



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

Report Title: Clean Water Act Compliance Inspection Report
Inspection Date(s): 11/29/2022 to 12/1/2022
Regulatory Program(s): National Pollutant Discharge Elimination System (NPDES)
Type of Activity: Municipal Separate Storm Sewer System
Facility Name: Naval Support Facility Indian Head (NSFIH)
Permittee(s): Naval Support Facility Indian Head (NSFIH)
Facility Operator: Naval Support Facility Indian Head (NSFIH)
Permittee Address: 3972 Ward Road, Suite 101, Indian Head, Maryland 20640-5157
Facility Address: 3972 Ward Road, Suite 101, Indian Head, Maryland 20640-5157
Facility Latitude: 38.596648
Facility Longitude: -77.179034
County/Parish: Charles County
Permit No: MDR055501
NAICS Code: 924110
SIC: 9511
Unique Project #: 3E23WN017A

Facility Representative(s): William Fabey
Email: william.b.fabey.civ@us.navy.mil
Point of Contact ☒

EPA Inspectors:
Kaitlin McLaughlin – EPA Region III
Phone: (215) 814-2393 Email: McLaughlin.Kaitlin@epa.gov
Michael Greenwald – EPA Region III
Phone: (215) 814-2398 Email: Greenwald.Michael@epa.gov

State/Local Inspectors (see report body for list of additional inspectors):
Greg Kolarik
Email: greg.kolarik@maryland.gov

Report Preparer *Kaitlin McLaughlin* 2/2/2023
Signature/Date Kaitlin McLaughlin, Enforcement Officer
NPDES Enforcement Section (3ED32) Date

Supervisor
Signature/Date Mark Zolandz, Section Chief
NPDES Enforcement Section (3ED32) Date

Unique Project#: 3E23WN017A

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I. Introduction

On November 29, 2022, an inspection team composed of staff from the U.S. Environmental Protection Agency (“EPA”) Region III (hereinafter, “EPA Inspection Team”) conducted a Municipal Separate Storm Sewer System (“MS4”) inspection of the Naval Support Facility Indian Head (“NSFIH” or “facility”). The purpose of the inspection was to observe compliance with the Clean Water Act (“CWA”) and to verify compliance with the facility’s National Pollutant Discharge Elimination System (“NPDES”) Permit No. MDR055501 (hereinafter, the “Permit”) and applicable State and Federal regulations.

A. Inspection Opening Conference

The EPA Inspection Team arrived at the facility at approximately 8:30 AM. Representatives from the Maryland Department of the Environment (MDE) were in attendance. The following inspectors and representatives were present for the inspection:

Table 1: Inspection Attendee List

Name	Affiliation	Telephone	Email
EPA Region III Inspectors			
Kaitlin McLaughlin	EPA Region III	215-814-2393	McLaughlin.Kaitlin@epa.gov
Michael Greenwald	EPA Region III	215-814-2398	Greenwald.Michael@epa.gov
Facility Representatives			
Linsey De La Rosa	NSFIH EV	956-975-7415	linsey.delarose.civ@us.navy.mil
Hayden Dermanelian	NSWC	703-587-1681	hayden.dermanelian.civ@us.navy.mil
William Fabey	NSFIH EV	301-997-3776	william.b.fabey.civ@us.navy.mil
Chris Goddard	NSFIH EV	240-298-4376	christopher.j.goddard2.civ@us.navy.mil
Tara Meadows	NSFIH EV	202-718-0665	tara.l.meadows2.civ@us.navy.mil
Kenneth Robitaille	NSFIH EV	202-718-0682	kenneth.r.robitalle.civ@us.navy.mil
Diana Rose	NSFIH EV	301-744-2267	diana.l.rose.civ@us.navy.mil
Victoria Waranoski	NAVFAC EV	202-685-8056	victoria.m.waranoski.civ@us.navy.mil
State or County Representatives			
Greg Kolarik	MDE	443-532-9020	greg.kolarik@maryland.gov

Kaitlin McLaughlin and Michael Greenwald displayed their credentials to the facility representatives at the outset of the inspection, and explained the purpose of the inspection was to observe compliance with its Permit. A copy of the Permit is provided in [Attachment 1](#).

B. Weather and Precipitation Conditions

The closest National Oceanic and Atmospheric Administration (“NOAA”) National Weather Service precipitation data for the date of the inspection and 5 days prior are provided in Table 2 below.

Table 2. Precipitation Data

Station Name	Date	Precipitation Amount (inches) ¹
ALEXANDRIA 6.6 WNW, VA US US1VAFX0081	11/24/22	0.00
ALEXANDRIA 6.6 WNW, VA US US1VAFX0081	11/25/22	0.11

¹ Source: NOAA National Climatic Data Center (<http://www.ncdc.noaa.gov/>).

ALEXANDRIA 6.6 WNW, VA US US1VAFX0081	11/26/22	0.04
ALEXANDRIA 6.6 WNW, VA US US1VAFX0081	11/27/22	0.00
ALEXANDRIA 6.6 WNW, VA US US1VAFX0081	11/28/22	0.19
ALEXANDRIA 6.6 WNW, VA US US1VAFX0081	11/29/22	0.00
ALEXANDRIA 6.6 WNW, VA US US1VAFX0081	11/30/22	0.21
ALEXANDRIA 6.6 WNW, VA US US1VAFX0081	12/1/22	0.08

II. Facility Activity

NSFIH is a naval base which consists of various industrial activities including explosive and propellant manufacturing, research, development, assembly, and testing. The facility discharges industrial wastewater, stormwater, and various process wastewaters.

The facility implements an MS4 program and is regulated under the Permit, which became effective on October 31, 2018 and expires on October 30, 2023. The facility discharges through various outfalls to the Potomac River and the Mattawoman Creek, both designated as Use II under the Code of Maryland Regulations (COMAR) 26.08.02.02 protected for water contact recreation, fishing, aquatic life, wildlife, and support of shellfish harvesting (non-shellfish harvesting) water and is protected for estuarine and marine aquatic life.

The inspection included discussions with MS4 staff, file reviews, and field visits. These inspection activities were conducted to review the facility's implementation of the Minimum Control Measures (MCMs), which are required to be implemented by the Permit. The facility's site-specific plan is documented in their Storm Water Pollution Prevention Plan (SWPPP) ([Attachment 3](#)). A certification statement is included with the SWPPP that was signed by the facility on March 29, 2022.

On November 29, 2022, the EPA Inspection Team conducted on-site interviews with the facility's staff regarding the implementation of the MCMs.

On November 30, 2022, the EPA Inspection Team conducted field visits, including: four (4) micro-bioretenment Best Management Practices (BMPs); the facility's "burn point" area and associated BMPs; Stormwater (SW) Outfall 12; a vehicle wash rack area; a transportation maintenance area; two (2) construction sites (the safety building parking lot site and the P-190 site); SW Outfall 17; site 1731 which included a salt dome and dumpster; SW Outfall 77, SW Outfall 87.

On December 1, 2022, The EPA Inspection Team conducted additional on-site interviews and reviewed a portion of the facility's records. Additional records were reviewed offsite.

Observations based on both the offsite compliance review and the field visits are documented in the sections below.

III. Observations

The inspection observations below are made pursuant to the requirements of the Permit. Photographs were taken during the inspection by a facility representative Linsey De La Rosa and are provided in Attachment 2. The Photograph Log referenced throughout this inspection report is designated as Controlled Unclassified Information (CUI).

MCMs 1 and 2 (Public or Personnel Education and Outreach, Public or Personnel Involvement and Participation)

The facility representative(s) that implements the MS4 program stated that the facility provides education and outreach opportunities to staff, contractors, and base personnel through emails. Emails are prepared by the facility staff and are distributed by the Public Affairs Office. The facility also posts some educational content and opportunities on the South Potomac's social media page.

Educational content distributed includes information on rain barrels, retention basins, trench drains, outreach events, good housekeeping tips, and other stormwater related topics.

Opportunities in the last year are summarized in the Fiscal Year (FY) 2022 Annual Report (Attachment 4), which was submitted on October 7, 2022. These opportunities include:

- A beach cleanup, which has an annual goal of a minimum of 200 yards. The beach cleanup event was joined by the Allison Ferguson foundation. ~3740 pounds of trash and debris were removed at cleanup events in FY 2022.
- Stenciling done of storm drains at the facility's youth center. Seven stencils were created during FY 2022.
- Tree plantings. Nine trees were planted in FY 2022.
- Public and/or Staff meetings. About eight meetings were listed as occurring in FY 2022.

The Public Affairs Office also serves as the primary contact for receiving complaints. The facility noted on their 2022 Annual Report that no complaints had been received.

MCM 3 (Illicit Discharge Detection and Elimination [IDDE])

The facility has 111 stormwater outfalls. The facility representative indicated that 20% of the total stormwater outfalls are inspected yearly. The facility inspects new outfalls each year so that the entire universe is inspected in a 5-year period.

Eight of the stormwater outfalls have been designated as priority outfalls based on their location. The priority outfalls are inspected on a yearly basis. High priority outfalls are designated based on the location of the outfalls.

Additional contractor assistance is utilized every five years for illicit discharge surveys, if funding is provided.

The facility representative stated that there is a process for inspecting outfalls for IDDE. If no dry weather flow is observed, the representative takes a picture and documents the outfall condition. If flow is observed, sampling will be conducted. The facility representative stated that they collect additional information including temperature, pH, ammonia, nitrate, and nitrite. They will also perform a check for foam, sheen, flow rate, and color clarity, among other conditions. If flow is observed, the facility representative will trace the flow upstream of the discharge to determine where the source.

If flow is identified due to a fault in a water line, the facility representative will contact the Utility Branch Manager at Utilities and Energy Management (UEM) to perform follow-up corrections.

The facility's FY 2022 Annual Report indicated that 57 outfalls were screened for dry weather flows, and of those screened, 22 were observed to have a dry weather flow. Zero of the 22 dry weather flows observed were due to illicit discharges after conducting source tracing.

The FY 2022 Annual Report indicated that NSFIH Public Works Director addresses erosion, debris buildup, sediment accumulation, and blockage problems. Work tickets are placed by base employees for areas of concern.

MCM 4 (Construction Site Stormwater Runoff Control)

The facility conducts a minimum of monthly oversight inspections for active construction sites. If needed, the facility representative will inspect more often. For permitted sites, for all sites the contractors are the responsible party to ensure compliance inspections are performed. For unpermitted sites, such as those that are under an acre, the facility representative will perform inspections during regular drive-arounds and re-iterate to developers the requirements of COMAR.

Complaints regarding Erosion and Sediment Control (E&S) are referred by base personnel to the Public Affairs Office. The FY 2022 Annual Report indicated that no complaints were received for "Construction Site Stormwater Runoff Control".

For enforcement, the facility representative would refer cases through the chain of command, or involve MDE.

The EPA Inspection Team visited two construction sites. The first site visited was a safety building parking lot in proximity to building 482 (Photograph Log, Page 95). This lot was under the threshold for requiring an NPDES permit. The facility representative stated that he performs monthly oversight inspections. A construction site representative stated that he does daily reports (documenting the site conditions).

The second construction site visited was the P-190 Advanced Energetics Research Lab. The NPDES permit No. for the site is MDRCIF078, and the approved plan numbers are 18-SF-0175. The total site area is 5 acres, with a disturbed acreage of 3.45 acres. The construction permit was transferred to the contractor. The site was in the initial phase and clearing was

being conducted. The EPA Inspection Team walked the perimeter of the site, and observed silt fence (Photograph Log, Page 96 and Page 100), outfall structures (Photograph Log, Page 97), a construction entrance (Photograph Log, Page 98), and a sand filtration BMP (Photograph Log, Page 99). During the inspection, the EPA Inspection Team also reviewed site records, including the most recent inspection report, which was conducted by the construction site representative on 11/28/22 and was for a post-storm event. The construction site representative stated that weekly inspections are conducted, and during or after rain events.

MCM 5 (Post Construction Stormwater Management)

The FY 2022 Annual Report lists the total number of BMPs as 67 (59 at Cornwallis Neck, and 8 at Stump Neck, with one additional BMP that is shared and counted for both) on Page D-19. In Table B.1.a of the report, there are 71 BMPs and 18 future BMPs listed. The facility representative indicated that comprehensive annual inspections are performed for BMPs. Monthly inspections are also conducted for trash. Table B.1.a includes the last date of inspections of these BMPs.

The facility representative stated that structural issues can be addressed by submitting tickets to the NAVFAQ South Potomac service desk. Employees create service tickets. The service desk will track tickets. The facility representative verifies completion of repairs/corrections through his routine inspections. The facility representative also will communicate issues in emails to relevant staff or management.

Observation 1. The SWPPP provided by the facility indicates in Appendix G that 111 items were identified as having deficiencies. These items include BMPs as well as stormwater structures. Of the 111 line items identified, only three of the identified line items were confirmed to be corrected by the facility representatives. This included item 1 (the burn point), item 38 (damaged culvert), and item 98 (a ground subsidence).

The EPA Inspection Team visited four (4) micro-bioretenention basins that were in proximity to the facility's maintenance shop. These basins are identified as UEM 1 (Photograph Log, Page 43-45), UEM 2 (Photograph Log, Page 41-42), UEM 3 (Photograph Log, Page 39-40), and UEM 4 (Photograph Log, Page 46-47). UEM 1, UEM 2, and UEM 3 are hydraulically connected. These BMPs discharge to a vegetated area, then grass swale, and ultimately discharge to the Potomac. The facility representative indicated that the BMPs were in need of replanting and provided a record that this had previously been noted as a result of the facility's routine inspections (see Appendix G of the SWPPP for the record of repair requests).

The EPA Inspection Team visited the facility's Strauss Avenue Thermal Treatment Point (SATTP) or "burn point", which is a peninsula at the southern area of the base. At this location, there were two earthen berm BMPs observed. The berms cover portions of the peninsula. The peninsula had two points (Auxiliary Point and Main Point), with one berm surrounding the south side of the Auxiliary Point (Photograph Log, Page 55-56), and another berm surrounding portions of the Main Point (Photograph Log, Page 58-59). Inspections are

conducted of berms by the facility representative monthly, and staff at the SATTP conduct regular inspections after each burn is conducted.

Observation 2. The EPA Inspection Team observed an area on the Main Point where there was significant stormwater pooling (Photograph Log, Page 63). This was a portion of the burn point where the earthen berm was not located and there were no other BMPs in place.

The EPA Inspection team visited several stormwater outfalls, including SW Outfall 12 (Photograph Log, Page 79-80), SW Outfall 17 (Photograph Log, Page 101-103), SW Outfall 77 (Photograph Log, Page 107-112), and SW Outfall 87 (Photograph Log, Page 113-117).

The EPA Inspection Team observed Outfall 87 to have sediment laden water on the downstream outlet (Photograph Log, Page 114). The upstream inlet appeared to have collapsed (Photograph Log, Page 115). The facility representative provided an update the following day indicating that the outfall structure had been repaired (Photograph Log, Page 116-117).

Observation 3. The EPA Inspection Team observed Outfall 77 to have trees and vegetation obstructing a portion of the outfall (Photograph Log, Page 110).

MCM 6 (Pollution Prevention and Good Housekeeping)

Facility staff take web-based training related to pollution prevention and good housekeeping. Training is done through the facility's Environmental Compliance Assessment, Training, and Tracking System (ECATTS). The SWPPP team members take two trainings, including a general training and specific SWPPP related trainings. Records of training are included in the facility's SWPPP.

The facility representative stated that the web trainings are available to the whole base. The facility representative stated that the safety presentations given to base personnel also include stormwater and good housekeeping information. The SWPPP states, "The support commands are given training by NSFIH personnel concerning SWPPP policies and procedures and are responsible for the implementation of SWPPP provisions in areas under their supervision".

The SWPPP indicates that each building has a Site Spill Plan that includes procedures for prevention and response procedure for spills. Appendix D of the SWPPP includes a spill history spreadsheet, as well as information regarding the cause.

The facility representative stated that the facility does some street sweeping. The Transportation department does inlet cleaning. In the FY 2022 Annual Report, it was indicated that approximately 800 inlets had been cleaned, and approximately 11500 debris (no units indicated) were removed. Trash and hazardous waste are noted as being removed off base, while minor debris from street sweeping and inlet cleaning may be disposed of onsite at the soil deposition site.

The EPA Inspection Team visited a vehicle wash rack area (Photograph Log, Page 93). The wash rack area included informational signage regarding cleaning procedures (Photograph Log, Page 92). Facility representatives noted that the drains in this area drain to sanitary. At the time of the inspection, the area was not being used as there were materials being stored in the wash bay.

The EPA Inspection Team also visited a maintenance facility (Photograph Log, Page 94) in proximity to the vehicle wash rack area.

The EPA Inspection Team visited the 1731 site. This site included a salt dome (Photograph Log, Page 104-105). The facility representative stated that the salt dome had been renovated approximately 1.5 years prior to the EPA inspection. Quarterly inspections are conducted by the site representative. The site also had a dumpster for metals with an informational sign (Photograph Log, Page 106). The facility representative stated that they added silt fence to the site for additional stormwater control.

IV. Records Review

EPA requested and received copies of the following documents:

- 2022 Annual Report
- One week of self-inspection reports from the P190 permitted construction site

Records pertaining to the inspection report are attached, with additional records being kept on file.

V. Closing Conference

After the site walk, the EPA Inspection Team met with the site representatives for a closing conference. The EPA Inspection Team shared preliminary observations with the site representatives. The EPA Inspection Team reiterated to the site representatives that all preliminary observations discussed were not compliance determinations. Any and all preliminary observations shared were subject to further investigation by EPA upon the additional review of records and documentation. Additional observations may be contained in this inspection report that were not identified at the time of the closing conference after EPA reviewed additional materials following the inspection.

The MS4 inspection was the third and final inspection of a three-part CWA inspection of NSFIH. At the conclusion of the MS4 inspection, the EPA Inspection Team met with site representatives for a comprehensive closing conference. The EPA Inspection Team shared preliminary observations with the site representatives and reiterated the above information.

The final closing conference concluded at approximately 3:00 PM on December 1, 2022.

VI. List of Attachments

Attachment 1. NPDES Permit

- Attachment 2. Photograph Log
- Attachment 3. SWPPP
- Attachment 4. FY 2022 Annual Report