



PHIL-27895

January 22, 2024

Project Number 08005-WE04

Mr. Thomas Magge
Clean Water Environmental Program Manager
Pennsylvania Department of Environmental Protection
Southeast Regional Office
2 East Main Street
Norristown, Pennsylvania 19401

Reference: Contract No. N6247016D9008
Contract Task Order No. WE04

Subject: Discharge Monitoring Report – December 1 to December 31, 2023
WQM Permit # 0920203 - Effective: February 1, 2021, Expires: January 31, 2026
Site 5 Per- and Polyfluoroalkyl Substances Pilot Test System
Former Naval Air Station Joint Reserve Base Willow Grove
Horsham Township, Pennsylvania

Dear Mr. Magge:

On behalf of the U.S. Navy, Tetra Tech is pleased to submit the Discharge Monitoring Report (DMR) for the Site 5 per- and polyfluoroalkyl substances (PFAS) pilot test system in operation at the Former Naval Air Station Joint Reserve Base Willow Grove in Horsham Township, Pennsylvania. The system was placed online on January 31, 2022. During this reporting period, 869,925 gallons of water were discharged between December 1, 2023 and December 27, 2023 to Outfall 2. The total volume of groundwater treated by the Site 5 pilot system since startup through December 27, 2023 is 17,359,888 gallons. Sampling for permit parameters was conducted on December 4, 2023.

Please do not hesitate to contact me if you have any questions.

Sincerely,

A handwritten signature in black ink that reads 'Tricia E. Moore'.

Tricia E. Moore, PG
Senior Project Manager

TEM/nfs

Attachment: Discharge Monitoring Report – December 1 to December 31, 2023

c: Brian Helland (Navy BRAC PMOE)
Dawn DeFreitas (Navy BRAC PMOE)
Jonathan Harris (Navy BRAC PMOE)
Colin Wade (PADEP)
Sarah Kloss (EPA Region 3)
Navy Caretaker Office
Horsham Library
NIRIS RDM

This page intentionally left blank



**COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)**

Facility Type: **Minor**

PERMITTEE NAME/ADDRESS

NAME Naval Facilities Mid Atlantic

ADDRESS 4911 South Broad Street
Philadelphia, PA 19112

FACILITY Willow Grove NASJRB

LOCATION Site 5
Montgomery County

WATERSHED 3-J

0920203
PERMIT NUMBER

002
OUTFALL NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY
2023	12	1		2023	12	31

Reporting Frequency: Monthly

DMR Effective From: February 1, 2021

DMR Effective To: January 31, 2026

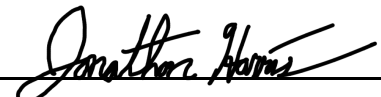
Permit Expires: January 31, 2026

Permit Application Due: August 4, 2025

Check Here if No Discharge

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Flow	SAMPLE MEASUREMENT	0.0290									
	PERMIT REQUIREMENT	Report Avg Mo	XXX	MGD	XXX	XXX	XXX	XXX		Continuous	Recorded
pH	SAMPLE MEASUREMENT				7.85		7.85				
	PERMIT REQUIREMENT	XXX	XXX	XXX	6.0 Inst Min	XXX	9.0 IMAX	S.U.		1/month	Grab
Total Suspended Solids	SAMPLE MEASUREMENT					< 4.0					
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	10.0 Avg Mo	XXX	mg/L		1/month	Grab
Aluminum, Total	SAMPLE MEASUREMENT					< 0.100					
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	0.75 Daily Max	XXX	mg/L		1/month	Grab
Chromium, Hexavalent	SAMPLE MEASUREMENT					0.00032					
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	0.0152 Avg Mo	XXX	mg/L		1/month	Grab

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).	 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE		DATE		
Jonathan Harris, BEC by direction of BRAC PMO, and in my official capacity			215	897 4915	2024	01	23
TYPED OR PRINTED			AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS (Report all violations on the "Non-Compliance Reporting Form"): Per the permit section C(E)(1), the dieldrin quantitation limit is 0.05 micrograms per liter. For the purpose of compliance, a statistical value report on the DMR that is less than the QL(s) (i.e., "non-detect") will be considered to be in compliance.



**COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)**

Facility Type: **Minor**

PERMITTEE NAME/ADDRESS

NAME Naval Facilities Mid Atlantic

ADDRESS 4911 South Broad Street
Philadelphia, PA 19112

FACILITY Willow Grove NASJRB

LOCATION Site 5
Montgomery County

WATERSHED 3-J

0920203
PERMIT NUMBER

002
OUTFALL NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY
2023	12	1		2023	12	31

Reporting Frequency: Monthly

DMR Effective From: February 1, 2021

DMR Effective To: January 31, 2026

Permit Expires: January 31, 2026

Permit Application Due: August 4, 2025

Check Here if No Discharge

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Iron, Dissolved	SAMPLE MEASUREMENT					<0.10					
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	0.439 Avg Mo	XXX	mg/L		1/month	Grab
Iron, Total	SAMPLE MEASUREMENT					< 0.10					
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	Report Avg Mo	Report IMAX	mg/L		1/month	Grab
Lead, Total	SAMPLE MEASUREMENT					< 0.001					
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	Report Avg Mo	Report IMAX	mg/L		1/month	Grab
Zinc, Total	SAMPLE MEASUREMENT					< 0.010					
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	Report Avg Mo	Report IMAX	mg/L		1/month	Grab
1,2-Dichloroethane	SAMPLE MEASUREMENT					< 0.00050					
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	Report Avg Mo	Report IMAX	mg/L		1/month	Grab

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).	TELEPHONE		DATE		
Jonathan Harris, BEC by direction of BRAC PMO, and in my official capacity		215	897 4915	2024	01	23
TYPED OR PRINTED		AREA CODE	NUMBER	YEAR	MO	DAY

Jonathan Harris
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

COMMENTS (Report all violations on the "Non-Compliance Reporting Form"): Per the permit section C(E)(1), the dieldrin quantitation limit is 0.05 micrograms per liter. For the purpose of compliance, a statistical value report on the DMR that is less than the QL(s) (i.e., "non-detect") will be considered to be in compliance.



**COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)**

Facility Type: **Minor**

PERMITTEE NAME/ADDRESS

NAME Naval Facilities Mid Atlantic

ADDRESS 4911 South Broad Street
Philadelphia, PA 19112

FACILITY Willow Grove NASJRB

LOCATION Site 5
Montgomery County

WATERSHED 3-J

0920203
PERMIT NUMBER

002
OUTFALL NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY
2023	12	1		2023	12	31

Reporting Frequency: Monthly

DMR Effective From: February 1, 2021

DMR Effective To: January 31, 2026

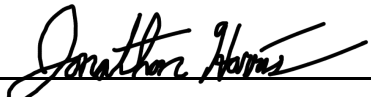
Permit Expires: January 31, 2026

Permit Application Due: August 4, 2025

Check Here if No Discharge

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Bis(2-Ethylhexyl)Phthalate	SAMPLE MEASUREMENT					< 0.003					
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	Report Avg Mo	Report IMAX	mg/L		1/month	Grab
Dieldrin	SAMPLE MEASUREMENT					< 0.03					
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	0.0003 Avg Mo	XXX	ug/L		1/month	Grab
1,1-Dichloroethylene	SAMPLE MEASUREMENT					0.00220					
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	Report Avg Mo	Report IMAX	mg/L		1/month	Grab
Trichloroethylene	SAMPLE MEASUREMENT					< 0.00050					
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	Report Avg Mo	Report IMAX	mg/L		1/month	Grab
PFOA	SAMPLE MEASUREMENT					< 0.00468					
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	XXX	Report IMAX	ug/L		1/month	Grab

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).	 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE		DATE		
Jonathan Harris, BEC by direction of BRAC PMO, and in my official capacity			215	897 4915	2024	01	23
TYPED OR PRINTED			AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS (Report all violations on the "Non-Compliance Reporting Form"): Per the permit section C(E)(1), the dieldrin quantitation limit is 0.05 micrograms per liter. For the purpose of compliance, a statistical value report on the DMR that is less than the QL(s) (i.e., "non-detect") will be considered to be in compliance.



**COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)**

Facility Type: **Minor**

PERMITTEE NAME/ADDRESS

NAME Naval Facilities Mid Atlantic

ADDRESS 4911 South Broad Street
Philadelphia, PA 19112

FACILITY Willow Grove NASJRB

LOCATION Site 5
Montgomery County

WATERSHED 3-J

0920203
PERMIT NUMBER

002
OUTFALL NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY
2023	12	1		2023	12	31

Reporting Frequency: Monthly

DMR Effective From: February 1, 2021

DMR Effective To: January 31, 2026

Permit Expires: January 31, 2026

Permit Application Due: August 4, 2025

Check Here if No Discharge

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
PFOS	SAMPLE MEASUREMENT					< 0.00468					
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	XXX	Report IMAX	ug/L		1/month	Grab
Total PFOA and PFOS	SAMPLE MEASUREMENT					< 0.00468					
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	0.07 Avg Mo	XXX	ug/L		1/month	Calculation

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).	TELEPHONE		DATE			
Jonathan Harris, BEC by direction of BRAC PMO, and in my official capacity			215	897 4915	2024	01	23
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS (Report all violations on the "Non-Compliance Reporting Form"): Per the permit section C(E)(1), the dieldrin quantitation limit is 0.05 micrograms per liter. For the purpose of compliance, a statistical value report on the DMR that is less than the QL(s) (i.e., "non-detect") will be considered to be in compliance.