site-related contaminants for 17 years. The CEA will remain in place until the NJDEP GWWS are achieved.

Per the ROD (USACE, 2020), A Deed Notice will be prepared and filed pursuant to N.J.A.C 7:26C-7.2 to address the presence of PFAS contamination remaining in soil above the NJDEP residential and non-residential soil remediation standards. The Deed Notice will serve to prevent potential exposure to soil contaminants that will remain in place at the site. Comparison of soil contamination remaining on site to NJDEP interim soil standards is provided in Appendix B. Use of the site will be restricted to non-residential purposes with other appropriate land use prohibitions (for example, no use as a childcare facility, or as a public, private or charter school) in accordance with NJDEP requirements.

Because this remedial approach will result in hazardous substances, pollutants, or contaminants remaining on site above levels that allow for unrestricted exposure, statutory reviews will be conducted every five years after initiation of the remedy to ensure it is, or will be, protective of human health and the environment, until such time it may be determined that the site qualifies for unrestricted use. Five-year reviews will be conducted in compliance with CERCLA §121(c) and the NCP §300.430(f)(5)

Evaluation against the Nine Criteria [40 CFR 300.430(e)(9)(iii)]:

- **Overall Protection of Human Health and the Environment:** Protective of human health by physically and legally preventing the ingestion of PFAS-contaminated groundwater. (Note: It does not actively restore the environment).
- **Compliance with ARARs:** Complies with action-specific ARARs (institutional controls). It does not achieve compliance with chemical-specific ARARs for the groundwater itself, serving instead as a containment/exposure-prevention measure.
- **Long-Term Effectiveness and Permanence:** Effective in the long term, provided the LUCs are permanently recorded, routinely monitored, and legally enforced. Five-Year Reviews under CERCLA would be required.
- **Reduction of Toxicity, Mobility, or Volume Through Treatment:** Does not involve treatment; fails to reduce the toxicity, mobility, or volume of the contaminant plume.
- **Short-Term Effectiveness:** Can be implemented relatively quickly (administratively) and is immediately effective at preventing exposure upon enforcement.
- **Implementability:** Readily implementable using existing DoD, state, and local administrative frameworks.
- **Cost:** Low - \$916,041. Costs are limited to routine GW and LUCs [monitoring/reporting](#). (See Appendix A).
- **State Acceptance:** Likely acceptable to the state as a necessary protective measure, potentially as an interim action until a final remedy is selected.
- **Community Acceptance:** Generally acceptable, provided communication efforts clearly explain the restrictions and the absence of current exposure.

8.0 Comparative Analysis

This section presents an evaluation and comparative analysis of the remedial alternatives relative to specific evaluation criteria provided in the NCP and provides a comparison to identify the advantages and disadvantages of each alternative relative to one another. Section 121 of CERCLA establishes several other statutory requirements and preferences, including: (1) a requirement that EPA's remedial action, when complete, must comply with all federal and more stringent state environmental standards, requirements, criteria or limitations, unless a waiver is invoked; (2) a requirement that EPA select a remedial action that is cost-effective and that uses permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable; and (3) a preference for remedies in which treatment that permanently and significantly reduces the volume, toxicity, or mobility of the hazardous substances is a principle element over remedies not involving such treatment.

Building upon these specific statutory mandates, the NCP articulates nine evaluation criteria to be used in assessing the individual remedial alternatives. These criteria are divided into three groups: Threshold Criteria, which each alternative must meet to be carried forward in the analysis; Balancing Criteria, which measure the performance of each alternative; and Modifying Criteria, which are assessed after this FFS and Proposed Plan are presented for public review and comment.

Criteria	Alternative 1: No Action	Alternative 2: Land Use Controls
Overall Protection	Not Protective. Allows for continued unacceptable risk from high levels of PFAS.	Protective. Prevents ingestion of contaminated groundwater.
ARARs Compliance	Fails to meet chemical-specific ARARs for PFOS and PFOA.	Complies with action-specific ARARs; serves to mitigate risk while chemical-specific ARARs are unmet.
Long-Term Effectiveness	Not effective. Contamination persists.	Effective as long as LUCs are maintained and enforced.
Toxicity/Mobility/Volume Reduction	No reduction.	No reduction.
Short-Term Effectiveness	No impact.	Effective in immediately preventing exposure.
Implementability	Easiest.	Readily implementable, via an Explanation of Significant Differences to the FTMM-53 Record of Decision (2020).
Cost	\$0	\$916,041 (30-year)

Table 4. Estimated Costs for Selected Remedy - FTMM-53(Bldg 699/Parcel 52)

CAPITAL COSTS	
Prepare CEA	\$26,386
Land Survey	\$7,261
Deed Notice	\$48,628
FTMM Sites LUCIP Report Update	\$53,214
LONG-TERM MONITORING COSTS	
30 YEAR LAND USE CONTROLS	
PFAS Groundwater Sampling – 30 years (Assume every 5 years for Five-Year Review Statement of Protectiveness evaluation) Total of 6	\$306,600
PFAS IDW Characterization and Disposal (Total of 6)	\$25,452
Volatile Organic Compound Sampling	\$24,600
Trucks, Equipment, & Fuel – 30 years (Total of 6)	\$12,200
Labor, PPE, & Per Diem - 30 Years (Total of 6)	\$123,800
Sampling Equipment - 30 Years (Total of 6)	\$15,500
Shipping Costs - 30 Years (Total of 6)	\$5,500
Miscellaneous Supplies - 30 Years (Total of 6)	\$27,100
Other – 30 Years (Total of 6)	\$2,800
Biennial Certification Report (LUCs Compliance Monitoring and Reporting – Total of 15)	\$237,000
Five-Year Review of ROD (Total of 6)	\$132,161
ESTIMATED COST	
	\$916,041

9.0 Conclusion

The "No Action" alternative is not a viable option as it fails to address the unacceptable risks posed by the high concentrations of PFAS (up to 337 ng/L for PFOS) localized near well 699-

MW-06 at FTMM-53/Building 699. The "Land Use Controls - Groundwater Restriction" alternative is a highly protective, implementable, and cost-effective measure that successfully meets the Remedial Action Objective (RAO) of preventing human exposure to PFAS-contaminated drinking water. Given the significant contamination present, Alternative 2 represents a necessary and responsible action under CERCLA to protect human health.

10.0 References

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Figure 1. FTMM-53/Building 699/Parcel 52 Location

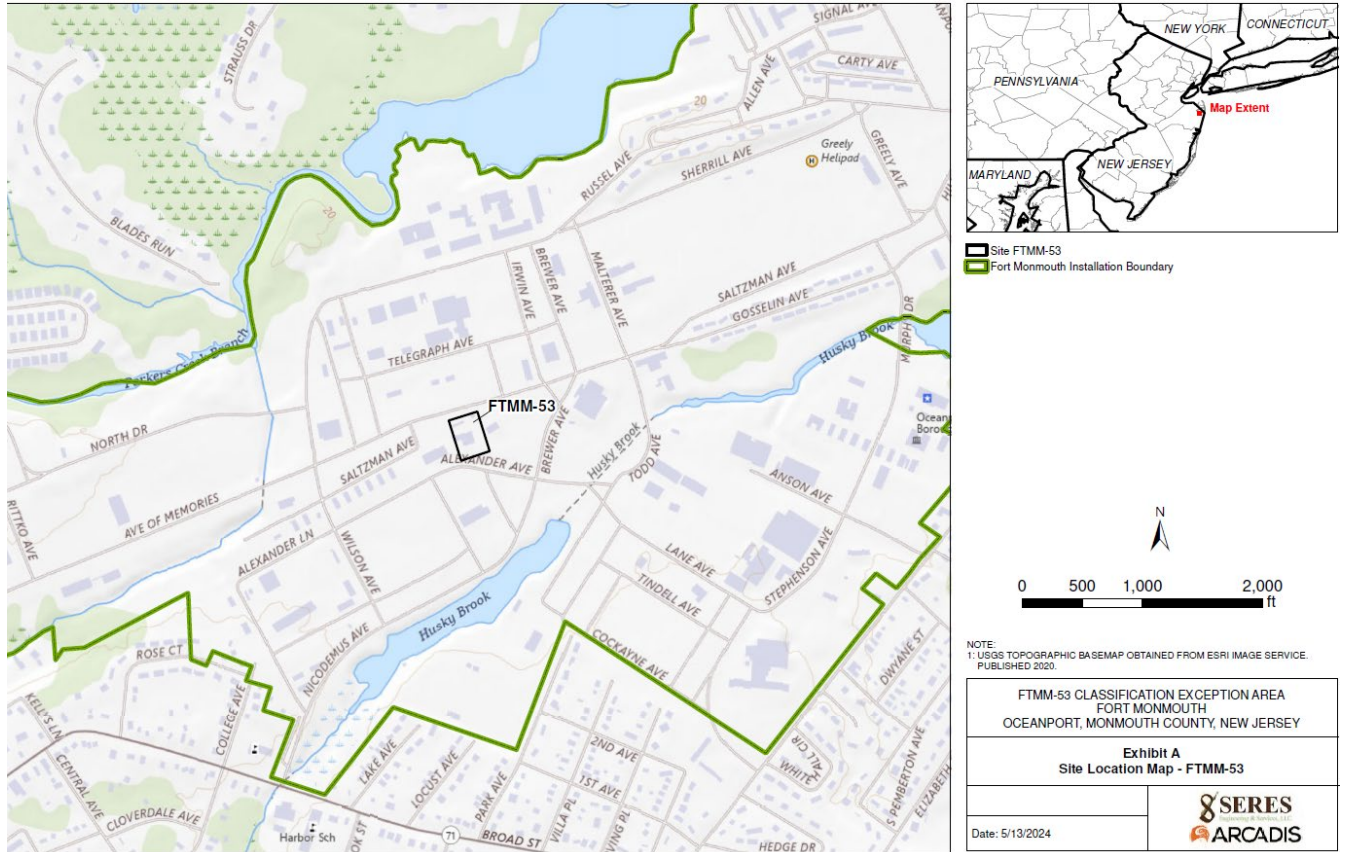


Figure 2. Current FTMM-53 CEA Boundary Under Existing Remedy

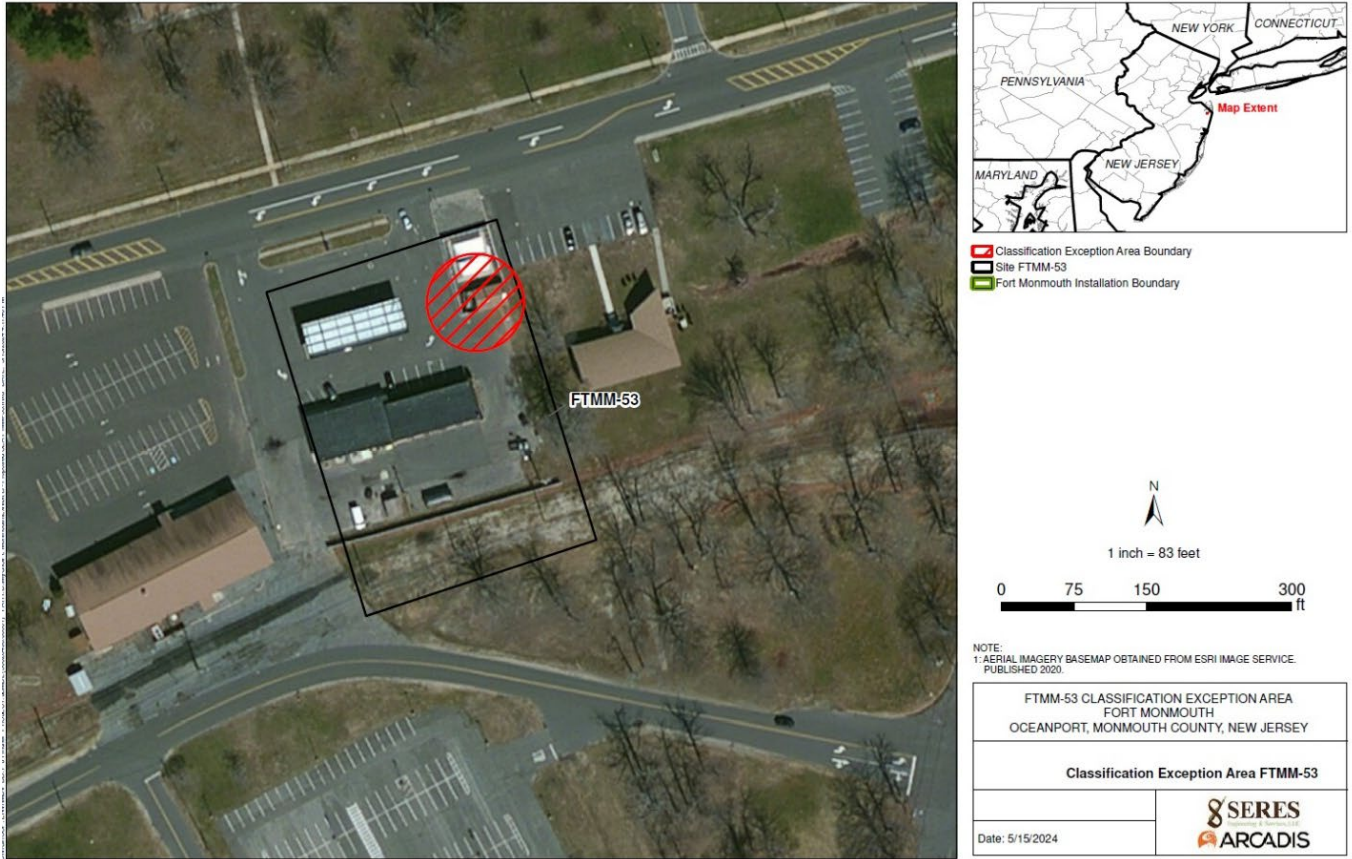
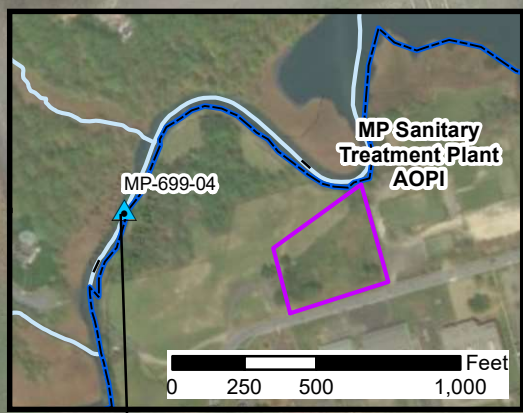


Figure 3. FTMM-53/Building 699 AOPI Groundwater PFAS Results

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MP-699-04 (SW/SD)		
Analyte	Surface Water (ng/L)	Sediment (µg/kg)
HFPO-DA	5.82 U	8.16 UJ
PFBS	3.48	0.204 UJ
PFBA	6.61 J	0.816 UJ
PFDA	1.45 U	0.592 J
PFHxS	8.32	0.293 J
PFHxA	7.88	0.283 J
PFNA	1.51 J	0.528 J
PFOS	21.4	8.19 J
PFOA	15.1	1.51 J

699MW01 (GW)	
Analyte (ng/L)	9 ft
HFPO-DA	0.727 UJ
PFBS	0.937 J
PFBA	11.2 J
PFDA	1.26 J
PFHxS	24.8 J
PFHxA	12.5 J
PFNA	1.47 J
PFOS	64.0 J
PFOA	40.5 J

699MW05 (GW)		
Analyte (ng/L)	10 ft	10 ft (D)
HFPO-DA	0.716 U	0.723 U
PFBS	1.26 J	1.25 J
PFBA	5.37 U	5.42 U
PFDA	1.34 U	1.36 U
PFHxS	18.6	18.2
PFHxA	5.14	4.90
PFNA	0.794 J	0.802 J
PFOS	20.2	19.7
PFOA	14.6	14.4

699MW06 (GW)	
Analyte (ng/L)	10 ft
HFPO-DA	3.14 J
PFBS	10.1 J
PFBA	21.2 J
PFDA	1.83 J
PFHxS	241 J
PFHxA	31.9 J
PFNA	5.39 J
PFOS	337 J
PFOA	93.9 J

FTMM-53-MW-01 (GW)	
Analyte (ng/L)	10 ft
HFPO-DA	0.738 UJ
PFBS	2.48 J
PFBA	4.06 J
PFDA	1.38 UJ
PFHxS	36.2 J
PFHxA	5.18 J
PFNA	2.99 J
PFOS	38.4 J
PFOA	85.2 J

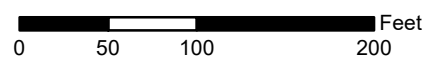
DoD Screening Levels (DoD 2025)		
Chemical	Residential Tap Water (ng/L)	Residential Soil (ug/kg)
HFPO-DA or GenX	1.5	23
PFBA	1,800	7,800
PFBS	600	1,900
PFDA	0.52	0.06
PFHxA	990	3,200
PFHxS	10	130
PFNA	5.9	19
PFOA	4.0	0.070
PFOS	4.0	0.63

Building 699 Fuel Spill AOPI

LEGEND:

- BRAC Parcel Boundary
- AOPI Area
- Creek (Flow Direction)
- Existing Monitoring Well
- Existing Well Sample
- Regional Groundwater Flow Direction
- Localized Groundwater Flow Direction

Notes:
 1. Background Source: ESRI World Imagery (Vivid/Maxar, 4/2020).
 2. Groundwater flow direction based on Shaw (2008).
 3. There are two boundary proposed DPT GW locations that are not included in the sample count.
 ng/L = nanogram per liter, µg/kg = microgram per kilogram
 J = (estimated), U = (not detected), UJ = (not detected and estimated)
 D = (duplicate)



NJ STATE PLANE (NAD83)



BUILDING 699 FUEL SPILL AOPI GROUNDWATER, SURFACE WATER, AND SEDIMENT SAMPLE RESULTS – MAIN POST – FORT MONMOUTH

FIGURE 3 DATE: 11/24/2025

Figure 4. FTMM-53/Building 699 AOPI Soils PFAS Results

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DoD Screening Levels (DoD 2025)		
Chemical	Residential Tap Water (ng/L)	Residential Soil (ug/kg)
HFPO-DA or GenX	1.5	23
PFBA	1,800	7,800
PFBS	600	1,900
PFDA	0.52	0.06
PFHxA	990	3,200
PFHxS	10	130
PFNA	5.9	19
PFOA	4.0	0.070
PFOS	4.0	0.63

MP-699-02 (SO)			
Analyte (ug/kg)	0.5-1 ft	2-3 ft	4-5 ft
HFPO-DA	5.95 U	6.01 UJ	6.04 U
PFBS	0.149 U	0.150 U	0.151 U
PFBA	0.595 U	R	R
PFDA	0.149 U	0.150 U	0.151 U
PFHxS	0.149 U	0.150 U	0.151 U
PFHxA	0.149 U	0.150 U	0.151 U
PFNA	0.149 U	0.150 U	0.151 U
PFOS	0.451	0.142 J	0.870
PFOA	0.149 U	0.150 U	0.0327 J

MP-699-01 (SO)			
Analyte (ug/kg)	1-1.5 ft	2-3 ft	5.5-6.5 ft
HFPO-DA	5.97 U	6.08 U	6.03 U
PFBS	0.149 U	0.152 U	0.151 U
PFBA	0.597 U	0.608 U	0.603 U
PFDA	0.149 U	0.152 U	0.151 U
PFHxS	0.117 J	0.152 U	0.0343 J
PFHxA	0.149 U	0.152 U	0.151 U
PFNA	0.149 U	0.152 U	0.151 U
PFOS	0.190 J	0.152 U	2.75
PFOA	0.157 J	0.0822 J	0.330

MP-699-03 (SO)			
Analyte (ug/kg)	0.5-1 ft	4-5 ft	9-10 ft
HFPO-DA	5.98 U	6.05 U	6.59 U
PFBS	0.150 U	0.151 U	0.165 U
PFBA	0.598 U	0.605 U	R
PFDA	0.150 U	0.151 U	0.165 U
PFHxS	0.0407 J	0.129 J	0.0601 J
PFHxA	0.150 U	0.151 U	0.165 U
PFNA	0.150 U	0.151 U	0.165 U
PFOS	1.16	0.697	1.32
PFOA	0.0380 J	0.0883 J	0.0541 J

**Building 699
Fuel Spill
AOPI**

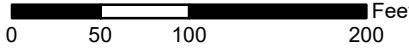
Saltzman Avenue

Husky Brook

LEGEND:

- BRAC Parcel Boundary
- AOPI Area
- Soil Boring
- Regional Groundwater Flow Direction
- Localized Groundwater Flow Direction
- Creek (Flow Direction)

Notes:
 1. Background Source: ESRI World Imagery (Vivid/Maxar, 4/2020).
 2. Groundwater flow direction based on Shaw (2008).
 3. There are two boundary proposed DPT GW locations that are not included in the sample count.
 ng/L = nanogram per liter, ug/kg = microgram per kilogram
 J = (estimated), U = (not detected), UJ = (not detected and estimated)
 D = (duplicate), R = (rejected)



NJ STATE PLANE (NAD83)



**BUILDING 699 FUEL SPILL AOPI
SOIL SAMPLE RESULTS –
MAIN POST – FORT MONMOUTH**

FIGURE 4
DATE: 11/24/2025

Appendix A. Exposure Assumptions and Equations for Residential Groundwater Ingestion Risks

Exposure Assumption	
BW _{res-a} (body weight - adult) kg	
BW _{res-c} (body weight - child) kg	
ED _{res} (exposure duration - resident) years	Value
ED _{res-a} (exposure duration - adult) years	80
ED _{res-c} (exposure duration - child) years	15
EF _{res} (exposure frequency) days/year	26
EF _{res-a} (exposure frequency - adult) days/year	20
EF _{res-c} (exposure frequency - child) days/year	6
IFW _{res-adj} (adjusted intake factor) L/kg	350
IRW _{res-a} (water intake rate - adult) L/day	350
IRW _{res-c} (water intake rate - child) L/day	350
LT (lifetime) years	327.95
	2.5
	0.78
Equations	70

Child Ingestion - Noncancer

$$CDI_{res-wat-ingnc} \left(\frac{\text{mg}}{\text{kg-day}} \right) = \frac{C_{\text{water}} \left(\frac{\mu\text{g}}{\text{L}} \right) \times \left(\frac{\text{mg}}{1000 \mu\text{g}} \right) \times EF_{res-c} \left(\frac{350 \text{ days}}{\text{yr}} \right) \times ED_{res-c} (6 \text{ yr}) \times IRW_{res-c} \left(\frac{0.78 \text{ L}}{\text{day}} \right)}{AT_{res-c} \left(\frac{365 \text{ days}}{\text{yr}} \times ED_{res-c} (6 \text{ yr}) \right) \times BW_{res-c} (15 \text{ kg})}$$

Resident Ingestion - Cancer

$$CDI_{res-wat-ingc} \left(\frac{\text{mg}}{\text{kg-day}} \right) = \frac{C_{\text{water}} \left(\frac{\mu\text{g}}{\text{L}} \right) \times \left(\frac{\text{mg}}{1000 \mu\text{g}} \right) \times IFW_{res-adj} \left(\frac{327.95 \text{ L}}{\text{kg}} \right)}{AT_{res} \left(\frac{365 \text{ days}}{\text{yr}} \times LT (70 \text{ yrs}) \right)}$$

where:

$$IFW_{res-adj} \left(\frac{327.95 \text{ L}}{\text{kg}} \right) = \left[\frac{EF_{res-c} \left(\frac{350 \text{ days}}{\text{yr}} \right) \times ED_{res-c} (6 \text{ yr}) \times IRW_{res-c} \left(\frac{0.78 \text{ L}}{\text{day}} \right)}{BW_{res-c} (15 \text{ kg})} + \frac{EF_{res-a} \left(\frac{350 \text{ days}}{\text{yr}} \right) \times ED_{res-a} (20 \text{ yr}) \times IRW_{res-a} \left(\frac{2.5 \text{ L}}{\text{day}} \right)}{BW_{res-a} (80 \text{ kg})} \right]$$

Chronic Daily Intake (CDI) (mg/kg-day) × oral Slope Factor (SF_o) = Cancer risk

CDI (mg/kg-day)/Reference Dose (RfD) = Noncancer Hazard Quotient (HQ)

Appendix B. FTMM-53/Building 699 AOPI Soils Results Compared to NJDEP Interim Soil Remediation Standards and Statewide Background Concentrations

Contaminant	Groundwater Remediation Standard (µg/L)	Interim NJDEP Soil Remediation Standard: Ingestion-Dermal Residential (mg/kg)	Interim NJDEP Soil Remediation Standard: Ingestion-Dermal Nonresidential (mg/kg)	Interim NJDEP Soil Remediation Standard: Migration to Groundwater (mg/kg)	Interim NJDEP Soil Leachate Remediation Standard: Migration to Groundwater (µg/L) ¹	NJ Statewide Investigation		DOD Residential Soil Screening Levels (2025) (ug/kg)	MP-699-01			MP-699-02			MP-699-03		
						Highest Rural Concentration Detected (ng/g) NOTE: All samples collected 0-6"	Highest Urban Concentration Detected (ng/g) NOTE: All samples collected 0-6"		0.5-1 ft ug/kg	2 - 3 ft ug/kg	5.5 - 6.5 ft ug/kg	0.5-1 ft ug/kg	2-3 ft ug/kg	4-5 ft ug/kg	0.5-1 ft ug/kg	2-3 ft ug/kg	4-5 ft ug/kg
GenX	0.02 ug/L = 20 ng/L	0.23 mg/kg = 230 ug/kg	3.9 mg/kg = 3900 ug/kg	Area of Concern / Site-Specific	0.4	0.229 J ng/g = 0.229 ug/kg	0.135 J ng/g = 0.135 ug/kg	23 ug/kg	5.97 U	6.08 UJ	6.03 U	5.95 U	6.01 UJ	6.04 U	5.98 U	6.05 UJ	6.59 U
PFNA	0.013 ug/L = 3 ug/L	0.047 mg/kg = 47 ug/kg	0.67 mg/kg = 670 ug/kg	Area of Concern / Site-Specific	0.26	1.42 ng/g = 1.42 ug/kg	1.18 ng/g = 1.18 ug/kg	19 ug/kg	0.149 U	0.152 U	0.151 U	0.149 U	0.150 U	0.151 U	0.151 U	0.151 U	0.165 U
PFOS	0.013 ug/L = 3 ng/L	0.11 mg/kg = 110 ppb	1.6 mg/kg = 1600 ug/kg	Area of Concern / Site-Specific	0.26	1.08 ng/g = 1.08 ug/kg	2.13 ng/g = 2.13 ug/kg	0.070 ug/kg	0.190 J	0.152 U	2.75	0.451	0.142 J	0.87	1.16	0.697	1.32
PFOA	0.014 ug/L = 4 ng/L	0.13 mg/kg = 130 ug/kg	1.8 mg/kg = 1800 ug/kg	Area of Concern / Site-Specific	0.28	6.49 ng/g = 6.49 ug/kg	5.44 ng/g = 5.44 ug/kg	0.63 ug/kg	0.157 J	0.082 J	0.33	0.149 U	0.150 U	0.032 J	0.038 J	0.883 J	0.054 J

FOOTNOTES:

1= Site- specific SRS-MGW are calculated using the synthetic precipitation leaching procedure (SPLP) and NJDEP's soil leachate remediation standards.

SRS-MGW are anticipated to be 1-2 orders of magnitude more stringent than the soil remediation standards for the residential ingestion-dermal exposure pathway (SRS-ID)

<https://www.globalelr.com/2025/04/njdep-proposed-rule-update-pfas-added-to-contaminant-testing-requirements/>

https://dep.nj.gov/wp-content/uploads/srp/pfas_soil_survey_report.pdf (PFAS Substances in NJ Soils: A Statewide Investigation - Revised September 2025)