



PHIL-27667

October 28, 2022

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 - September 1 to September 30, 2022  
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 the reporting period, 602,223 gallons of water were discharged between September 1, 2022 and September 30, 2022 to Outfall 2. The total volume of groundwater treated by the Site 5 pilot system since startup through September 27, 2022 is 6,380,411 gallons. Sampling for permit parameters was conducted on September 6, 2022 and September 27, 2022.

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

TM/nfs

Attachments:

Discharge Monitoring Report – September 1 to September 30, 2022

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



**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

<b>0920203</b>
PERMIT NUMBER


<b>002</b>
OUTFALL NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY
<b>2022</b>	<b>9</b>	<b>1</b>	TO	<b>2022</b>	<b>9</b>	<b>30</b>

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	0.0258									
	PERMIT REQUIREMENT	Report Avg Mo	XXX	MGD	XXX	XXX	XXX	XXX		Continuous	Recorded
pH	SAMPLE MEASUREMENT				8.45		8.47				
	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					< 0.00003					
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	0.0152 Avg Mo	XXX	mg/L		1/month	Grab
Iron, Dissolved	SAMPLE MEASUREMENT					< 0.100					
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	0.439 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		
Dawn M. DeFreitas, BEC by direction of BRAC PMO, and in my official capacity			215	897-4903	2022	10	28
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
2022	9	1		2022	9	30

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, Total	SAMPLE MEASUREMENT					< 0.100					
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	Report Avg Mo	Report IMAX	mg/L		1/month	Grab
Lead, Total	SAMPLE MEASUREMENT					< 0.003					
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	Report Avg Mo	Report IMAX	mg/L		1/month	Grab
Zinc, Total	SAMPLE MEASUREMENT					<0.02					
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	Report Avg Mo	Report IMAX	mg/L		1/month	Grab
1,2-Dichloroethane	SAMPLE MEASUREMENT					< 0.0005					
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	Report Avg Mo	Report IMAX	mg/L		1/month	Grab
Bis(2-Ethylhexyl)Phthalate	SAMPLE MEASUREMENT					<0.008					
	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

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		
TYPED OR PRINTED			215	897-4903	2022	10	28
		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.



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
2022	9	1		2022	9	30

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			
1,1-Dichloroethylene	SAMPLE MEASUREMENT					< 0.0005					
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	Report Avg Mo	Report IMAX	mg/L		1/month	Grab
Trichloroethylene	SAMPLE MEASUREMENT					< 0.0005					
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	Report Avg Mo	Report IMAX	mg/L		1/month	Grab
PFOA	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	XXX	Report IMAX	ug/L		1/month	Grab
PFOS	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	XXX	Report IMAX	ug/L		1/month	Grab
Total PFOA and PFOS	SAMPLE MEASUREMENT					< 0.00460					
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	0.07 Avg Mo	XXX	ug/L		1/month	Calculation

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER Dawn M. DeFreitas, BEC by direction of BRAC PMO, and in my official capacity	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		
			215	897-4903	2022	10	28
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.