Stormwater Pollution Prevention Plan

Naval Base Kitsap Bangor
May 2021

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Naval Base Kitsap Bangor
May 2021

Prepared by

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_____

(Signature) (Date)

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NAVAL BASE KITSAP BANGOR SWPPP 2021
RECORD OF REVIEW AND AMENDMENTS

All reviews and amendments to this plan shall be summarized below.

Date	Description of the Modification	Name	Signature
May 2021	Updated industrial facilities and stormwater outfalls lists. Summarized facility descriptions in table format. Revised the facility inspection reports and outfall visual observation logs to comply with 2021 MSGP. Revised plan layout to conform with the EPA's SWPPP template for consistency with the 2021 MSGP.	C. Jorgensen	

Certification and Signature

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated 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.

_____

(Signature) (Date)

R.G. RHINEHART
Captain, U.S. Navy
Commanding Officer, Naval Base Kitsap
120 South Dewey Street
Bremerton, WA 98314

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APPENDICES

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µg/L ..... *Microgram per Liter*
AST ..... *Aboveground Storage Tank*
BMP ..... *Best Management Practice*
BOD ..... *Biochemical Oxygen Demand*
BOSC ..... *Base Operating Support Contract*
$CaCO_3$ ..... *Calcium Carbonate*
CDX ..... *Central Data Exchange*
CERCLA ..... *Comprehensive Environmental Response, Compensation and Liability Act*
cfu ..... *Colony Forming Units*
CGP ..... *Construction General Permit*
CMA ..... *Calcium Magnesium Acetate*
CWA ..... *Clean Water Act*
DB ..... *Drainage Basin*
DMR ..... *Discharge Monitoring Report*
EHW ..... *Explosive Handling Wharf*
ELG ..... *Effluent Limitation Guideline*
EOD ..... *Explosive Ordnance Disposal*
EPA ..... *Environmental Protection Agency*
ESA ..... *Endangered Species Act*
FLC ..... *Fleet Logistics Center Puget Sound*
HazMat ..... *Hazardous Materials*
HVAC ..... *Heating, Ventilation, and Air Conditioning*
ICP ..... *Integrated Contingency Plan*
IDDE ..... *Illicit Discharge Detection and Elimination*
IWTP ..... *Industrial Wastewater Treatment Plant*
MFD ..... *Manchester Fuel Department*
mg/L ..... *milligram per liter*
MS4 ..... *Municipal Separate Storm Sewer System*
MSGP ..... *Multi-Sector General Permit*
NAVBASE ..... *Naval Base*
NAVFAC ..... *Naval Facilities Engineering Command*
NAVMAG ..... *Naval Magazine*
ND ..... *Not Detected*
NDTIB ..... *Non-Destructive Test and Inspection Building*
NeT-MSGP ..... *NPDES eReporting Tool for MSGP*
NFT ..... *No Further Testing*
NHPA ..... *National Historic Preservation Act*
NODI ..... *No Discharge*
NOI ..... *Notice of Intent*
NPDES ..... *National Pollutant Discharge Elimination System*
NRC ..... *National Response Center*
NUWC ..... *Naval Undersea Warfare Center*
OF ..... *Outfall*
POL ..... *Petroleum, Oils, and Lubricants*
PSNS & IMF ..... *Puget Sound Naval Shipyard and Intermediate Maintenance Facility*
RCRA ..... *Resource Conservation and Recovery Act*
SOD ..... *Ship's Overboard Discharge*

SPCC.....*Spill Prevention, Control, and Countermeasures*
SRSS.....*Surface Rescue Swimmer School*
SUBASE.....*Submarine Base*
SUBSAT.....*Submarine Supply Assistance Team*
SWFPAC.....*Strategic Weapons Facility Pacific*
SWMP.....*Stormwater Management Program*
SWPPP.....*Stormwater Pollution Prevention Plan*
SWS.....*Strategic Weapons System*
TIRIS.....*Technical Item Rapid Issue Storage*
TMDL.....*Total Maximum Daily Load*
TPU.....*Transient Personnel Unit*
TSS.....*Total Suspended Solids*
TTF.....*Trident Training Facility*
USCG.....*U.S. Coast Guard*
UST.....*Underground Storage Tank*
WDOE.....*Washington State Department of Ecology*
WQEC.....*Weapons Quality Engineering Center*
WQI.....*Water Quality Improvement*

1 Introduction

1.1 Purpose

This Stormwater Pollution Prevention Plan (SWPPP) was prepared for Naval Base (NAVBASE) Kitsap Bangor, Washington to comply with the terms and conditions of the U. S. Environmental Protection Agency (EPA) National Pollutant Discharge Elimination Systems (NPDES) Multi-Sector General Permit (MSGP) for Stormwater Discharges Associated with Industrial Activity (2021).

1.2 Scope and Contents

This SWPPP identifies sources and potential sources of pollutants that may reasonably be expected to affect the quality of stormwater discharges associated with industrial activities at NAVBASE Kitsap Bangor; defines practices and measures for minimizing and controlling pollutants in discharges; establishes a plan for implementing the practices and measures; establishes a mechanism for ensuring implementation; and establishes a plan for evaluating effectiveness of controlling and reducing pollution of stormwater discharges.

The MSGP requires certain elements in the SWPPP for permit coverage. Table 1-1 identifies required elements, associated MSGP sections, and corresponding sections of the SWPPP where elements are addressed.

Table 1-1: Required SWPPP Elements and Corresponding Sections

Required SWPPP Element	MSGP Section	SWPPP Section(s)
Stormwater pollution prevention team	6.2.1	2.3
Site description, including activities at the facility, general location map, site map(s), and figures	6.2.2	Section 2 and 3 Figure 2-1 Appendix A
Summary of potential pollution sources	6.2.3	3
Description of control measures	6.2.4	4
Schedules and procedures	6.2.5	5
Documentation to support eligibility considerations under other federal laws	6.2.6	6
Signature requirements	6.2.7	1.3.4

This plan was developed in accordance with the EPA guidance, "Developing Your Stormwater Pollution Prevention Plan: A Guide for Industrial Operators, EPA 833-B-09-002 (June 2015)" and follows the general format provided in the EPA Industrial SWPPP Template, consistent with the 2021 MSGP.

1.3 SWPPP Management

The 2021 MSGP mandates the SWPPP availability, revision, recordkeeping and retention, and signatory requirements. A copy of the 2021 MSGP is in Appendix B.

1.3.1 Availability Requirements

This SWPPP will be kept on-site by the NAVBASE Kitsap Stormwater Program Manager and will be made available upon request to the EPA or an authorized representative.

Public access to SWPPP information is required by the 2021 MSGP Part 6.4 The NAVBASE Kitsap Bangor SWPPP is available publicly at the following link:

https://www.navfac.navy.mil/navfac_worldwide/pacific/fecs/northwest/about_us/northwest_documents/ccr.html

The publicly available SWPPP has redactions of restricted information.

1.3.2 Revision Requirements

In accordance with Section 5 of the 2021 MSGP, this SWPPP will be amended when there is a change in design, construction, operation, or maintenance of NAVBASE Kitsap Bangor facilities covered by this plan or when there is an addition of a new industrial facility that has a significant effect on the potential for discharge of pollutants. In addition, this SWPPP will be amended if it is ineffective in eliminating or significantly minimizing pollutants from the sources identified.

1.3.3 Recordkeeping and Retention Requirements

Reports, records, and documents required by the 2021 MSGP will be included in Appendix A through J of this SWPPP. Alternative recordkeeping locations (online, computer network drive, CD/DVD, etc.) should be referenced in the applicable appendix.

The Navy requires retention of this SWPPP, records of monitoring information, copies of reports required by the SWPPP, and records of data used to complete the Notice of Intent (NOI) for at least 3 years after coverage under the permit expires or is terminated.

1.3.4 Signatory Requirements

This SWPPP, including changes documenting corrective actions taken as required by 2021 MSGP Part 5.1 and including the Annual Report, Discharge Monitoring Reports (DMRs), inspection reports, and corrective action reports, must be signed and certified by the Installation Commanding Officer or by a duly authorized representative of the Commanding Officer. Detailed signatory requirements are identified in the 2021 MSGP, Appendix B, Subsection 11.

This SWPPP's Signature and Certification page is located before the Table of Contents.

1.4 Stormwater Compliance at NAVBASE Kitsap Bangor

The EPA administers NPDES permits associated with stormwater discharges from federal facilities in Washington State.

1.4.1 Compliance for Industrial Activities

Industrial facilities requesting coverage under the MSGP were first required to submit a NOI to comply with the permit by March 29, 1996. For NAVBASE Kitsap Bangor, a NOI was postmarked on November 13, 1996. NOIs were also submitted in March 2001, May 2009, January 2016, and May 2021 to obtain coverage under the reissued MSGPs.

A copy of the most recent NOI form and supporting documentation are Appendix C.

1.4.2 Compliance for Construction Activities

To comply with the construction general permit (CGP), a NOI must be submitted to EPA for any construction activities at NAVBASE Kitsap Bangor that will disturb one or more acres or will disturb smaller sites that are part of a larger common plan of development. Compliance with the CGP requires development of a construction site-specific stormwater pollution prevention plan not related to this SWPPP document. Please refer to the EPA's NPDES General Permit for Discharges from Construction Activities for additional guidance and requirements. Additionally, the Municipal Separate Storm Sewer System (MS4) permit recently issued to Naval Base Kitsap has additional requirements for new development, redevelopment, and construction site runoff control.

1.4.3 Compliance for Municipal Activities

Stormwater discharges from urbanized non-industrial areas are not covered under the MSGP unless those areas drain to outfalls that also support industrial areas. During the drafting of this SWPPP, Naval Base Kitsap was issued a Phase II municipal separate storm sewer system (MS4) permit, EPA permit WAS026646. Under the permit, the Navy must develop and implement a stormwater management program (SWMP) for covered facilities and include the following control measures: public education and outreach, public participation and involvement, illicit discharge detection and elimination, new development and redevelopment requirements, construction site runoff control, post-construction runoff control, pollution prevention, and good housekeeping. The permit may also include water quality-related requirements to address issues such as Total Maximum Daily Loads (TMDL) and to protect designated uses of receiving waterbodies.

Although MSGP and MS4 permit coverage of certain areas and activities may overlap, the programs are managed separately. This SWPPP is prepared to meet the requirements of the 2021 MSGP.

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2 Facility Description and Contact Information

2.1 Facility Information

Form 2-1: Naval Base Kitsap Bangor Facility

Facility Location and Industrial Activity(s)		
Name of Facility: Naval Base Kitsap Bangor		
Street: 7001 Finback Circle, Room E300		
City: Silverdale	**State:** WA	**Zip:** 98315-1199
County or Similar Subdivision: Kitsap		
NPDES ID (i.e., permit tracking number): WAR05F004		
Primary Industrial Activity SIC code, Sector, and Subsector (2021 MSGP, Appendix D and Part 8): SIC Code 4489, Sector Q, Subsector Q1		
Co-located Industrial Activity(s) SIC code(s), Sector(s), and Subsector(s)(2021 MSGP, Appendix D): SIC Code 5093, Sector N, Subsector N1; SIC Code [multiple], Sector P, Subsector P1 SIC Code 3731, Sector R, Subsector R1 SIC Code 3411-3499, Sector AA, Subsector AA1		
Latitude/Longitude		
Latitude: 47.69916666ºN (decimal degrees)	**Longitude:** 122.6963888ºW (decimal degrees)	
Method for determining latitude/longitude (check one)		
☐ USGS topographic map (specify scale:_____)		☐ GPS
☒ Other (please specify):_____		
Horizontal Reference Datum (check one)		
☐ NAD 27 ☐ NAD 83 ☒ WGS 84		
Native American tribal lands or Federal Operator status		
Is the facility located on Native American tribal lands? ☐ Yes ☒ No **If yes, name of reservation, or if not part of a reservation, indicate "not applicable."** _____		
Are you considered a "Federal Operator" of the facility? **Federal Operator** – An entity that meets the definition of "operator" in this permit and is either a department, agency, or instrumentality of the executive, legislative, or judicial branches of the Federal government of the United States or another entity, such as a private contractor, operating for any such department, agency, or instrumentality. ☒ Yes ☐ No		
Estimated area of industrial activity at site exposed to stormwater: 150 (acres)		

Discharge Information
Does this facility discharge stormwater into a MS4? ☒ Yes ☐ No If yes, name of MS4 operator: Naval Base Kitsap, permit WAS026646
Name(s) of surface water(s) that receive stormwater from your facility: Clear Creek; Unnamed Creek (Tributary to Clear Creek); Hood Canal (North); Devil's Hole
Does this facility discharge industrial stormwater directly into any segment of an "impaired water" (see definition in 2021 MSGP, Appendix A)? ☒ Yes ☐ No If yes, identify name of the impaired water(s) and segment(s), if applicable, and identify the pollutant(s) causing the impairment(s): Clear Creek (dissolved oxygen, fecal coliform); Unnamed tributary to Clear Creek (fecal coliform); Hood Canal North (dissolved oxygen, sediment) Which of the identified pollutants may be present in industrial stormwater discharges from this facility? Sediment Has a TMDL been completed for any of the identified pollutants? ☒ Yes ☐ No If yes, please list the TMDL pollutants: Sinclair and Dyes Inlet Fecal Coliform TMDL/42347/Fecal Coliform
Does this facility discharge industrial stormwater into a receiving water designated as a Tier 2, Tier 2.5, or Tier 3 water (see definitions in 2015 MSGP, Appendix A)? ☐ Yes ☒ No
Are any of your stormwater discharges subject to effluent limitation guidelines (ELGs)(2021 MSGP Table 1-1)? ☐ Yes ☒ No If Yes, which guidelines apply? _____

2.2 Contact Information/Responsible Parties

Facility Operator
Name: Naval Base Kitsap Bangor
Address: 7001 Finback Circle, Room E300
Silverdale, WA 98315-1199

Operator/SWPPP Primary Point of Contact
Office: Naval Base Kitsap Environmental
Title: Stormwater Media Manager
Phone: (360) 315-1992

Alternate SWPPP Point of Contact
Office: Naval Base Kitsap Environmental
Title: Installation Environmental Program Director
Phone: (360) 315-5411

2.3 Stormwater Pollution Prevention Team

The stormwater pollution prevention team titles and designated responsibilities are in Table 2-1. The team is responsible for overseeing the development of this SWPPP and any modifications to it, implementing and maintaining control measures, and taking corrective actions when necessary to address permit violations or to improve the performance of control measures. Team members must have ready access to applicable portions of the 2021 MSGP, the most updated copy of the SWPPP, and other relevant documents or information that must be kept with the SWPPP.

Table 2-1: Stormwater Pollution Prevention Team

Title/Position	Individual Responsibility
Commanding Officer	Ensure that stormwater permit requirements, including those associated with the SWPPP, are met.
Public Works Officer	Maintain and inspect stormwater equipment (conveyance system, oil/water separators, etc.) and record/track status. Program funding for routine inspection and maintenance of stormwater system and associated structural stormwater pollution control facilities.
Installation Environmental Program Director	Program funding for compliance with SWPPP and stormwater permit requirements, including upgrades and corrective actions, as required. Submit Discharge Monitoring Reports. Serve as a conduit to other entities at the installation.
Stormwater Manager	Implement and coordinate overall SWPPP program. Ensure best management practices (BMPs) are implemented. Visually examine and monitor outfalls (discharges) and submit reports. Complete facility visual inspections and record results. Coordinate updates to the SWPPP. Ensure annual reports are prepared and submitted. Complete and document employee training.
Oil and Hazardous Substance Spill Manager	Track and report spills.
Naval Facilities Engineering Command (NAVFAC) Northwest Stormwater Media Manager	Provide SWPPP updates upon request, assist with annual report preparation, and provide regulatory and technical assistance as requested by the Installation Environmental Program Director.

2.4 Site Description

The site description of NAVBASE Kitsap Bangor provides a framework for understanding its surface hydrologic features. It includes the installation mission and location, climate, and stormwater discharge.

2.4.1 Mission and Location

NAVBASE Kitsap Bangor, Bremerton, and Keyport installations; Fleet Logistics Center (FLC) Puget Sound, Manchester Fuel Department (MFD); and Naval Magazine (NAVMAG) Indian Island employs military and civilian personnel and provides housing units for on-base occupants.

NAVBASE Kitsap's mission is to serve as the home base for the Navy's fleet throughout West Puget Sound and to provide base operating services for homeported vessels. In addition, NAVBASE Kitsap provides services, programs, and facilities to meet the needs of the hosted commands, tenant activities, crew members, and civilian employees.

NAVBASE Kitsap Bangor is located on the eastern shore of Hood Canal, near the town of Silverdale in Kitsap County, Washington (see Figure 2-1, Location Map). NAVBASE Kitsap Bangor was commissioned in February 1977. Extensive environmental impact studies were conducted to establish baseline conditions prior to the start of construction.

2.4.2 Climate

NAVBASE Kitsap Bangor has a temperate maritime climate with generally mild temperatures and moderate to heavy precipitation.

The Western Regional Climate Center website provides historic data from the weather station located in Bremerton, Washington. Table 2-2 provides annual average precipitation information for the period of May 1, 1899, to June 10, 2016. The source information is available at the following website link:

http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?wa0872

Table 2-2: Annual Precipitation Information

Month	Average Maximum Temperature (ºF)	Average Minimum Temperature (ºF)	Average Total Precipitation (inch)	Average Total Snowfall (inch)
Jan	45.1	34.5	7.24	3.6
Feb	49.3	35.3	5.30	1.1
Mar	53.3	37.5	4.66	0.5
Apr	58.7	40.6	2.73	0.0
May	64.8	45.8	1.83	0.0
Jun	69.6	50.4	1.44	0.0
Jul	74.9	53.7	0.73	0.0
Aug	75.3	53.8	0.86	0.0
Sep	70.3	50.1	1.65	0.0
Oct	60.5	44.2	3.99	0.0
Nov	50.7	38.5	7.28	0.7
Dec	45.6	35.3	7.65	1.7
Annual	59.8	43.3	45.36	7.6

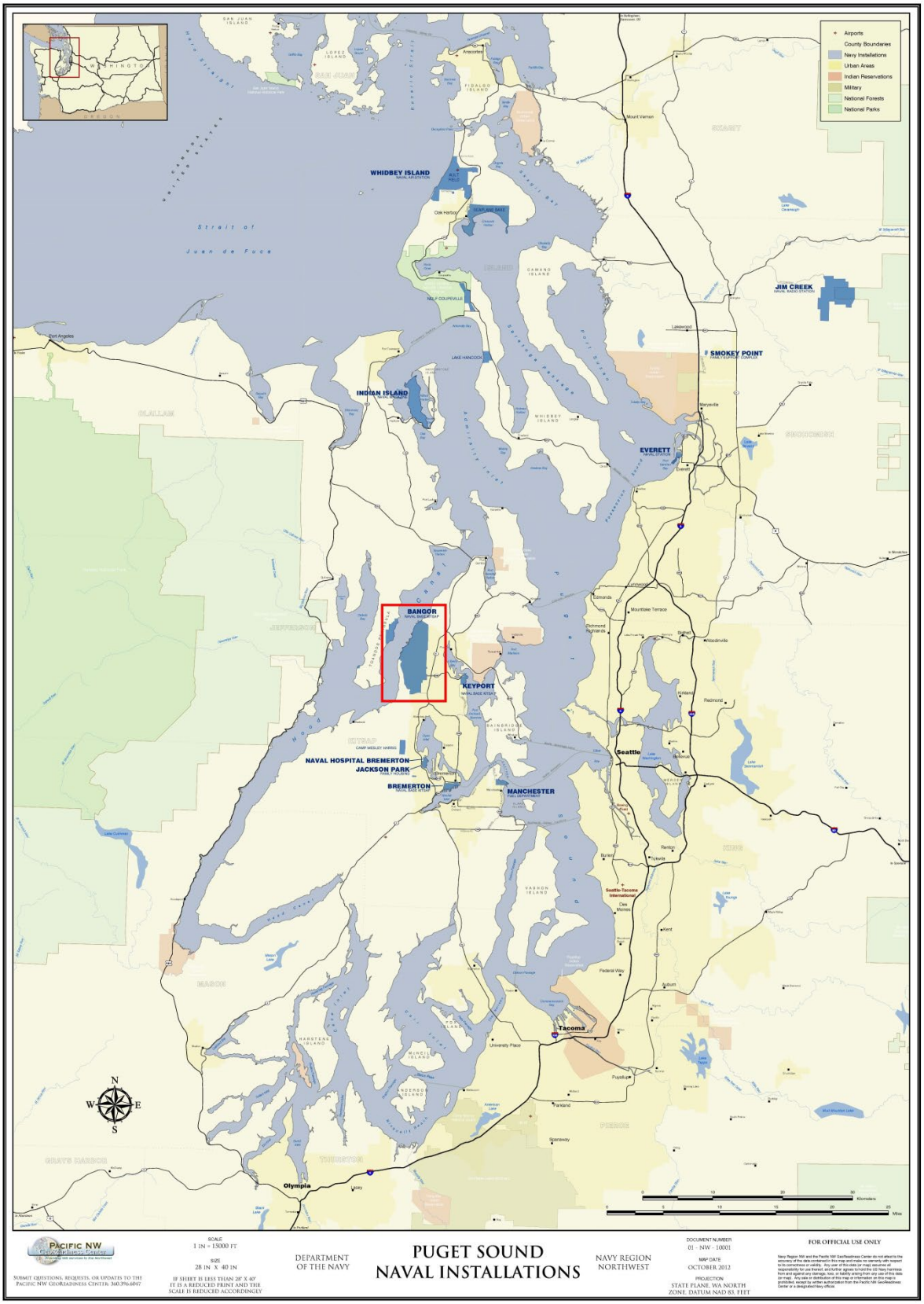

Figure 2-1: Location Map

2.4.3 Topography

NAVBASE Kitsap Bangor is characterized by flat-topped ridges, ranging in elevation from 300 to 500 feet above mean sea level, with steep flanks sloping on the west side of the base down to Hood Canal. The base comprises a 6,785-acre reserve with approximately 4,111 acres of evergreen forests and with some small meadows and a number of streams and lakes. The base has approximately 4.5 miles of shoreline. Natural surface drainage flows through six small streams draining to Hood Canal and two small streams exiting the base to the southeast and discharging to Dyes Inlet via Clear Creek. Drainage areas for the streams range from 0.03 to 3.68 square miles. Three of the streams pass through small lakes and marshes, including Devil's Hole Lake, Cattail Estuary, and Hunter's Marsh before reaching Hood Canal. Some areas of NAVBASE Kitsap Bangor are drained by overland flow (sheet flow) directly into Hood Canal.

2.4.4 Stormwater Conveyances, Drainage Basins, and Outfalls

2.4.4.1 Stormwater Drainage Facilities

Stormwater drainage facilities at NAVBASE Kitsap Bangor include natural drainage conveyance systems (e.g., streams, creeks, and ditches), constructed drainage conveyance systems (e.g., swales, open channels, and culverts), and underground storm drain systems (e.g., catch basin inlets, manholes, and outlets). Retention ponds, media filter vaults, filterras, and oil/water separators are also incorporated into the storm drain system.

Stormwater runoff from the western portion of the base either infiltrates the ground or flows westward into Hood Canal. Stormwater runoff from the eastern half of the base either infiltrates the ground or flows eastward off the base. Flow off base is conveyed by either overland flow or within streams, creeks, and underground drain system outfalls. Much of the surface water discharges are intercepted by retention ponds prior to discharge. Retention ponds include:

- Trident Lakes
- Industrial Area Retention Pond (Facility 1043)
- Delta Pier Retention Pond
- Trident Refit Facility (TRF) area Retention Pond
- Explosive Handling Wharf (EHW) Retention Pond
- Transient Personnel Unit (TPU) Parking Lot Pond
- West Family Housing Pond
- Corner of Sturgeon and Escolar
- Corner of Escolar and Golet
- Building 7125 Pond
- Building 7111 Ponds (two)

The retention ponds provide stormwater sedimentation and limited attenuation of conventional pollutants.

2.4.4.2 Drainage Basins and Outfalls

Approximately 35 outfalls (OF) and potential discharge locations within 22 drainage basins (DB) have been identified at NAVBASE Kitsap Bangor. A number of drainage basins contain industrial areas that drain to sub-basins where the topography limits stormwater runoff from reaching the basin outfall. Stormwater also discharges from several facilities via sheet flow into Hood Canal. Table 2-3 provides a list of drainage basins and identifies associated outfalls, whether industrial areas discharge to listed outfalls, outfall locations, receiving waterbodies, drainage basin areas, and a percent of impervious cover within the basins.

Table 2-3: Drainage Basin Summary

Drainage Basin	Outfall Number	Industrial Area(s) Discharging to Outfall	Outfall Location	Receiving Water	Drainage Area (acres)	Impervious Cover (%)
DB1	OF1	Yes	East of Trigger Avenue Gate	Unnamed Creek	413	25
DB2	OF2	Yes	South of Sculpin Road	Clear Creek	1,500	30
DB3	OF3A	Yes	Detention Pond draining to Devil's Hole	Devil's Hole	11	100
DB3	OF3B	Yes	Tributary to Devil's Hole	Devil's Hole	15	85
DB4	OF4	No	Hunter's Marsh	Hood Canal	505	<10
DB5	OF5	No	Cattail Estuary	Hood Canal	901	<10
DB6	OF6	No	Marginal Stream	Hood Canal	136	<10
DB7	OF7	Yes	Southwest of Service Pier	Hood Canal	16	20
DB8	OF8	Yes	Under Service Pier	Hood Canal	7	10
DB9	OF9	Yes	KB Dock Seawall	Hood Canal	4	25
DB10	OF10	Yes	Between Devil's Hole and Delta Pier	Hood Canal	7	50
DB11	OF11A	Yes	Behind new Pure Water Plant	Hood Canal	493	10
	OF11B	Yes	Between Delta Pier causeways	Hood Canal		
	OF11C	Yes	Between Delta Pier causeways	Hood Canal		
	OF11D	Yes	Between Delta Pier causeways	Hood Canal		
DB12	OF12	Yes	Explosive Handling Wharf 1	Hood Canal	23	40
DB13	OF13	No	West of Escolar Road	Hood Canal	11	20
DB14	OF14	No	Seawall East of Marginal Wharf	Hood Canal	< 1	100
DB15	OF15	No	Seawall East of Marginal Wharf	Hood Canal	< 1	100
DB16	OF16	No	Seawall East of Marginal Wharf	Hood Canal	< 1	80
DB17	OF17	No	North of Marginal Wharf	Hood Canal	2	10
DB18	OF18A	No	Drains detention basin behind Small Arms Range	None[a]	1,511	10
	OF18B	No	Drains woodlands/gravel road, SW end of base	None[a]		
	OF18C	No	Drains detention basin in West Family Housing	None[a]		
	OF18D	No	Drains Thresher Ave and Family Housing	None[a]		
DB19	OF19A	No	Drains woodlands and lower Tautog Cir.	Unnamed channel	542	<10
	OF19B	No	Drains parking lots, roads on east side of base	Unnamed channel		

Drainage Basin	Outfall Number	Industrial Area(s) Discharging to Outfall	Outfall Location	Receiving Water	Drainage Area (acres)	Impervious Cover (%)
	OF19C	No	Drains athletic field behind Bldg 1006	Clear Creek		
DB20	OF20A	No	SE corner of base; drains family housing	Unnamed channel	15	20
	OF20B	No	SE corner of base; drains family housing	Unnamed channel		
	OF20C	No	SE corner of base; drains family housing	Unnamed channel		
	OF20D	No	SE corner of base; drains family housing	Unnamed channel		
DB21	OF21	No	Northwest corner of base	Hood Canal	73	<10
DB22	OF22	No	Northwest corner of base	Nonea	338	<10

[a] Runoff infiltrates into the ground prior to reaching a receiving surface waterbody.

2.4.5 Substantially Identical Discharge Points

As indicated in Table 2-3, industrial areas at NAVBASE Kitsap Bangor discharge to 14 outfalls: OF1, OF2, OF3A, OF3B, OF7, OF8, OF9, OF10, OF11A, OF11B, OF11C, OF11D and OF12. The 2021 MSGP allows certain exceptions to quarterly visual assessment requirements (SWPPP Section 5.6.2) and benchmark, indicator, or impaired waters monitoring (SWPPP Section 5.7) for discharges from substantially identical discharge points.

Outfalls with similar general industrial activities and control measures, similar exposed materials that may significantly contribute pollutants to stormwater, and similar runoff coefficients for their drainage areas are considered substantially identical outfalls.

Two separate groups of outfalls were found to consist of substantially identical discharges. The first group of substantially identical outfalls includes OF7, OF8, OF10, OF11A, OF11B and OF11D. The second group of substantially identical outfalls consists of OF3A and OF12. The substantially identical outfall groups, industrial activities located within each drainage area, significant materials, management practices, and basin characteristics are summarized in Table 2-4.

As shown, the first group of outfalls receives runoff from facilities involved in materials storage. Materials management in the basins is similar (indoor material storage and proper containment of outdoor materials). The drainage basin served by Outfall OF7 contains a somewhat higher amount of industrial activity and will be sampled as representative of the group.

The second group of outfalls, OF3A and OF12, contain facilities that function primarily for submarine berthing and maintenance purposes. Both outfalls serve highly impervious pier areas that drain to detention ponds prior to discharge. Management practices consisting of indoor material storage and the use of flammable material lockers are similar. The drainage basin served by Outfall OF3A contains a higher level of industrial activity and will be sampled as representative of the group.

Table 2-4: Substantially Identical Outfall Groups

Group	Outfall	Industrial Activity	Significant Materials	Management Practices	Drainage Area (acres)	Relative Runoff Coefficient
1	OF7	Welding, Material Storage, Small Craft Maintenance	Metals, Flammable Materials, Oil	Materials kept indoors.	16	High
	OF8	Dry Material Storage, Welding, Material Storage	Metals, Flammable Materials, Oil	Materials kept indoors.	7	High
	OF10	Material Storage, Steam Generation	Metals, POLs	Flammable lockers. Indoor storage.	7	High
	OF11A	Material Storage, Pure Water Production	Metals, POLs	Materials kept indoors.	1	High
	OF11B	Material Storage	Metals	Materials kept under cover.	15.6	High
	OF11D	Material Storage	Metals	Materials kept under cover.	1	High
2	OF3A	Vessel Maintenance	Metals, Flammable Materials, Oil	Flammable lockers.	11	High
	OF12	Vessel Maintenance	Metals, Flammable Materials, Oil	Flammable lockers. Indoor storage.	23	High

POL: Petroleum, Oils, and Lubricants

2.4.5.1 Exceptions for Quarterly Visual Assessments

In accordance with the 2021 MSGP, when a facility has two or more substantially identical outfalls, permittees may conduct quarterly visual assessments of the discharge at one outfall and report that the results apply to the other substantially identical outfall(s) if the visual assessments rotate to each substantially identical outfall during the period of permit coverage.

2.4.5.2 Exceptions for Certain Monitoring

In accordance with the 2021 MSGP, when a facility has two or more substantially identical outfalls, permittees may collect samples of the discharge at one outfall and report that the quantitative data also applies to the other substantially identical outfall(s). Representative monitoring can be used for benchmark monitoring, impaired receiving waters monitoring, and Puget Sound Sediment Cleanup Sites monitoring, but representative monitoring does not apply to the compliance monitoring required for effluent limitations. The use of substantially identical outfalls does not apply to the removal and analysis of accumulated solids or line cleaning operations required by 2021 MSGP Section 9.10.7.2

3 Potential Pollutant Sources

Areas at NAVBASE Kitsap Bangor where industrial materials or activities are exposed to stormwater or from which allowable non-stormwater discharges originate were evaluated for inclusion in this SWPPP. For each of the industrial areas identified, this section provides a description of potential pollutants, spills and leaks, unauthorized non-stormwater discharges, salt storage, and stormwater sampling data collected during the previous permit term.

3.1 Potential Pollutants Associated with Industrial Activity

In support of the development of the initial SWPPP in 1994 and 1995, 148 individual or groups of industrial facilities at NAVBASE Kitsap Bangor were inspected. During subsequent updates, the list was reevaluated in consideration of facility changes, new construction, and changes to operations, resulting in the removal or addition of facilities to the list.

The industrial facilities at NAVBASE Kitsap Bangor are associated with one (or more) of five industrial sectors defined in the 2020 MSGP, including:

- Sector N: Scrap Recycling and Waste Recycling Facilities
- Sector P: Land Transportation and Warehousing
- Sector Q: Water Transportation
- Sector R: Ship and Boat Building and Repair Yards
- Sector AA: Fabricated Metal Products

Table 3-1 identifies the location and name of current industrial facilities at NAVBASE Kitsap Bangor, associated stormwater outfalls, and applicable industrial sectors as defined in the MSGP.

Table 3-1: Industrial Facilities, Associated Outfalls, and Applicable Permit Sectors

Drainage Basina	Outfall Impacted	Facility Number	Facility Description	Permit Sector
DB1	OF1	2800b	[redacted]	Q
DB2	OF2	1012	[redacted]	P
		1014	[redacted]	P
		1016	[redacted]	P
		1021	[redacted]	Q
		1025	[redacted]	P
		1026	[redacted]	Q
		1034	[redacted]	Q
		1038	[redacted]	Q
		1048	[redacted]	P
		1049	[redacted]	P
		1201	[redacted]	P
		1202	[redacted]	P
		1203	[redacted]	P
		1204	[redacted]	P
		1205	[redacted]	P
		1206	[redacted]	P
		1247	[redacted]	Q
		1268	[redacted]	P
		1460	[redacted]	N

Drainage Basin[a]	Outfall Impacted	Facility Number	Facility Description	Permit Sector
		2003	[redacted]	P
		2014	[redacted]	Q
		2800b	[redacted]	Q
	None[c]	2820	[redacted]	P
		5000	[redacted]	AA
		5002	[redacted]	AA
		5003	[redacted]	AA
		5061	[redacted]	AA
		5063	[redacted]	AA
		5065	[redacted]	AA
		5066	[redacted]	AA
		5067	[redacted]	AA
		5731	[redacted]	Q
		5938	[redacted]	Q
		5094	[redacted]	AA
		5095	[redacted]	AA
		5945	[redacted]	AA
	None[c]	6074	[redacted]	Q
		6079	[redacted]	Q
		6080	[redacted]	Q
		6081	[redacted]	Q
	Wetland	6099A	[redacted]	Q
DB3	None[c]	6593	[redacted]	Q
		6687	[redacted]	Q
	OF3B	7000	[redacted]	Q, R, AA
		7003	[redacted]	Q
		7029	[redacted]	P
		7048	[redacted]	Q
		7052	[redacted]	Q
		7058	[redacted]	Q
		7069	[redacted]	AA
		7080	[redacted]	Q
		7142	[redacted]	Q
		7089	[redacted]	Q
	None[c]	7203b	[redacted]	Q
		7125	[redacted]	Q
		7718	[redacted]	AA
		7719	[redacted]	AA
DB3A	OF3A	7037	[redacted]	Q
		7400	[redacted]	Q, R
		7409	[redacted]	Q
		7415	[redacted]	Q
		7417	[redacted]	Q, R
		7418	[redacted]	Q
		7419	[redacted]	Q
		7420	[redacted]	Q, R
		7425	[redacted]	Q
		7426	[redacted]	Q
		7428	[redacted]	Q
		7429	[redacted]	Q, R
		7431	[redacted]	Q, R

Drainage Basin[a]	Outfall Impacted	Facility Number	Facility Description	Permit Sector
		7432		Q, R
		7436		Q, R
		7450		Q
DB7	OF7	7101[b]		Q
		7043		Q
		7109		Q
		7110		Q
DB8	OF8	7101[b]		Q
		7108		Q
DB9	OF9	7136[f]		Q
		7658[f]		Q
DB10	OF10	7201		Q
		7202		Q
		7203[b]		Q
DB11	OF11B	7039		Q
		7040		Q
		7009, 7051		Q
	OF11C	7030		Q
		7031		Q
		7032		Q
		7071		Q
	OF11A	7123[f]		Q
	OF11D	Unknown		Q
DB12	OF12	7036		Q
		7501		Q
		7511		Q
		7512		Q
DB18	None[c]	4070		P
		4073		P
		4075		P
		6002		P
		6003		P
		6005		P
		6056		P
		6072		P
		6073		P
		6400		Q
		6403		P
		6405		P
		6575		P
	None[d]	7717		Q
	None[d]	7792		Q
DB19	None[c]	5937		Q
Sheet Flow	Directly to Hood Canal	7105[e]		Q
		7176		Q
		7273		Q
		7137[f]		Q
		7100/7042[f]		Q

Notes:
[a] Only drainage basins with industrial facilities are listed.
[b] This facility lies in two drainage basins or a portion of this facility has sheet flow drainage.

[c] No outfall identified which discharges to a receiving surface waterbody including streams, lakes, wetlands, or the Hood Canal. Runoff infiltrates into the ground prior to reaching surface waterbody.
[d] Some stormwater runoff from these facilities could reach a wetland prior to infiltration.
[e] No concentrated flow available to sample prior to reaching waterbody.
[f] Stormwater flows through treatment device prior to discharge.
N/A – Not applicable

3.2 Spills and Leaks

Part 5.3.2 of the 2021 MSGP requires permittees to identify past spills and leaks. Significant spills and leaks of POLs or hazardous substances that occurred at exposed areas or that drained to a stormwater conveyance during the prior 3 years are identified in Table 3-2. Significant spills and leaks include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under Clean Water Act (CWA) Section 311 (see 40 CFR 110.6 and 40 CFR 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 USC §9602.

Table 3-2: Past Significant Spills and Leaks, 2018-2020

Date	Location	Material	Description	Discharge Point(s) Affected
2018	Marginal Pier	Diesel Fuel	Wake from passing vessel caused fuel container to tip spilling approximately 1 quart of fuel to water.	Over water spill (Hood Canal)
	KB Dock	Bilge Water	Back pressure from hose during hydro testing, approximately 1 quart spilled to water	Over water spill (Hood Canal)
	Delta Pier	Hydraulic Oil	Broken hydraulic line on shore power boom, approximately 1 pint spilled to water.	Over water spill (Hood Canal)
	Service Pier	Hydraulic Oil	Loose cap on reservoir on security boat, approximately 1 gallon spilled to water.	Over water spill (Hood Canal)
	Delta Pier	Hydraulic Oil	Ship's Force spilled 5 gallons of hydraulic oil to water.	Over water spill (Hood Canal)
2019	Delta Pier	Hydraulic Oil	Submarine hydraulic system work, ½ cup spilled to water.	Over water spill (Hood Canal)
	KB Dock	Diesel Fuel	Missing fill pipe gasket caused about 1 gallon of diesel fuel to spill to water.	Over water spill (Hood Canal)
2020	KB Dock	Hydraulic Oil	Boat steering system ruptured leaking approximately 1 pint into water.	Over water spill (Hood Canal)
	Delta Pier	Hydraulic Oil	Broken hydraulic fitting on shore power boom leaked 1 quart of hydraulic oil into water.	Over water spill (Hood Canal)
	Service Pier	Bilge Water	Bilge pump activated by high water level, approximately ½ pint of oil pumped to water.	Over water spill (Hood Canal)
	Marginal Pier	Sheen	Source unknown, possibly from Tribal fishing vessel leaking fuel North of base.	Over water spill (Hood Canal)
	Service Pier	Hydraulic Oil	Broken fitting on hydraulic hammer spilled ½ pint of oil in water.	Over water spill (Hood Canal)

The 2021 MSGP additionally requires documentation of industrial facilities where potential spills and leaks could contribute pollutants to stormwater discharge and the corresponding outfall(s) likely to be affected. These facilities, their potential pollutants, and associated outfalls are described in Table 3-3. Maps identifying the layout of facilities and their surrounding areas are provided in Appendix A.

The facilities listed in Table 3-3 are grouped by host and major tenant organization names, as follows:

- NAVBASE Kitsap Bangor and Base Operating Support Contract (BOSC);
- Naval Undersea Warfare Center (NUWC) Bangor Annex;
- Strategic Weapons Facility Pacific (SWFPAC); and
- Puget Sound Naval Shipyard and Intermediate Maintenance Facility (PSNS & IMF).

Table 3-3: Industrial Facilities, Potential Pollutants, and Associated Outfalls

Building/Facility Name (Number)	Sector	Description	Potential Pollutants	Exposed Materials Storage or Process	Drainage Basin(s)	Outfall(s)	Appendix A Figure
NAVBASE Kitsap Bangor and BOSC							
[redacted] (1012)	P	The separator is covered by a large metal plate and receives flow from the trench drains in Building 1202 and 1205. This water flows to the industrial sewer. Stormwater runoff from Facility 1012 generally percolates into the grassy area surrounding the facility. Some runoff may reach Catch Basin 1043-9347. This facility lies in Drainage Basin DB2 because very little runoff would reach the drainage outfall.	POL	Potentially during overflow situation or when emptying waste oil tank.	DB2	OF2	Group 1
[redacted] (1014*), [redacted] (1206) [redacted] (1635)	P	[redacted] The slab is graded to contain stormwater that falls on the facility. The catch basins drain to an oil/water separator (1025), which discharges to the sanitary sewer. This facility lies in drainage area DB2, but no runoff would likely reach the outfall. Runoff from the southern part of the C-Pool drains to catch several catch basins while the northern part of the slab drains via sheet flow to surrounding swales. Both the swales and catch basins flow to a retention pond (1043) and through an oil/water separator before discharging at Outfall OF2. Stormwater runoff from the Railroad Equipment Maintenance Shop drains to the south. Catch basins around the shop building collect runoff and direct it to the retention pond (1043), which directs flow through an oil/water separator before discharging at Outfall OF2. These facilities lie in Drainage Basin DB2.	Paint, POL	Potential exposure if maintenance is conducted outside. Metals stored/staged outdoors.	DB2	OF2	Group 1 Group 2
[redacted] (1016) [redacted] (1268)	P	[redacted] Stormwater runoff from the east side of Building 1016 infiltrates into the grass adjacent to the building. Remaining runoff from 1016 and 1268 drains to the southwest into several catch basins in the asphalt lot surrounding these buildings. These catch basins drain to a retention pond (1043), which directs flow through an oil/water separator before discharging at Outfall OF2.	Paint, POL, Solids, Pesticides	Exposure possible during unloading of materials.	DB2	OF2	Group 1
[redacted] (1021)	Q	[redacted] Stormwater runoff from Facility 1021 drains to the south. Runoff flows to catch basins in the asphalt lot surrounding the building. The catch basins drain to a retention pond (1043), which directs flow through an oil/water separator before discharging at Outfall OF2.	Oil, Solids, Acids	Large grounds equipment stored outdoors on asphalt.	DB2	OF2	Group 1
[redacted] (1025)	Q	This facility includes a 6,000-gallon oil/water separator with a 6,000-gallon waste oil storage tank. Stormwater runoff from Facility 1025 generally flows to the east. Runoff flows across the asphalt surrounding the facility to Catch Basin 1043-CB37. This catch basin drains to a retention pond (1043), which directs flow through an oil/water separator before discharging at Outfall OF2.	POL	Potentially during overflow situation or when emptying waste oil tank.	DB2	OF2	Group 1
[redacted] (1026)	Q	[redacted] Stormwater runoff from Facility 1026 drains to the south. Runoff flows to catch basins in the asphalt lot surrounding this building. The catch basins direct flow to a retention pond (1043), which directs flow through an oil/water separator before discharging at Outfall OF2.	POL, Paint, Solvents, Pesticides	Certain spilled materials could be tracked outdoors if not immediately cleaned up.	DB2	OF2	Group 1
[redacted] (1034)	Q	[redacted] Stormwater runoff generally drains to the south. This building is surrounded by grass on the south, west, and north. Most runoff drains overland to open ditches flowing to a retention pond (1043). Some runoff from the east side of the building drains across the asphalt lot to catch basins on Sculpin Road. These catch basins also flow to the retention pond (1043). Some of the runoff that drains across the grass will percolate into the ground before reaching Outfall OF2.	Paint, Battery Lead/Acid	None	DB2	OF2	Group 1

Building/Facility Name (Number)	Sector	Description	Potential Pollutants	Exposed Materials Storage or Process	Drainage Basin(s)	Outfall(s)	Appendix A Figure
[redacted] (1038)	Q	[redacted] Stormwater runoff from the Facility 1038 area drains to the south. Catch basins around the building collect runoff and direct it to a retention pond (1043), which directs flow through an oil/water separator before discharging at Outfall OF2. Some runoff west of the building will percolate into the ground before reaching the catch basins. This facility lies in Drainage Basin DB2.	POL	None	DB2	OF2	Group 1
[redacted] (1048)	P	[redacted] Stormwater runoff from Facility 1048 drains to the east to a grassy, open channel. Runoff in the open channel flows to a retention pond (1043), where the runoff goes through an oil/water separator before discharging at Outfall OF2. A portion of the runoff will percolate into the ground before reaching the outfall.	POL	Rusted flammable lockers stored outside.	DB2	OF2	Group 1
[redacted] (1049)	P	[redacted] Stormwater runoff from Facility 1049 drains to the east, across a gravel parking lot and into a grassy, open channel. Runoff in the open channel flows to a retention pond (1043), where it is routed through an oil/water separator before discharging at Outfall OF2. Some runoff from this facility will percolate into the ground before reaching the outfall. This facility lies in Drainage Basin DB2.	Pesticides	Currently, no materials are used, stored, or produced at this facility.	DB2	OF2	Group 1
[redacted] (1201)	P	[redacted] Stormwater runoff from the Facility 1201 area drains to the south. Catch basins in the asphalt and the vegetated areas around the building collect the runoff. These catch basins direct flows to a retention pond (1043), which directs the flow through an oil/water separator before discharging at Outfall OF2. Most runoff in the vegetated areas will reach the catch basins before percolating into the ground.	Solids	None	DB2	OF2	Group 1
[redacted] (1202)	P	[redacted] Stormwater runoff from Facility 1202 drains to the south. Runoff flows to catch basins in the asphalt lot surrounding the building. The catch basins direct flow to a retention pond (1043), which directs flow through an oil/water separator before discharging at Outfall OF2.	Paint, Antifreeze, POL, Battery Lead/Acid	Outdoor scrap metal bins, old vehicles, and exposed auto parts.	DB2	OF2	Group 1
[redacted] (1203)	P	[redacted] Stormwater runoff from the Steam Cleaning Shed facility drains to the west into two catch basins. These catch basins direct flows to a retention pond (1043), which directs flow through an oil/water separator before discharging at Outfall OF2. Some runoff may flow to four wash-water catch basins that are located under the roof of Facility 1203. These basins flow to an oil/water separator (1025) before discharging to the sanitary sewer.	POL	Uncovered storage area with no secondary containment. Open scrap metals bin.	DB2	OF2	Group 1
[redacted] (1204)	P	[redacted] Stormwater runoff from Facility 1204 flows to a trench drain. Runoff in the trench drain flows through an oil/water separator (1025) before discharging to the sanitary sewer. The facility's concrete pad is graded to collect stormwater and spills in the trench drain. The roof drains for this facility discharge to catch basins. The catch basins direct flow through an oil/water separator prior to discharging to a retention pond (1043) and eventually Outfall OF2.	Gasoline	Potentially during overfill situation or during fuel transfer.	DB2	OF2	Group 1

Building/Facility Name (Number)	Sector	Description	Potential Pollutants	Exposed Materials Storage or Process	Drainage Basin(s)	Outfall(s)	Appendix A Figure
[redacted] (1205)	P	[redacted] Stormwater runoff generally flows to catch basins to the east and the north. These catch basins direct flow to a retention pond (1043), which directs flow through an oil/water separator before discharging at Outfall OF2. Stormwater runoff from the vehicle wash pad collects in a trench drain at the low point of the pad. Runoff in the trench drain flows through an oil/water separator (1012) before discharging to the sanitary sewer.	Solvents, POL	Yes, during vehicle washing or in the event of a spill. Exposed anodes and batteries, discarded pressure washer stored outside.	DB2	OF2	Group 1
[redacted] (1247)	Q	[redacted] Runoff from the [redacted] facility flows to the west to an open channel. Runoff in the open channel flows north along Trigger Avenue. There are no other designed stormwater systems in the area; all runoff flows overland across the gravel parking lot surrounding the building. The [redacted] building is in Drainage Basin DB2, which outfalls at OF2.	Oil	None	DB2	OF2	Group 5
[redacted] (1460)	N	[redacted] Catch basins in the asphalt lot around the building collect runoff and direct it to a wooded area southwest of the facility. Although this facility lies in Drainage Basin DB2, most runoff will percolate into the ground before reaching the outfall. Some runoff from the entrance area will flow toward Silversides Road rather than into the catch basins.	BOD, Solids, Metals	Uncovered metals bins stored outdoors.	DB2	OF2	Group 2
[redacted] (2003)	P	[redacted] A single catch basin downhill from the facility collects runoff from the east side of the facility. This catch basin discharges to a wooded area south of the catch basin. Although this facility lies in Drainage Basin DB2, most of the runoff will percolate into the ground before reaching the outfall.	BOD, Solids	During transfer, solid waste occasionally ends up on the ground around the truck loading area.	DB2	OF2	Group 1
[redacted] (2800)	Q	[redacted] The area around this location drains to the south and east. The only designed stormwater conveyance is a catch basin south of the building, which collects runoff from the southwestern portion of the building and discharges to the south. The remainder of the runoff drains by overland flow to the southeast.	pH, Solids, Metals	Possible leaks when POL facility pumps diesel to USTs. Scrap metals bin without lid outdoors.	DB1	OF1	Group 6
[redacted] (2802, 2820, 2821, 2822, 2823, 2824)	P	The [redacted] Facilities were originally constructed for loading, unloading, and storage of coal [redacted]. However, coal has not been used on NAVBASE Kitsap Bangor since 2000. The coal unloading facility was demolished in 2007[redacted] Stormwater runoff from the former coal unloading facility and surrounding area generally drains to the northeast to Catch Basin 2801-CB6. The former coal pile area is sloped and bermed so that runoff flows to this catch basin, which discharges into a sedimentation basin and pond in the northeastern corner of the facility. Stormwater flows through the basin and into a retention pond before discharging to a wooded area below the coal yard. The western portion of the facility (across railroad lines) drains to several catch basins that discharge to the same wooded area below the former coal yard. The berm around the paved area is breached in several places allowing runoff to bypass the pond and discharge directly into the wooded area. A portion of the runoff from the access driveway drains to the south towards Thresher Road. This facility lies in Drainage Basin DB2, but the runoff would infiltrate into the ground before reaching the basin outfall. Runoff from upland areas to the southwest of the former coal storage area is diverted through the area by a storm drain system, which discharges into the eastern wooded area via Manhole 2801-MH8.	Solids, pH, Metals	None	DB2	OF2	Group 6

Building/Facility Name (Number)	Sector	Description	Potential Pollutants	Exposed Materials Storage or Process	Drainage Basin(s)	Outfall(s)	Appendix A Figure
[redacted] (4070, 4073, 4075, 4080)	P	[redacted] Stormwater runoff from the facility 4070 area generally drains to the south. Runoff flows to catch basins in the asphalt lots around the building or flows overland toward Thresher Road (the southern sides of facilities 4070 and 4075). The catch basins drain to a grassy, open channel along Thresher Road. Runoff in the open channel flows through a culvert under Thresher Road and discharges down a hillside. These facilities lie in Drainage Basin DB18, but runoff will percolate into the ground before reaching an outfall.	POL, Paint, Solvents	Certain materials are stored outdoors and uncovered or without secondary containment. Fuel spills possible during filling of on-site diesel UST.	DB18	OF18	Group 6
[redacted] (6074, 6079, 6080, 6081, 6089)	Q	[redacted] Stormwater runoff generally drains to the west. Catch basins collect stormwater that flows into these bermed storage areas. These catch basins drain to Retention Basin 6081, where flows are pumped through an oil/water separator and into the sanitary sewer. A trench drain at the Building 6079 loading area discharges to a 7,000 gallon tank to the west. The discharge is periodically pumped from the tank and taken to the industrial waste treatment plant for disposal. The remainder of the loading area drains overland across grass and asphalt to the surrounding woods. This facility lies in Drainage Basin DB2, but runoff will infiltrate before reaching the basin outfall.	Solids, POL, Solvents	Exposure possible during material unloading activities.	DB2	OF2	Group 5
[redacted] (6099a)	Q	[redacted] Stormwater runoff from the areas surrounding Building 6099a flows into dead-end ditches surrounding the facility. A catch basin, which appears to discharge to the ditch west of the facility, is located inside the south entry of the covered area. This facility lies in Drainage Basin DB2, but runoff will infiltrate before reaching the basin outfall.	Solids	POL-contaminated soils and used blast grit piles could track to catch basin. Used vehicle tires exposed to weather.	DB2	OF2	Group 5
[redacted] (7022), [redacted] (7039), [redacted] (7040)	Q	[redacted] Stormwater runoff from facilities 7022, 7039, and 7040 drains into an open ditch and flows north along Escolar Road. The open ditch eventually discharges at Outfall OF11. These facilities, which lie in Drainage Basin DB11, are surrounded on all sides by gravel. A significant portion of the runoff will percolate into the ground before reaching the drainage basin outfall.	Solids, SOD, POL	Materials could become exposed during transfer or in the event of an equipment (hose) failure.	DB11	DB11	Group 14

Building/Facility Name (Number)	Sector	Description	Potential Pollutants	Exposed Materials Storage or Process	Drainage Basin(s)	Outfall(s)	Appendix A Figure
[redacted] (7030, 7031, 7032, 7071)	Q	[redacted] Stormwater from the facilities drains to the west. These facilities lie in the DA11 drainage area, which outfalls at OF11C to Hood Canal. The entire facility is surrounded by a berm, and all stormwater flows to two catch basins in the bermed area. The catch basins drain to a 200,000-gallon tank to await treatment and separation before discharge to the sanitary sewer system. The only stormwater to leave the site drains from the roof to an open ditch along Runner Road. The ditch flows southwest along Runner Road and eventually discharges at Outfall OF11C.	POL	None	DB11	OF11C	Group 16
[redacted] (7037)	Q	[redacted] The associated 500-gallon waste-oil aboveground storage tank was removed in 2019. The oil/water separator was used for separation of oil from water retained in the Delta Pier stormwater detention pond, which emptied into Devil's Hole. The separator has not been operational since prior to the 2005 SWPPP site visit. However, a very small amount of discharge from the pond still passes through the separator and empties into Devil's Hole; the pond discharge is periodically checked for sheen. The pond is also periodically visually checked for oil sheen. Stormwater runoff generally flows to the east and would generally percolate into vegetation surrounding the facility. This facility lies in Drainage Basin DB3.	POL	When operational, if the AST were to leak, POL exposure would be possible.	DB3	DB3	N/A
[redacted] (7051, 7009)	Q	[redacted] Runoff flows to an open channel, flowing west along Greenling Road. The open channel is culverted under the facility access drive and eventually discharges at OF11B. Building 7009 drains to the west into a wooded ravine draining towards Devils hole. The [redacted] buildings and the surrounding area are within Drainage Basin DB11.	Chlorine	None	DB11	DB11	Group 14
[redacted] (7100*, 7105*, 7042*, 7101*, 7041, 7108*, 7043*)	Q	[redacted] Drainage for the upper complex flows to the northwest into Hood Canal. The large parking lot, 7043, 7041, 7113, and the southern half of 7101 are within Drainage Basin DB7, which drains to Outfall OF7. The Carlson Spit [redacted] is within DB7 and sheet flows into Hood Canal. The small parking lot, 7108, and the northern half of 7101 are within Drainage Basin DB8, which drains to Outfall OF8. The lower complex includes the pier (7100), 7105, and 7042. Stormwater from 7100 and 7042 is collected and runs through media cartridge filter vaults before entering Hood Canal.	Ethylene Glycol Solvents, POL Solids, Paint	Uncovered scrap metal dumpster on pier. Diesel fuel dripping from fill port on south end of pier.	DB7, DB8	OF7, OF8	Group 12
[redacted] (7202)	Q	[redacted] Stormwater runoff generally drains to the west. Runoff flows across grassy areas to an open ditch that discharges to Hood Canal at Outfall OF10.	POL, BOD, Solids	None	DB10	OF10	Group 14
NUWC Bangor Annex							

Building/Facility Name (Number)	Sector	Description	Potential Pollutants	Exposed Materials Storage or Process	Drainage Basin(s)	Outfall(s)	Appendix A Figure
[redacted] (5000)	AA	[redacted] Stormwater runoff in the Building 5000 complex generally drains to the south. Grass surrounds the facility on all sides except between Building 5000 and 5003, which bracket an asphalt parking lot. A catch basin in the parking lot receives stormwater flow from the lot and building roof drains, and it discharges to an open channel west of the building. This facility lies in Drainage Basin DB2. Very little runoff from this facility reaches the drainage basin outfall due to percolation into the ground. There is no point source outfall for drainage from this facility.	POL, Solvents, Metals, Paint	Outdoor metals storage	DB2	n/a	Group 3
[redacted] (5002)	AA	[redacted] Stormwater runoff generally drains to the south. A catch basin in the parking lot receives stormwater flow from the lot and the building roof drains, and it discharges to an open channel west of the building. This facility lies in Drainage Basin DB2. Very little runoff from this facility reaches the drainage basin outfall due to percolation into the ground. There is no point source outfall for drainage from this facility.	Metals	Outdoor metals storage	DB2	n/a	Group 3
[redacted] (5003)	AA	[redacted] Stormwater runoff generally drains to the south. Grass surrounds the facility on all sides except between Building 5000 and 5003, which bracket an asphalt parking lot. A catch basin in the parking lot receives stormwater flow from the lot and the building roof drains, and it discharges to an open channel west of the building. This facility lies in Drainage Basin DB2. Very little runoff from this facility reaches the drainage basin outfall due to percolation into the ground. There is no point source outfall for drainage from this facility.	Metals, Acid	No. Any spill would flow to floor drain connected to sanitary sewer.	DB2	n/a	Group 3
[redacted] (5061) [redacted] (5938)	AA	[redacted] Stormwater runoff drains to the west and to the south. A catch basin to the west collects stormwater from the asphalt area in front of the buildings and discharges to an open ditch along Scorpion Avenue. Grass and a wooded area surround the other three sides of the facility. The facility lies in Drainage Basin DB2, but all stormwater drainage will percolate into the ground before reaching the drainage area outfall.	Paint, POL, Detergents	Scrap metals dumpster missing lid.	DB2	n/a	Group 4
[redacted] (5063)	AA	[redacted] Stormwater runoff drains to the west and to the south. A catch basin collects stormwater runoff from the asphalt area in front of the building and discharges to an open ditch flowing south along Scorpion Avenue. The remainder of the facility is surrounded by grass and trees. This facility lies in Drainage Basin DB2, but all stormwater runoff will likely percolate into the ground before reaching an outfall.	Paint, Solvents, Metals	Uncovered scrap metal dumpster	DB2	n/a	Group 4
[redacted] (5065) [redacted] (5731)	AA	[redacted] Stormwater runoff drains to the west and to the south. A catch basin collects stormwater runoff from the asphalt area in front of the building and discharges to an open ditch flowing south along Scorpion Avenue. The remainder of the facility is surrounded by grass and trees. This facility lies in Drainage Basin DB2, but all stormwater runoff will percolate into the ground before reaching an outfall.	POL	None	DB2	n/a	Group 4

Building/Facility Name (Number)	Sector	Description	Potential Pollutants	Exposed Materials Storage or Process	Drainage Basin(s)	Outfall(s)	Appendix A Figure
[redacted] (5066)	AA	[redacted] Stormwater runoff drains to the east and to the south. Stormwater runoff flows from the asphalt area in front of the building and discharges to an open ditch flowing south along Dace Road. The remainder of the facility is surrounded by grass and trees. This facility lies in Drainage Basin DB2, but all stormwater runoff will likely percolate into the ground before reaching an outfall.	Paint, Solvents, Metals	None	DB2	n/a	Group 4
[redacted] (5067)	AA	[redacted] Stormwater runoff drains to the west and to the south. A catch basin collects stormwater runoff from the asphalt area in front of the building and discharges to an open ditch flowing south along Scorpion Avenue. The remainder of the facility is surrounded by grass and trees. This facility lies in Drainage Basin DB2, but all stormwater runoff will likely percolate into the ground before reaching an outfall.	Paint, Solvents, Metals	Scrap metal dumpster missing lid.	DB2	n/a	Group 4
[redacted] (5094)	AA	[redacted] Stormwater runoff generally drains to the east and to the south. A catch basin collects stormwater from the northeastern portion of the asphalt lot surrounding the building and discharges to a ditch along Kete Road. Runoff from the parking lot not captured by the catch basin flows east to the same ditch. Stormwater runoff from the grassy ridge behind the northern half of the building generally ponds in depressions observed on the west and north sides of the building, although a 12-inch corrugated pipe connected to the parking lot catch basin was observed on the north side. Runoff from the southern portion of the grassy ridge flows into an open ditch bordering the asphalt lot to the south of Building 5094. This facility lies in Drainage Basin DB2, but stormwater runoff will percolate into the ground before reaching an outfall.	Paint, Solvents, Metals	Outdoor empty drum storage, uncovered scrap metal dumpster, pile of rusted debris on pavement.	DB2	n/a	Group 4
[redacted] (5095)	AA	[redacted] Stormwater runoff generally drains to the east and to the south. A 12-inch corrugated pipe connected to two catch basins to the northeast collects stormwater from the northern portion of the building. The catch basins discharge to the east to a ditch along Kete Road, which in turn flows south. Runoff from the parking lot flows overland to the same ditch. Stormwater runoff from the grassy ridge behind the southern half of the building flows into a ditch bordering the asphalt lot to the south of Building 5095. This facility lies in Drainage Basin DB2, but all stormwater runoff will percolate into the ground before reaching an outfall.	Paint, Metals	Two scrap metal dumpsters missing lids. Old equipment stored on pavement.	DB2	n/a	Group 4
[redacted] (5937)	AA	[redacted] Stormwater runoff infiltrates into the vegetated areas around this facility. Some stormwater ponds on the metal matting, but most flows off of the matting and percolates into the ground. This facility does not drain to a specific outfall.	Solids, Metals	Metals containers stored outdoors.	DB2	n/a	Group 19

Building/Facility Name (Number)	Sector	Description	Potential Pollutants	Exposed Materials Storage or Process	Drainage Basin(s)	Outfall(s)	Appendix A Figure
[redacted] (5945)	AA	[redacted] Stormwater runoff flows into a set of catch basins on the paved surfaces surrounding the facility. The facility storm sewer system discharges into a bio-swale west of the facility. The swale expands at the downstream end to allow for a small amount of stormwater detention. Flow from the swale likely infiltrates into the forested area to the south; however, during period of heavy runoff, discharges may reach a culvert under Kete road and ultimately discharge through OF2. This facility lies in Drainage Basin DB2.	Paint, Solvents, Metals, POL	Uncovered scrap metals dumpsters. Magnesium castings on the ground.	DB2	OF2	Group 3
[redacted] (7136*), [redacted] (7273*), and [redacted] (7658)	Q	[redacted] Holes have been drilled at intervals along the berm and act as scuppers [redacted] Stormwater runoff flows over the sides of the dock or through holes (scuppers) along the bermed edges of the dock. The [redacted] Building drain to the north and to the west. Catch basins in the asphalt surrounding the buildings collect all stormwater runoff and discharge to Hood Canal at Outfall OF9. Several catch basins within the parking lot include stormwater filtration systems to treat runoff from the lot prior to discharge.	POL, Detergent, Paint, Solids, Solvents, Metals	Potential for POL exposure if spilled or overflowed. Scrap metals bins missing lids. Used anodes exposed on pavement.	DB9	OF9	Group 13
[redacted] (7717) [redacted] (7792)	Q	[redacted] Stormwater runoff generally drains to the west. Catch basins in the asphalt lot to the south drain runoff from the south and east sides of the buildings. These catch basins drain to the wooded area west of the facility. The north and west sides of the buildings drain across the asphalt lot into the wooded area to the west. This buildings lies in Drainage Basin DB18, but runoff will infiltrate into the ground before reaching the basin outfall.	POL, Solvents, Paint, Battery Lead/Acids	Potential for POL exposure if spilled. Outdoor storage of certain materials. Scrap metals bins without lids. Pipe rack uncovered.	DB18	n/a	Group 9
[redacted] (7718)	Q	[redacted] Stormwater runoff from Facility 7718 drains to the south and to the west. Runoff from the northern half of the building drains to catch basins in the asphalt lot surrounding the building. These catch basins discharge to a wooded area west of the building. This portion of the facility lies in Drainage Basin DB3. The southern half of this facility drains to a catch basin to the east and by overland flow to a wooded area to the south. This catch basin discharges to the same wooded area to the south. The southern half of the building lies in Drainage Basin DB18. The runoff from this facility would infiltrate into the ground before reaching an outfall.	Paint, Solvents, Metals, POL	Outdoor uncovered material storage. Scrap metal dumpster with damaged lid.	DB3, DB18	n/a	Group 9
[redacted] (7719)	Q	[redacted] Stormwater runoff from Facility 7719 drains to the west. Runoff flows across the asphalt lot in front of the building to a wooded area to the west. Some flow from the eastern portion of the building may flow to an open ditch that also drains to the wooded area to the west. This facility lies in Drainage Basin DB3, but runoff will infiltrate the ground before reaching the basin outfall.	Paint, Solvents, Solids	Uncovered scrap metals dumpsters. Steel stock exposed outdoors.	DB3	n/a	Group 9
SWFPAC							

Building/Facility Name (Number)	Sector	Description	Potential Pollutants	Exposed Materials Storage or Process	Drainage Basin(s)	Outfall(s)	Appendix A Figure
[redacted] (6575) [redacted] (6003)	Q	[redacted] Stormwater runoff generally drains to the west. Runoff from Building 6575 drains to catch basins in the asphalt lot around the building, which drain to a wooded area west of the facility. Runoff from most of Building 6003 flows south to an open ditch that flows to the west, discharging into the same wooded area. Runoff from the western side of Building 6575 and some runoff from the north side of Building 6003 drain northwest along Roosevelt Avenue to catch basins in front of Building 6589. These catch basins also discharge to the wooded area to the west. Both buildings lie in Drainage Basin DB18, but runoff will percolate into the ground before reaching an outfall discharging to a receiving waterbody.	Solvents	Any spill occurring during the pumping of the hazardous waste tank on-site will not be contained.	DB18	n/a	Group 8
[redacted] (6002), [redacted] (6056), [redacted] (6073)	P	[redacted] Stormwater runoff from Building 6002 drains to catch basins in the asphalt lot surrounding the building. Stormwater runoff from Building 6056 flows east across the asphalt lot to Catch Basin 6002-CB4 and 6002-CB5, while runoff from Building 6073 drains to the north to Catch Basin 6002-CB5. All of the catch basins discharge to an open ditch to the west, which in turn flows northwest to a wooded area west of Escolar Road. All three buildings lie in Drainage Basin DB18, but runoff will infiltrate the ground before reaching the basin outfall.	POL, Solids, Solvents, Detergents	A POL spill from the 55-gallon drums in Bldg. 6056 could flow outdoors and become exposed. An uncovered scrap metals dumpster is on-site.	DB18	n/a	Group 8
[redacted] (6005)	P	[redacted] Stormwater runoff drains to the west across an asphalt lot to Catch Basin 6002-CB2. This catch basin discharges to an open channel that drains to a wooded area to the west. Some runoff from the southern pad [redacted] flows to Catch Basin 6002-CB3. This catch basin drains to the same wooded area to the west. The facility lies in Drainage Basin DB18, but runoff will percolate into the ground before reaching an outfall.	Gasoline, Diesel	A spill occurring during tank filling will not be contained.	DB18	n/a	Group 8
[redacted] (6072)	P	[redacted] Stormwater runoff generally drains to the east. A catch basin in a grassy low-lying area to the east of the building receives most of the runoff. This catch basin discharges to a wooded area west of Skipjack Circle. Runoff from the western side of the building will infiltrate the ground before reaching the catch basin. This facility lies in Drainage Basin DB18, but runoff will infiltrate the ground before reaching the basin outfall.	None	None	DB18	n/a	Group 7
[redacted] (6400)	Q	[redacted] Stormwater runoff from Building 6400 generally drains to the north. This building has no designed stormwater control system. Runoff flows across the parking lot to a wooded area west of Skipjack Circle. Runoff from the west and south sides of the building infiltrates into the grassy area around the facility. This building lies in Drainage Basin DB18, but runoff would percolate into the ground before reaching the basin outfall.	Sulfide, Caustics	None	DB18	n/a	Group 7
[redacted] (6403)	P	[redacted] Stormwater runoff drains to the west. Runoff flows to catch basins around the building. These catch basins discharge to a wooded area west of Skipjack Circle. Runoff from the southern and western portions of the building will infiltrate into vegetated areas before reaching any catch basins. This facility lies in Drainage Basin DB18, but runoff will infiltrate the ground before reaching the basin outfall.	Metals	Outdoor exposed storage of metals parts, metal tanks	DB18	n/a	Group 7

Building/Facility Name (Number)	Sector	Description	Potential Pollutants	Exposed Materials Storage or Process	Drainage Basin(s)	Outfall(s)	Appendix A Figure
[redacted] (6405)	P	[redacted] Stormwater runoff generally drains to the east and to the north. Runoff from the north side of the building flows to a catch basin in an asphalt lot to the northeast. Runoff from the rest of the building infiltrates the grassy areas surrounding the building. Some runoff may reach a catch basin in the grass to the east of the building. The catch basins discharge to a wooded area to the west of Skipjack Circle. This facility lies in Drainage Basin DB18, but runoff will percolate into the ground before reaching the basin outfall.	None	None	DB18	n/a	Group 7
[redacted] (6687)	Q	[redacted] Stormwater runoff from Facility 6687 drains to the west. Runoff flows to a grassy open channel flowing west. The building is surrounded by grass on all sides. This facility lies in Drainage Basin DB3, but runoff will infiltrate the ground before reaching the basin outfall.	POL, Paint, Solvents	None	DB3	n/a	Group 8
[redacted] (7137, 7501*, 7511, 7512)	Q	[redacted] Stormwater runoff in this area flows to Outfall OF12. Filterra bio-retention filtration units are installed along the access roads leading to the wharf causeways to treat stormwater runoff prior to discharge. Stormwater that falls on the [redacted] (Facility 7501) flows into catch basins and is collected in two tanks. Contents of the two tanks are pumped into the stormwater retention pond to the southeast. Stormwater in the retention pond is pumped through an oil/water separator for treatment before discharging to Hood Canal at Outfall OF12. Runoff on small sections of the wharf sheet flow directly into Hood Canal; runoff from the northwestern corner, the southwestern corner, and the lightning tower base all sheet flow directly into Hood Canal. Stormwater on [redacted] is directed to a system of stormwater trench drains and catch basins. Catch basin filtration systems installed along the wharf provide stormwater treatment prior to discharge to Hood Canal.	POL, Paint, Solvent	POL and SOD exposure is possible if leaked or during tank filling operations.	DB12	OF12	Group 18
PSNS & IMF							
[redacted] (7000)	Q, R, AA	[redacted] This facility lies in Drainage Basin DB3, which outfalls at OF3B which eventually enters Devil's Hole. There are two separate stormwater collection systems for the facility; both discharge to a stream flowing to Devil's Hole. The first system includes the stormwater structures (catch basins, manholes, and outfalls) labeled 7000-OF34 through 7000-CB75 on the base maps. This system receives flow from Building 7000 roof drains, catch basins, and trench drains immediately surrounding the building. The majority of the stormwater from Building 7000 collects in this system, which will most likely collect runoff from areas potentially impacted by facility pollutants. Drainage from this system discharges at a point northeast of Building 7000 directly to a stream flowing to Devil's Hole. This system bypasses the stormwater retention pond that receives flow from the rest of the area. The second stormwater system drains those impervious surfaces beyond the immediate perimeter of the building. This second system receives flow from the parking lots to the west and to the east and from a portion of Building 7000. This system discharges to the stormwater retention pond behind Building 7077. This retention pond discharges to Devil's Hole via the same stream that receives flow from the first stormwater system.	Metals, Solvents, Detergents, POL	Open scrap metal bins, metal stock stored outside.	DB3	OF3B	Group 11

Building/Facility Name (Number)	Sector	Description	Potential Pollutants	Exposed Materials Storage or Process	Drainage Basin(s)	Outfall(s)	Appendix A Figure
[redacted] (7003)	Q	[redacted] Surface water runoff from the facility collects in a storm drain system before discharging to a stream that runs directly to Devil's Hole. The primary impervious surfaces associated with potential pollutant sources are located along the southern perimeter of the facility, which contains a vehicle parking area and a loading dock. The loading dock drains to a catch basin at the bottom of the loading ramp. This catch basin discharges to a storm drain system that runs west and connects to catch basins in the vehicle parking area. The drain system runs along the west portion of the building and discharges to an open drainage way that connects to the stream discharging to Devil's Hole.	Paint, Solvents, Acids	Sodium hypochlorite stored in a flammable locker near door on east side of building could become exposed if spilled.	DB3	OF3B	Group 10
[redacted] (7029)	P	[redacted] Building 7029 is located within the north central portion of Drainage Basin DB3, on the eastern edge of a parking lot that slopes generally to the west. Surface water runoff from the facility drains into a storm drain system that opens into ditches and streams draining to the north. The catch basin drain system crosses Sturgeon Street before opening into the ditch located northwest of the facility. The collecting stream runs into Devil's Hole, which discharges to the Hood Canal.	Metals, POL	Outdoor uncovered metals storage. Vehicle staging.	DB3	OF3B	Group 10
[redacted] (7048)	Q	[redacted] The area generally drains to the north and lies within Drainage Basin DB3. The majority of the stormwater runoff enters Catch Basin 7000-CB75, which flows through the storm drainage system and empties into the stream northeast of Building 7000 on the way to OF3B. A portion of the runoff may flow south to an open ditch that flows to the retention pond behind Facility 7077, which also eventually outfalls at OF3B.	None	None	DB3	OF3B	Group 11
[redacted] (7052)	Q	[redacted] lies in Drainage Basin DB3 and drains to the east into catch basins along Finback Circle. These catch basins empty into the stream northeast of Building 7000 and eventually discharge at OF3B.	Solvents, Paint	None	DB3	OF3B	Group 11
[redacted] (7058)	Q	[redacted] area lies in Drainage Basin DB3 and drains to the east into an open channel along Finback Circle. The open channel flows to Catch Basin 7000-CB62. Some stormwater infiltrates into the grassy area along Finback Circle. The portion of the runoff reaching the catch basin flows into the stream northeast of Building 7000, eventually discharging at OF3B.			DB3	OF3B	Group 11
[redacted] (7064, 7068)	N/A	These buildings have been demoed.	N/A	N/A	N/A	N/A	Group 17
[redacted] (7069)	AA	[redacted] (7069) area lies in Drainage Basin DB3 and drains to the north. Stormwater runoff flows to Trench Drain 7000-TD60B and to several catch basins along Finback Circle. The stormwater flows through the storm system, under Sturgeon Street, and discharges to a small stream that leads to Devil's Hole.	POL, Detergents, Metals	None	DB3	OF3B	Group 11

Building/Facility Name (Number)	Sector	Description	Potential Pollutants	Exposed Materials Storage or Process	Drainage Basin(s)	Outfall(s)	Appendix A Figure
[redacted] (7080)	Q	[redacted] Building 7080 lies in Drainage Basin DB3. Stormwater runoff from the facility would enter the ditch to the south and east sides of 7080. The ditch flows north and east to the corner of Trigger and Sturgeon, then drains into the piping that flows to OF3B.	Metals, Detergents, Corrosives	None	DB3	OF3B	Group 11
[redacted] (7089)	Q	[redacted] The facility lies in Drainage Basin DB3, and drainage is generally to the east. The facility is surrounded by grass on all sides except for the loading/unloading areas on the north side and east side of the building. Each loading/unloading area has a trench drain that collects stormwater. Both trench drains flow to the Retention pond behind 7077, to OF3B then to Devil's Hole before discharging to the Hood Canal. The stormwater runoff from the rest of the facility probably percolates into the grassy areas.	Caustics, Acid, Solids, Solvents	None	DB3	OF3B	Group 11
[redacted] (7109)	Q	[redacted] Stormwater runoff from the east side of Facility 7109 enters a trench drain in front of the service bay doors and discharges to the ditch running south along Sealion Road. Runoff from the gravel parking lot flows west over the hillside into a ditch and catch basins around Building 7110. This facility lies in Drainage Basin DB7 and discharges through OF-7.	POL, Paint, Solvents	None	DB7	OF7	Group 12
[redacted] (7110)	Q	[redacted] Stormwater runoff from the entry to Facility 7110 (north side) flows south and west into a ditch running along Wahoo Road. The ditch ends at a catch basin that drains to OF-7. Runoff from the other three sides of the building flows into ditches and catch basins surrounding the facility. These catch basins also drain through Outfall OF-7. The maintenance bay entry, at the north side of the building, is covered by a canopy.	POL, Paint, Solvents	Open dumpster with oily scrap metal. Open dumpster with scrapped boat parts and metal shavings.	DB7	OF7	Group 12
[redacted] (7123)	Q	[redacted] Stormwater runoff from facility drains to the north of the building into Hood Canal. Runoff flows from the facility into catch basins, through two media filter cartridge vaults and then out the outfall pipe OF11A. Building 7604's roof drains also discharge into this outfall pipe. [redacted]	Bases	None	DB11	OF11A	
[redacted] (7125)	Q	[redacted] Stormwater runoff from the areas surrounding Building 7125 flows into a set of catch basins surrounding the facility. The facility storm sewer system discharges into a wet pond northeast of the building. Overflow from the wet pond would flow into the forested area to the east of the pond. Although the majority of runoff from the site likely infiltrates, during very heavy rainfall events, some stormwater may flow down the slope into Devils Hole. This facility lies in Drainage Basin DB3.	POL, Paint, Solvents	None	DB3	n/a	Group 13

Building/Facility Name (Number)	Sector	Description	Potential Pollutants	Exposed Materials Storage or Process	Drainage Basin(s)	Outfall(s)	Appendix A Figure
[redacted] (7142)	Q	[redacted] The facility is situated on the northwest end of a parking lot that slopes generally to the west and drains to catch basins. Surface water runoff from the facility flows into a storm drain system that opens into ditches to the west and north and drains west to a culvert that runs under Trigger Street. The water then goes to OF3B and then runs into Devil's Hole, which discharges to Hood Canal. A stormwater detention pond is located in the parking lot to the south of Building 7142. The stormwater drainage and conveyance features to the north and west of Building 7142 were renovated in 2016 to improve stormwater flow and prevent localized flooding/ponding in the vicinity.	Metals, POL	Outdoor metals storage, scrap metals bin, crane test weights storage, wood bin.	DB3	OF3B	Group 10
[redacted] (7176*)	Q	[redacted] Stormwater runoff generally drains to the west. The facility lies in several drainage areas, but all drainage areas discharge to Hood Canal. [redacted] drains by sheet flow directly to Hood Canal. The [redacted] drains through 6-inch drop drains and by sheet flow over the edge of the wharf. The area between the seawall and the former location of Building 7163 and 7180 sheet flows directly into Hood Canal. Stormwater from the former location of Building 7161, on the north side of the pier entrance, flows to Catch Basin 7163-CB20, which outfalls at OF16. This area constitutes Drainage Basin DB16. The eastern half of the former Building 7163 and the asphalt in front of the building slabs drain into catch basins that outfall at OF15. Two of these catch basins (7163-CB8 and 7163-CB11) have gravity oil/water separators that are not properly maintained. This area constitutes Drainage Basin DB15. The eastern half of former Building 7180 and the asphalt lot in front of the slab drain into catch basins that outfall at OF14. These areas lie in Drainage Basin DB14 and generally drain to the south.	POL, Solvents, Metal, Detergents, Ethylene Glycol	Outdoor metals storage. Rusted flammable lockers. Garbage dumpster missing lid.	DB14, DB15, DB16	OF14, OF15, OF16	Group 17
[redacted] (7201)	Q	[redacted] Stormwater runoff from Building 7201 drains to the southwest. Catch basins in the asphalt lot surrounding the building collect the runoff. These catch basins discharge to an open ditch that discharges into Hood Canal at OF10. Some of the runoff will percolate into the ground before reaching the outfall. This facility lies in Drainage Basin DB10.	Paint	None	DB10	OF10	Group 14
SUBSAT Facility (7203)	Q	[redacted] Surface water runoff associated with the facility drains west to Devil's Hole, which discharges to the Hood Canal. The west and east sides of the building contain impervious surfaces that generate surface runoff and are potentially in contact with pollutants. The eastern side of the building contains a loading ramp that is served by a trench drain. A vehicle parking area, also on the east side, drains away from the building to catch basins located on adjacent grassy areas. The trench drains and the catch basins are connected to a storm drain system that runs along Sealion Road and opens to a ditch before entering Devil's Hole. The west side of the building sheet flows away from the building and runs over a grassy area or down the loading drive before migrating overland to Devil's Hole. Eleven Filterra bio-retention filtration units are installed in the parking lots to the south to treat stormwater runoff from the paved areas.	Lithium Hydroxide, Mono Methylamine	None	DB3	DB3	Group 14

Building/Facility Name (Number)	Sector	Description	Potential Pollutants	Exposed Materials Storage or Process	Drainage Basin(s)	Outfall(s)	Appendix A Figure
[redacted] (7400*, 7409, 7415, 7417*, 7429*, 7431*, 7432*, 7418, 7419, 7425, 7426, 7428, 7436*, 7450)	Q, R	[redacted] All stormwater from the [redacted] collects in catch basins throughout the pier. Berms prevent any sheet flows over the sides of the pier, and roof drains empty onto the deck and do not sheet flow to the canal. The catch basins flow by gravity to a sump pump that pumps the stormwater to the retention pond southeast [redacted]. The retention pond discharges mainly through its overflow pipe with a little flow through an oil/water separator (7037) to OF3A to Devil's Hole which then discharges to Hood Canal. Delta Pier lies in Drainage Basin DB3A [redacted]	POL, Paint, Metals, Solids	Diesel from outdoor ASTs could be exposed during fuel transfer. Metal equipment storage and staging occurs throughout the pier complex. Exposed zinc anodes exposed to weather on south side of 7450. Scrap dumpsters exposed to weather on south side of 7450.	DB3A	OF3A	Group 15
[redacted] (7408)	N/A	This building has been demoed			N/A	N/A	Group 17

Building/Facility Name (Number)	Sector	Description	Potential Pollutants	Exposed Materials Storage or Process	Drainage Basin(s)	Outfall(s)	Appendix A Figure
[redacted] (7420)	Q, R	[redacted] Stormwater runoff from [redacted], collects in catch basins throughout the pier. Berms prevent sheet flow over the side of the pier, and roof drains empty onto the deck instead of into the canal. Stormwater that falls into the actual [redacted] collects in catch basins and is pumped to Building 7030 for treatment as industrial waste. Stormwater that falls around the [redacted] collects in catch basins and gravity flows to a wetwell with a grit chamber. The stormwater in the wetwell is pumped to the retention pond southeast of the pier. The retention pond discharges mainly through its overflow pipe with a little flow through an oil/water separator (7037) to OF3A to Devil's Hole which then discharges to Hood Canal. Delta Pier lies in Drainage Basin DB3. Hose trenches adjacent to the [redacted] extend toward it and open on the side above a gallery that extends along each side. This gallery has floor drains that discharge to the stormwater system. [redacted]	Paint, Solids, Metal, POL, Wastewater	None	DB3A	OF3A – top surface of drydock. [redacted]	Group 15
[redacted] (7604)	N/A	The was demolished.	N/A	N/A	N/A	N/A	N/A

*Only discharges from facilities indicated are applicable to sector
BOD: Biochemical Oxygen Demand

[redacted]

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3.3 Non-Stormwater Discharges

An evaluation of non-stormwater discharges was conducted at NAVBASE Kitsap Bangor in fiscal year 2017, in conjunction with the Illicit Discharge Detection and Elimination (IDDE) program review in accordance with the MS4 permit. Major objectives of this evaluation were (a) to identify permitted and unpermitted non-stormwater entries into the stormwater system and (b) to identify and evaluate controls to reduce the discharge of unpermitted discharges to the maximum extent practicable.

Typical unpermitted non-stormwater entries include sanitary wastewater or septic system seepage, non-contact or contaminated industrial process waters, household toxics, glycols, detergents, and POLs from vehicle repair shops and storage areas, and runoff from pesticide or fertilizer applications. The method of entry can be through direct connections (where illicit discharges are plumbed directly to the drainage system), by indirect entry (through below-grade system infiltration), or from spills (through overland flow into catch basins).

Specific procedures used during the non-stormwater discharge evaluation included:

- Review and confirmation of existing facility maps to identify potential non-stormwater illicit discharges or cross-connections to the system
- Dry weather inspection and testing of outfalls-of-concern identified in the field
- Inspections of industrial facilities-of-concern to determine the source

Methodologies used to conduct the evaluation, study findings, and make recommendations are detailed in the 2017 Illicit Discharge Detection and Elimination Study report for NAVBASE Kitsap Bangor, which is being drafted concurrent to this SWPPP. No discharges were observed at the majority of catch basins and outfalls during the dry weather inspections. Illicit discharges associated with cross-connections were identified at two locations, as identified in Table 3-4.

Table 3-4: Illicit Discharges Identified during 2017 IDDE Study

Outfall/ Catch Basin	Finding Description	Discharge Type		Recommendation
		Dry Weather Discharge	Cross-Connection	
Catch Basin outside Bldg. 7059	Water used for [redacted] to floor drain in Bldg. 7059, which is plumbed to storm system.		X	Plumb the floor drain to sanitary sewer system.
Trench drains outside Bldg. 2950	Trench drains outside maintenance area flow to storm system.		X	Plumb the trench drains to sanitary sewer system.

Not all non-stormwater discharges are considered unauthorized. The 2021 MSGP, Part 1.2.2.1, authorizes certain non-stormwater discharges. A number of site-specific permitted non-stormwater discharges are present at NAVBASE Kitsap Bangor, including:

- Chiller water overflow at the [redacted] (Bldg. 7202)
- Drinking water fountain and eye wash station discharges at the [redacted] (Bldg. 5065)

- Drinking water blow-off, sample purge, and pre-operation flush water (high grade pure water only) to Hood Canal at the [redacted] (Bldg. 7123)
- Discharges of potable water from eyewash stations
- Fresh water pressure washing of oil containment booms to remove marine growth
- Fresh water rinsing of small boats

Other permitted non-stormwater discharges similar to those identified above exist at other facilities. In addition, non-detergent building and pavement washing takes place as needed. As part of the potable water supply system, waterlines are flushed to the storm drain system. Lawns are also watered throughout the developed portions of the base resulting in potable water runoff to the storm drain system. Fire-fighting activities, as required, also result in potable water runoff to the storm drain system.

3.4 Salt Storage

The 2021 MSGP requires that the location of any storage piles containing salt used for deicing or other commercial or industrial purposes be documented. There are no industrial activities occurring at NAVBASE Kitsap Bangor that include the stockpiling of salt or deicing agents.

The deicing of roads and paved surfaces is primarily conducted by contractor. The contractor maintains a supply of granulated calcium magnesium acetate (CMA) and commercial grade salt pellets for deicing purposes. Unused salts and CMA are maintained in bags until mixed into brine solutions for use. Excess deicing brine solutions are enclosed in plastic containers for storage.

Salt containers and bags are maintained for industrial and deicing purposes at several locations on the installation and are identified in Table 3-5. Small quantities of salt stored at shops and units for localized deicing of walkways and shop entrances are not included in Table 3-5.

Table 3-5: Salt Storage at NAVBASE Kitsap Bangor

Building	Building Use	Salt Use	Quantity Stored	Storage/pile exposed to stormwater
1038	[redacted]	Deicing	Forty 55-lb bags of CMA	No, stored indoors
1205	[redacted]	Deicing	Thirty-five 50-lb bags of Salt Pellets	No, enclosed in storage unit
		Deicing	Approx 350-gal salt brine solution	No, stored outdoors in plastic containers
		Deicing	Approx 1,300-gal CMA brine solution	No, stored outdoors in plastic containers
2800	[redacted]	Water softener	Thirty 50-lb bags	No, stored indoors
7000	[redacted]	Unidentified, disodium salt on prior AUL	Unidentified	Unknown
7202	[redacted]	Operation and maintenance	Twenty 50-lb bags	No, stored and used indoors
7501	[redacted]	Maintenance	Twenty 50-lb bags	No, stored under cover

3.5 Sampling Data Summary

Under the 2008 and 2015 MSGP the hardness dependent metals in freshwater were for discharges to Clear Creek and Devil's Hole. The freshwater hardness value used in 2015 MSGP was 72 mg/L as $CaCO_3$.

Under the 2021 MSGP, the benchmark values assigned to certain metals were dependent on the hardness of the receiving waters. NAVBASE Kitsap Bangor receiving waters at Clear Creek and Devil's Hole were monitored for hardness in preparation for the 2021 MSGP. These values will be used for the 2021 MSGP hardness dependent metals. Results of hardness monitoring are in Table 3-6.

Table 3-6: Hardness Monitoring for 2021 MSGP

Location	Parameter	Units	28 April 2021
Clear Creek	Hardness	mg/L as $CaCO_3$	96.2
Devil's Hole	Hardness	mg/L as $CaCO_3$	91.7

Notes:
$CaCO_3$: Calcium Carbonate
mg/L: milligram per liter

3.5.1 Past Quarterly Monitoring

During the prior 2015 MSGP permit authorization, quarterly benchmark monitoring was conducted at seven outfalls through the first quarter of 2018. The annual averages for all sampled parameters were below the sector-specific benchmarks, meeting the requirements of the 2015 MSGP. Table 3-7 summarizes the sample results obtained during this timeframe, including sector-specific quarterly benchmark monitoring results and impaired water monitoring results, which are described below. Special monthly copper and zinc monitoring are discussed below in 3.5.3.

3.5.2 Past Impaired Waters Monitoring

Under the 2015 MSGP authorization, NAVBASE Kitsap Bangor conducted quarterly impaired waters monitoring at several locations for COD, TSS and fecal coliform bacteria.

Quarterly COD monitoring was conducted at five outfalls (OF1, OF2, OF8, and OF11) that discharge to portions of Hood Canal and to tributaries of Clear Creek, which are impaired for low dissolved oxygen content. During this time, only three samples, one at OF11 and two at OF8 exceeded the benchmark of 120 mg/L. All other samples met benchmark requirements for COD during the prior permit term.

Quarterly fecal coliform bacteria monitoring was conducted at OF1 and OF2 that discharge to tributaries of Clear Creek, which is listed as impaired for fecal coliform. There is no MSGP benchmark for fecal coliform. Samples flowing into Clear Creek were compared to the Sinclair-Dyes Watershed Bacteria TMDL and Implementation Plan goals of 73 cfu/100 ml geometric mean and 90th percentile value of 146 cfu/100 ml. Neither outfall exceeded these goals.

Quarterly TSS monitoring was performed at OF8, OF9, and OF11 as required for sediment cleanup areas along the shoreline of the Hood Canal. The lower TSS benchmark of 30 mg/L was used as required in Part 9.10.7.3 of the 2015 MSGP.

Table 3-8 summarizes sampling results of discharges to impaired waters during the 2015 MSGP permit period to current.

3.5.3 Additional Monitoring

In a 25 January 2017 letter, the EPA mandated additional monthly benchmark monitoring for copper and zinc at Outfall OF2 and OF3A. Monthly samples were averaged on a quarterly basis and compared to monthly sampling benchmark levels required by EPA. Sampling could cease if four consecutive quarterly average values were below the benchmark. For OF2, which discharges into a Clear Creek tributary, EPA established a freshwater benchmark of 50 µg/L for zinc and 5.6 µg/L for copper. For OF3A, which discharges to Hood Canal, the EPA mandated a saltwater benchmark of 117 µg/L for zinc and 14 µg/L for copper.

At OF2, copper and zinc concentrations met eligibility requirements to cease monitoring at end of first year of sampling.

At OF3A, copper and zinc concentrations met eligibility requirements to cease monitoring at end of first year of sampling.

Table 3-9 identifies monthly zinc and copper monitoring results during 2015 MSGP permit period.

Table 3-7: First Four Quarters of Sampling Data during 2015 MSGP Permit Term

Outfall/Location	Parameter	Units	Benchmark	Mar 2017	Jun 2017	Sep 2017	Dec 2017	Feb 2018	Four Qtr. Average	Note
OF1	Aluminum	µg/L	750	92.9	22.9	0	0	---	28.95	NFT
	Iron	µg/L	1000	275	172	150	235	---	208	NFT
	Lead	µg/L	45	0159	0	0	0	---	.04	NFT
	Zinc	µg/L	80	8.02	0	0	0	---	2.005	NFT
OF2	Aluminum	µg/L	750	435	32.5	27.1	113	---	151.9	NFT
	Iron	µg/L	1000	415	737	765	392	---	577.25	NFT
	Lead	µg/L	45	.966	0736	1.57	.968	---	1.06	NFT
	COD	mg/L	120	14.2	20.3	26.3	26.4	---	21.8	NFT
	TSS	mg/L	100	8.6	2.6	1.5	3.3	---	4	NFT
	Nitrate + Nitrite	mg/L	0.68	.06	0	.021	0	---	.02	NFT
OF3	Aluminum	µg/L	750	93	0	0	27.8	---	30.2	NFT
	Iron	µg/L	1000	218	183	237	149	---	196.75	NFT
	Lead	µg/L	210	0	0	0	0	---	0	NFT
	Zinc	µg/L	90	0	0	0	6.01	---	1.503	NFT
	Nitrate + Nitrite	mg/L	0.68	.425	.038	0	.499	---	.241	NFT
OF3A	Aluminum	µg/L	750	28.8	0	0	0	---	7.2	NFT
	Iron	µg/L	1000	229	372	133	246	---	245	NFT
	Lead	µg/L	210	.39	.148	0	.211	---	.187	NFT
OF8	Aluminum	µg/L	750	493	318	No	395	83.3	322.35	NFT
	Iron	µg/L	1000	400	597	observed	398	967	590.5	NFT
	Lead	µg/L	210	.488	1.06	discharge	.794	.58	.730	NFT
	Zinc	µg/L	90	66.4	70.1	from rain event	65	53.6	63.775	NFT
OF9	Aluminum	µg/L	750	609	260	0	0	---	217.25	NFT
	Iron	µg/L	1000	596	624	0	32.8	---	313.2	NFT
	Lead	µg/L	210	.888	2.92	.175	0	---	.996	NFT
	Zinc	µg/L	260	14.9	47.2	7.37	0	---	17.368	NFT
OF11	Aluminum	µg/L	750	304	123	0	103	---	132.5	NFT
	Iron	µg/L	1000	639	684	395	359	---	519.25	NFT
	Lead	µg/L	210	.254	.25	0	0	---	.126	NFT
	Zinc	µg/L	90	11.7	0	68.1	11.6	---	22.85	NFT

Notes:
Italic: Individual sample exceeds benchmark or target value.
cfu: Colony Forming Units
µg/L: Microgram per Liter
mg/L: Milligrams per Liter
NFT: No Further Testing required during permit term. Average of four quarterly monitoring results met benchmark.

Table 3-8: Impaired Water Monitoring 2015 MSGP Permit Term

Outfall	Parameter	Units	Bench-mark	Mar 2017	Jun 2015	Sep 2017	Dec 2017	Feb 2018	Jun 2018	Jul-Sep 2018	Dec 2018	Feb 2019	Apr 2019	Jul 2019	Dec 2019	Mar 2020	Apr 2020	Aug 2020	Nov 2020	Mar 2021
OF1	**Fecal Coliform**	**cfu/ 100 ml**	**note [a]**	2	***140***	20	30	0	80	NF	10	0	10	0	<10	<10	<10	***310***	<10	<10
OF2	**Fecal Coliform**	**cfu/ 100 ml**	**note [a]**	21	30	0	30	10	*150*	NF	60	0	20	*127*	82	20	73	20	20	50
OF1	**COD**	**mg/L**	**120**	0	0	0	0	0	NF	NF	11.6	0	0	0	10	6	0	0	11	4
OF2	**COD**	**mg/L**	**120**	14.2	20.3	26.3	26.4	21.8	NF	NF	12.3	0	0	19.9	0	7	20	32	5	14
OF8	**COD**	**mg/L**	**120**	21.1	15.9	NF	29	31.1	NF	NF	13.7	17.1	14.7	13	65	19	***203***	***143***	64	11
OF11	**COD**	**mg/L**	**120**	38.5	20.1	***125***	21.1	18.4	NF	NF	26.3	17.9	0	12.3	34	22	0	15	25	19
OF8	**TSS**	**mg/L**	**30**	29.5	17	NF	13	8	NF	NF	16	7	22	5	***203***	***49.5***	***64.5***	20	***168***	7
OF9	**TSS**	**mg/L**	**30**	10	13.1	0	1.5	11	NF	NF	5	7	14	0	11	0	***42.5***	17	14	<4
OF11	**TSS**	**mg/L**	**30**	17.6	19.9	17.3	2.6	15	NF	NF	5	3	3	3	5.5	7	***73.5***	7	14	<4

Notes:

[a] Fecal coliform monitoring conducted as required for discharges to impaired waters with TMDL, no benchmark.
COD was sampled for Category 5 dissolved oxygen impaired waters and TSS was sampled for Category 4b sediment impaired waters.
Italic: Individual sample exceeds benchmark or target value.
NF: No flow

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Table 3-9: Monthly Coper and Zinc Monitoring at OF2 and OF3A, 2015 MSGP

Outfall	**OF2**		**OF3A**	
Analyte	**Zinc**	**Copper**	**Zinc**	**Copper**
Units	**µg/L**	**µg/L**	**µg/L**	**µg/L**
Benchmark	**50**	**5.6**	**117**	**14**
Jan 2017	21.2	3.94	74.1	8.91
Feb 2017	14.5	2.53	93.2	*14.5*
Mar 2017	19.4	3.35	103	*15*
Quarterly Average	18.367	3.273	90.1	12.803
Apr 2017	27.3	4.07	95.8	*15.6*
May 2017	16.4	3.12	54.7	13.3
Jun 2017	7.35	1.53	18	8.95
Quarterly Average	17.017	2.907	56.167	12.617
Jul 2017	no flow	no flow	no flow	no flow
Aug 2017	no flow	no flow	no flow	no flow
Sep 2017	12.5	*6.17*	8.69	4.13
Quarterly Average	12.5	**6.17**	8.69	4.13
Oct 2017	0	1.02	6.69	3.45
Nov 2017	32.6	5.18	62.3	9.73
Dec 2017	24.8	3.34	34.2	6.610
Quarterly Average	19.133	3.18	34.397	6.597
First year Average	16.754	3.883	47.338	9.037

Notes:
Italic: Individual sample exceeds benchmark value.
Bold: Quarterly average result exceeds benchmark value.

4 Stormwater Control Measures

In accordance with the MSGP, NAVBASE Kitsap Bangor selects, designs, installs, and implements stormwater control measures, including BMPs, to prevent or reduce the potential for water pollution. Some BMPs are more appropriate for an individual site than others based on site-specific characteristics; some BMPs are readily implemented at all sites.

The EPA identifies baseline BMPs (good housekeeping and preventive maintenance practices, inspections, employee training and testing, spill prevention and response, sediment and erosion control, management of runoff, and recordkeeping and reporting) that are required of all facilities and advanced BMPs that specifically address particular pollutant sources or industrial sectors. The Stormwater Management Manual for Western Washington (Ecology 2019) also identifies baseline BMPs and emphasizes source control BMPs as the first and most cost effective method of eliminating or reducing pollution of stormwater.

The various types of stormwater control measures, including BMPs, applicable to NAVBASE Kitsap Bangor are summarized below.

4.1 Non-Numeric Technology-Based Effluent Limits (Core BMPs)

Core BMPs are those mandated in the 2021 MSGP Part 2.1, which generally apply to all industrial areas at NAVBASE Kitsap Bangor, as identified in Section 3.1 of this SWPPP. Core BMPs are identified in Table 4-1.

4.2 Sector-Specific Non-Numeric Effluent Limits (Sector-Specific BMPs)

As identified in Section 3.1 of this SWPPP, the industrial areas at NAVBASE Kitsap Bangor are associated with one or more of five industrial sectors defined in the 2021 MSGP. Sector-specific BMPs are mandated in the 2021 MSGP Part 8 and apply to industrial areas at NAVBASE Kitsap Bangor identified in Table 3.1 of this SWPPP as having activities associated with the respective MSGP sector(s). Sector-specific BMPs are identified in Table 4-1.

4.2.1 Sector N: Scrap and Waste Recycling Facility BMPs

These BMPs are required by 2021 MSGP Part 8.N.3.1 for Scrap and Waste Recycling Facilities (Non-Source Separated, Non-liquid Recyclable Materials). Unless otherwise noted, these BMPs apply only to those facilities associated with that sector. The Recycle Center (Bldg. 1460) is identified as a Sector N industrial facility at NAVBASE Kitsap Bangor.

4.2.2 Sector P: Land Transportation and Warehousing BMPs

These BMPs are required by 2021 MSGP Part 8.P.3 for Land Transportation and Warehousing. Unless otherwise noted, these BMPs apply only to those facilities associated with that sector.

4.2.3 Sector Q: Water Transportation BMPs

These BMPs are required by 2021 MSGP Part 8.Q.3 for Water Transportation. Unless otherwise noted, these BMPs apply only to those facilities associated with that sector.

4.2.4 Sector R: Ship and Boat Building and Repair Yards BMPs

These BMPs are required by 2021 MSGP Part 8.R.3 for Ship and Boat Building and Repair Yards. Unless otherwise noted, these BMPs apply only to those facilities associated with that sector.

4.2.5 Sector AA: Fabricated Metal Products BMPs

These BMPs are required by 2021 MSGP Part 8.AA.2 for Fabricated Metals Products. Unless otherwise noted, these BMPs apply only to those facilities associated with that sector.

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Table 4-1: Stormwater Control Measures/Best Management Practices

BMP Number	BMP Title	BMP	Note
Core BMPs			
C-1	Minimize Exposure (Core BMP)	Industrial areas must minimize the exposure of manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) to rain, snow, snowmelt, and runoff in order to minimize pollutant discharges by either locating these industrial materials and activities inside or protecting them with storm resistant coverings. Unless infeasible, you must also: • Use grading, berming, or curbing to prevent runoff of contaminated flows and divert run-on away from these areas; • Locate materials, equipment, and activities so that potential leaks and spills are contained or able to be contained or diverted before discharge; • Clean up spills and leaks promptly using dry methods (e.g., absorbents) to prevent the discharge of pollutants; • Store leaky vehicles and equipment indoors or, if stored outdoors, use drip pans and absorbents; • Use spill/overflow protection equipment; • Perform all vehicle and/or equipment cleaning operations indoors, under cover, or in bermed areas that prevent runoff and run-on and also that capture any overspray; and • Drain fluids from equipment and vehicles that will be decommissioned, and for any equipment and vehicles that will remain unused for extended periods of time, inspect at least monthly for leaks. **Note:** Industrial materials do not need to be enclosed or covered if stormwater runoff from affected areas does not discharge pollutants to receiving waters or if discharges are authorized under another NPDES permit.	

BMP Number	BMP Title	BMP	Note
C-2	Good Housekeeping (Core BMP)	Industrial areas must keep clean all exposed areas that are potential sources of pollutants. Good housekeeping measures must be performed in order to minimize pollutant discharges, including but not limited to, the following: • Sweep or vacuum at regular intervals or alternatively wash down the area and collect and/or treat. Properly dispose of the washdown water. • Store materials in appropriate containers. • Keep all dumpster lids closed when not in use. For dumpsters and roll off boxes that do not have lids and could leak, ensure that discharges have a control (e.g., secondary containment, treatment). Consistent with 2021 MSGP, this permit does not authorize dry weather discharges from dumpsters or roll off boxes. • Minimize the potential for waste, garbage, and floatable debris to be discharged by keeping exposed areas free of such materials or by intercepting them before they are discharged. **Plastic Materials Requirements:** Facilities that handle pre-production plastic must implement best management practices to eliminate discharges of plastic in stormwater. Examples of plastic material required to be addressed as stormwater pollutants include plastic resin pellets, powders, flakes, additives, regrind, scrap, waste, and recycling.	
C-3	Maintenance (Core BMP)	Industrial areas must maintain all control measures that are used to achieve the effluent limits in this permit in effective operating condition, as well as all industrial equipment and systems, in order to minimize pollutant discharges. This includes: • Perform inspections and preventive maintenance of stormwater drainage, source controls, treatment systems, and plant equipment and systems that could fail and result in contamination of stormwater. • Diligently maintain non-structural control measures (e.g., keep spill response supplies available, personnel appropriately trained). • Inspect and maintain baghouses at least quarterly to prevent the escape of dust from the system and immediately remove any accumulated dust at the base of the exterior baghouse. • Clean catch basins when the depth of debris reaches two-thirds of the sump depth and keep the debris surface at least 6 inches below the lowest outlet pipe.	See Section 5 of the SWPPP for more information regarding maintenance and inspections.

BMP Number	BMP Title	BMP	Note
C-4	Spill Prevention and Response (Core BMP)	Industrial areas must minimize the potential for leaks, spills, and other releases that may be exposed to stormwater and develop plans for effective response to such spills if or when they occur in order to minimize pollutant discharges. Spill prevention and response measures that must be conducted include, but are not limited to, the following: • Plainly label containers (e.g., "Used Oil," "Spent Solvents," "Fertilizers and Pesticides") that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur; • Implement procedures for material storage and handling, including the use of secondary containment and barriers between material storage and traffic areas, or a similarly effective means designed to prevent the discharge of pollutants from these areas; • Develop training on the procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases. As appropriate, execute such procedures as soon as possible; • Keep spill kits on-site, located near areas where spills may occur or where a rapid response can be made; and • Notify appropriate facility personnel when a leak, spill, or other release occurs. When a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302, occurs during a 24-hour period, you must notify the National Response Center (NRC) at (800) 424-8802 as soon as you have knowledge of the discharge. State or local requirements may necessitate reporting spills or discharges to local emergency response, public health, or drinking water supply agencies. Contact information must be in locations that are readily accessible and available.	Spill prevention and response procedures are thoroughly addressed in the NAVBASE Kitsap Bangor Spill Prevention, Control, and Countermeasures (SPCC) Plan and Commander, Navy Region Northwest (COMNAVREG NW) Oil and Hazardous Substance Integrated Contingency Plan
C-5	Erosion and Sediment Controls (Core BMP)	Industrial areas must minimize erosion by stabilizing exposed soils in order to minimize pollutant discharges and placing flow velocity dissipation devices at discharge locations to minimize channel and stream bank erosion and scour in the immediate vicinity of discharge points. Industrial activities must also use structural and non-structural control measures to minimize the discharge of sediment. If polymers and/or other chemical treatments are used as part of erosion and sediment controls, they must be identified by name and purpose in this SWPPP. Additional resources are available to help select appropriate BMPs for erosion and sediment control at EPA's Stormwater Discharges from Construction Activities website.	The 2021 MSGP requires that the SWPPP identify areas of the facility that have the potential for erosion and implement BMPs to control that erosion.

BMP Number	BMP Title	BMP	Note
C-6	Management of Runoff (Core BMP)	Industrial areas must divert, infiltrate, reuse, contain, or otherwise reduce stormwater runoff to minimize pollutants in discharges. In selecting, designing, installing, and implementing appropriate control measures, facilities are encouraged to consult with EPA's internet-based resources relating to runoff management, including the sector-specific Industrial Stormwater Fact Sheet Series, National Menu of Stormwater BMPs, and National Management Measures to Control Nonpoint Source Pollution from Urban Areas, and any similar state or tribal resources.	The 2021 MSGP requires that stormwater runoff management practices such as permanent structural BMPs be described in the SWPPP.
C-7	Salt Storage Piles or Piles Containing Salt (Core BMP)	Industrial areas must enclose or cover storage piles of salt or piles containing salt that are used for deicing or other commercial or industrial purposes, including maintenance of paved surfaces, in order to minimize pollutant discharges. Salt storage facilities must implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile. Piles do not need to be enclosed or covered pursuant to this permit if stormwater runoff from the piles is not discharged or if discharges from the piles are authorized under another NPDES permit.	Winter Road and Sidewalk Safety (Salt and Sand) Control measures, including covering piles, must be described and implemented through the SWPPP.

BMP Number	BMP Title	BMP	Note
C-8	Employee Training (Core BMP)	Train all employees who work in areas where industrial materials or activities are exposed to stormwater or who are responsible for implementing activities necessary to meet the conditions of this permit (e.g., inspectors, maintenance personnel), including all members of the stormwater pollution prevention team. The following personnel must understand the requirements of the 2021 MSGP and their specific responsibilities with respect to those requirements: • Personnel who are responsible for the design, installation, maintenance, and/or repair of controls (including pollution prevention measures); • Personnel responsible for the storage and handling of chemicals and materials that could become contaminants in stormwater discharges; • Personnel who are responsible for conducting and documenting monitoring and inspections as required in 2021 MSGP Parts 3 and 4; and • Personnel who are responsible for taking and documenting corrective actions as required in 2021 MSGP Part 5. Personnel must be trained in at least the following if related to the scope of their job duties (e.g., only personnel responsible for conducting inspections need to understand how to conduct inspections): • An overview of what is in the SWPPP; • Spill response procedures, good housekeeping, maintenance requirements, and material management practices; • The location of all controls on the site required by this permit, and how they are to be maintained; • The proper procedures to follow with respect to the permit's pollution prevention requirements; and • When and how to conduct inspections, record applicable findings, and take corrective actions.	Industrial sector-specific training requirements are also applicable. See sector-specific BMPs below.
C-9	Non-Stormwater Discharges (Core BMP)	Evaluate for the presence of non-stormwater discharges. Any non-stormwater discharges not explicitly authorized in 2021 MSGP or covered by another NPDES permit must be eliminated. This includes vehicle and equipment/tank wash water (except for those authorized in 2021 MSGP Part 1.2.2.3 for Sectors G, H, and J). If not covered under a separate NPDES permit, then wastewater, wash water, and any other unauthorized non-stormwater must be discharged to a sanitary sewer in accordance with applicable industrial pretreatment requirements or otherwise disposed of appropriately.	Permitees must eliminate non-stormwater discharges that are not authorized by an NPDES permit. See SWPPP Section 3.3 for a list of authorized non-stormwater discharges.

BMP Number	BMP Title	BMP	Note
C-10	Dust Generation and Vehicle Tracking of Industrial Materials (Core BMP)	Minimize generation of dust and off-site tracking of raw, final, or waste materials in order to minimize pollutant discharges.	
Sector N BMPs – Scrap Recycling and Waste Recycling Facilities			
N-1	Inbound Recycling and Waste Material Control Program	Minimize the chance of accepting materials that could be significant sources of pollutants by conducting inspections of inbound recyclables and waste materials and through implementation of control measures such as the following, where determined to be feasible (list not exclusive): • Provide information and education to suppliers of scrap and recyclable waste materials on draining and properly disposing of residual fluids (e.g., from vehicles and equipment engines, radiators and transmissions, oil filled transformers, and individual containers or drums) and removal of mercury switches from vehicles before delivery to the facility; • Establish procedures to minimize the potential of any residual fluids from coming into contact with precipitation or runoff; • Establish procedures for accepting scrap lead-acid batteries (additional requirements for the handling, storage, and disposal or recycling of batteries are contained in the scrap lead-acid battery program provisions in 2021 MSGP Part 8.N.3.1.6); • Provide training targeted for those personnel engaged in the inspection and acceptance of inbound recyclable materials; and • Establish procedures to ensure that liquid wastes, including used oil, are stored in materially compatible and non-leaking containers and are disposed of or recycled in accordance with the Resource Conservation and Recovery Act (RCRA).	Materials will be inspected for potential sources of spills.
N-2	Scrap and Waste Material Stockpiles and Storage (Outdoor)	Minimize contact of stormwater runoff with stockpiled materials, processed materials, and non-recyclable wastes through implementation of control measures such as the following, where determined to be feasible (list not exclusive): Permanent or semi-permanent covers; sediment traps, vegetated swales and strips, catch basin filters, and sand filters to facilitate settling or filtering of pollutants; dikes, berms, containment trenches, culverts, and surface grading to divert runoff from storage areas; silt fencing; and oil/water separators, sumps, and dry absorbents for areas where potential sources of residual fluids are stockpiled (e.g., automobile engine storage areas).	Stored materials will be covered to the maximum extent practicable. Electronics will be shrink-wrapped or covered with tarps. Metals will be covered or stored in dumpsters with weatherproof lids.

BMP Number	BMP Title	BMP	Note
N-3	Stockpiling of Turnings Exposed to Cutting Fluids (Outdoor Storage)	Minimize contact of surface runoff with residual cutting fluids by storing all turnings exposed to cutting fluids under some form of permanent or semi-permanent cover, or establish dedicated containment areas for all turnings that have been exposed to cutting fluids. Any containment areas must be constructed of concrete, asphalt, or other equivalent types of impermeable material and include a barrier (e.g., berms, curbing, elevated pads) to prevent contact with stormwater run-on. Stormwater runoff from these areas can be discharged, provided that any runoff is first collected and treated by an oil/water separator or its equivalent. Regularly maintain the oil/water separator (or its equivalent) and properly dispose of or recycle collected residual fluids.	Metal turnings will be covered or otherwise protected from exposure.
N-4	Scrap and Waste Material Stockpiles and Storage (Covered or Indoor Storage)	Minimize contact of residual liquids and particulate matter from materials stored indoors or under cover with surface runoff through implementation of control measures such as the following, where determined to be feasible (list not exclusive): Good housekeeping measures, including the use of dry absorbents or wet vacuuming to contain, dispose of, or recycle residual liquids originating from recyclable containers; mercury spill kits for spills from storage of mercury switches; not allowing wash water from tipping floors or other processing areas to discharge to the storm sewer system; and disconnecting or sealing off all floor drains connected to the storm sewer system.	Materials will be stored in containers or on pallets to minimize contact with runoff.

BMP Number	BMP Title	BMP	Note
N-5	Scrap and Recyclable Waste Processing Areas	Minimize surface runoff from coming in contact with scrap processing equipment. Pay attention to operations that generate visible amounts of particulate residue (e.g., shredding) to minimize the contact of accumulated particulate matter and residual fluids with runoff (through good housekeeping, preventive maintenance). To minimize discharges of pollutants in stormwater from scrap and recyclable waste processing areas, implement control measures such as the following, where determined to be feasible (list not exclusive): • At least once per month, inspect equipment for spills or leaks and for malfunctioning, worn, or corroded parts or equipment; • Establish a preventive maintenance program for processing equipment; • Use dry-absorbents or other clean-up practices to collect and dispose of or recycle spilled or leaking fluids; use mercury spill kits for spills from storage of mercury switches; • For unattended hydraulic reservoirs over 150 gallons in capacity, install protection devices such as low-level alarms or equivalent devices or install secondary containment that can hold the entire volume of the reservoir; • Implement containment or diversion structures such as dikes, berms, culverts, trenches, elevated concrete pads, and grading to minimize contact of stormwater runoff with outdoor processing equipment or stored materials; • Use oil and water separators or sumps; • Install permanent or semi-permanent covers in processing areas where there are residual fluids and grease; and • Use retention or detention ponds or basins, sediment traps, vegetated swales or strips, and/or catch basin filters or sand filters for pollutant settling and filtration.	All scrap and recycling bins must be covered to prevent stormwater intrusion. Processing areas must be bermed or contained so surface runoff does not come into contact with scrap processing equipment.
N-6	Scrap Lead-Acid Battery Program	To minimize the discharge of pollutants in stormwater from lead-acid batteries, properly handle, store, and dispose of scrap lead-acid batteries and implement control measures such as the following, where determined to be feasible (list not exclusive): Segregate scrap lead-acid batteries from other scrap materials; properly handle, store, and dispose of cracked or broken batteries; collect and dispose of leaking lead-acid battery fluid; minimize or eliminate (if possible) exposure of scrap lead-acid batteries to precipitation or runoff; and provide employee training for the management of scrap batteries.	All scrap lead-acid batteries disposal receptacles must be contained and not expose contents to surface runoff.

BMP Number	BMP Title	BMP	Note
N-7	Spill Prevention and Response Procedures	In addition to the requirements of 2021 MSGP Part 2.1.2.4, the following procedures are applicable at Sector N areas: Install alarms and/or pump shut-off systems on outdoor equipment with hydraulic reservoirs exceeding 150 gallons in the event of a line break. Alternatively, a secondary containment system capable of holding the entire contents of the reservoir plus room for precipitation can be used. Use a mercury spill kit for any release of mercury from switches, anti-lock brake systems, and switch storage areas.	Required in addition to the Core BMP C-4 procedures derived from 2021 MSGP Part 2.1.2.4.
N-8	Supplier Notification Program	As appropriate, notify major suppliers about what scrap materials will not be accepted at the facility or will only be accepted under certain conditions.	The recycle facility provides guidance to served Navy commands on acceptable materials.
Sector P BMPs – Land Transportation and Warehousing			
P-1	Good Housekeeping Measures	Vehicle and Equipment Storage Areas: (See BMP P-1(a)) Fueling Areas: (See BMP P-1(b)) Material Storage Areas: (See BMP P-1(c)) Vehicle and Equipment Cleaning Areas: See BMP(d)) Vehicle and Equipment Maintenance Areas: (See BMP P-1(e)) Locomotive Sanding (Loading Sand for Traction) Areas: (See BMP P-1(f))	Required in addition to the Core BMP C-2 procedures derived from 2021 MSGP Part 2.1.2.2. See BMPs P-1(a) through P-1(f)
P-1(a)	Vehicle and Equipment Storage Areas	Minimize the potential for stormwater exposure to leaky or leak-prone vehicles/equipment awaiting maintenance through implementation of control measures such as the following, where determined to be feasible (list not exclusive): Use drip pans under vehicles/equipment; store vehicles and equipment indoors; install berms or dikes; use absorbents; roof or cover storage areas; and clean pavement surfaces to remove oil and grease.	
P-1(b)	Fueling Areas	Minimize contamination of stormwater runoff from fueling areas through implementation of control measures such as the following, where determined to be feasible: Cover the fueling area; use spill/overflow protection and clean-up equipment; minimize stormwater run-on/runoff to the fueling area; use dry clean-up methods; and treat and/or recycle collected stormwater runoff.	

BMP Number	BMP Title	BMP	Note
P-1(c)	Material Storage Areas	Maintain all material storage vessels (e.g., for used oil/oil filters, spent solvents, paint wastes, hydraulic fluids) to prevent contamination of stormwater and plainly label them (e.g., "Used Oil," "Spent Solvents"). To minimize discharges of pollutants in stormwater from material storage areas, implement control measures such as the following, where determined to be feasible (list not exclusive): Store the materials indoors; Install berms/dikes around the areas; minimize runoff of stormwater to the areas; use dry clean-up methods; and treat and/or recycle collected stormwater runoff.	
P-1(d)	Vehicle and Equipment Cleaning Areas	Minimize contamination of stormwater runoff from all areas used for vehicle/equipment cleaning through implementation of control measures such as the following, where determined to be feasible (list not exclusive): Perform all cleaning operations indoors; cover the cleaning operation and ensure all wash water drains to a proper collection system (i.e., not the stormwater drainage system); treat and/or recycle collected wash water; or other equivalent measures. Discharges of vehicle and equipment wash water, including tank cleaning operations, are not authorized by the MSGP for this sector.	Washing of vehicles is allowed only at the wash racks.
P-1(e)	Vehicle and Equipment Maintenance Areas	Minimize contamination of stormwater runoff from all areas used for vehicle/equipment maintenance through implementation of control measures such as the following, where determined to be feasible (list not exclusive): Perform maintenance activities indoors; Use drip pans; keep an organized inventory of materials used in the shop; drain all parts of fluid prior to disposal; prohibit wet clean-up practices if these practices would result in the discharge of pollutants to stormwater drainage systems; use dry clean-up methods; treat and/or recycle collected stormwater runoff; and minimize run-on/runoff of stormwater to maintenance areas.	
P-1(f)	Locomotive Sanding (Loading Sand for Traction) Areas	Minimize discharges of pollutants in stormwater from locomotive sanding areas through implementation of control measures such as the following, where determined to be feasible (list not exclusive): Cover sanding areas; minimize stormwater run-on/runoff; or perform appropriate sediment removal practices to minimize the off-site transport of sanding material by stormwater.	This process is not conducted at NAVBASE Kitsap Bangor.
P-2	Employee Training	In addition to the requirements of 2021 MSGP Part 2.1.2.8, the following procedures are applicable at Sector P areas. Train personnel at least once a year and address the following activities, as applicable: Used oil and spent solvent management; fueling procedures; general good housekeeping practices; proper painting procedures; and used battery management.	Required in addition to the Core BMP C-8 procedures derived from 2021 MSGP Part 2.1.2.8.
Sector Q BMPs – Water Transportation			

BMP Number	BMP Title	BMP	Note
Q-1	Good Housekeeping Measures	Pressure Washing Area: (see BMP Q-1(a)) Blasting and Painting Area: (see BMP Q-1(b)) Material Storage Areas: (see BMP Q-1(c)) Engine Maintenance and Repair Areas: (see BMP Q-1(d)) Material Handling Area: (see BMP Q-1(e)) Drydock Activities: (see BMP Q-1(f))	Required in addition to the Core BMP C-2 procedures derived from 2021 MSGP Part 2.1.2.2. See BMPs Q-1(a) through (f).
Q-1(a)	Pressure Washing Area	If pressure washing is used to remove marine growth from vessels, the discharge water must be permitted by a separate NPDES permit. Collect or contain the discharges from the pressure washing area so that they are not commingled with stormwater discharges authorized by this permit.	Pressure washing to remove marine growth from vessels is allowed only at the car wash/wash racks.
Q-1(b)	Blasting and Painting Area	Minimize the potential for spent abrasives, paint chips, and overspray to be discharged into receiving waters or the storm sewer system. Contain all blasting and painting activities, or use other measures to minimize the discharge of contaminants (e.g., hanging plastic barriers or tarpaulins during blasting or painting operations to contain debris). At least once per month, you must clean stormwater conveyances of deposits of abrasive blasting debris and paint chips.	Exterior vessel blasting is only allowed when operations are contained and exhaust is filtered. Over water vessel touch-up painting is only allowed when operations are contained.
Q-1(c)	Materials Storage Areas	Store and clearly label all containerized materials (e.g., fuels, paints, solvents, waste oil, antifreeze, batteries) in a protected and secure location away from drains. Minimize the contamination of precipitation or surface runoff from the storage areas. Specify which materials are stored indoors, and contain or enclose or use other measures for those stored outdoors. If abrasive blasting is performed, discuss the storage and disposal of spent abrasive materials generated at the facility. Implement an inventory control plan to limit the presence of potentially hazardous materials on-site.	Store containerized materials with a potential to spill (e.g., paints, fuels, waste oil, antifreeze, batteries, solvents) in a protected and secure location away from drains.
Q1(d)	Engine Maintenance and Repair Areas	Minimize the contamination of precipitation or surface runoff from all areas used for engine maintenance and repair through implementation of control measures such as the following, where determined to be feasible (list not exclusive): Perform all maintenance activities indoors; maintain an organized inventory of materials used in the shop; drain all parts of fluid prior to disposal; prohibit the practice of hosing down the shop floor; use dry clean-up methods; and treat and/or recycle stormwater runoff collected from the maintenance area.	Conduct small marine engine maintenance and repairs indoors. Engine flushing using potable water is allowed only at the wash racks.

BMP Number	BMP Title	BMP	Note
Q-1(e)	Material Handling Area	Minimize the contamination of precipitation or surface runoff from material handling operations and areas (e.g., fueling, paint and solvent mixing, disposal of process wastewater streams from vessels) through implementation of control measures such as the following, where determined to be feasible (list not exclusive): Cover fueling areas; Use spill and overflow protection; mix paints and solvents in a designated area (preferably indoors or under a shed); and minimize runoff of stormwater to material handling areas.	All material handling must take place indoors or in areas where precipitation or surface runoff can be contained.
Q-1(f)	Drydock Activities	Routinely maintain and clean drydock to minimize discharges of pollutants in stormwater. Address cleaning of accessible areas of drydock prior to flooding and at final cleanup following removal of the vessel and raising the dock. Include procedures for cleaning up oil, grease, and fuel spills occurring on drydock. To minimize discharges of pollutants in stormwater from drydock activities, implement control measures such as the following, where determined to be feasible (list not exclusive): Sweep rather than hose off debris and spent blasting material from accessible areas of drydock prior to flooding, and make absorbent materials and oil containment booms readily available to clean up or contain any spills.	More information regarding the drydock inspection and cleaning is provided in SWPPP Table 3-3, under the PSNS and IMF section.
Q-2	Employee Training	In addition to the requirements of 2021 MSGP Part 2.1.2.8, the following procedures are applicable at Sector Q areas. As part of the employee training program, address, at a minimum, the following activities (as applicable): Used oil management, spent solvent management, disposal of spent abrasives, disposal of vessel wastewaters, spill prevention and control, fueling procedures, general good housekeeping practices, painting and blasting procedures, and used battery management.	Required in addition to the Core BMP C-8 procedures derived from 2021 MSGP Part 2.1.2.8.
Q-3	Preventive Maintenance	In addition to the requirements of 2021 MSGP Part 2.1.2.3, the following procedures are applicable at Sector Q areas. As part of the preventive maintenance program, perform timely inspection and maintenance of stormwater management devices (e.g., cleaning oil and water separators and cleaning sediment traps to ensure that spent abrasives, paint chips, and solids are intercepted and retained prior to entering the storm drainage system), as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters.	Required in addition to the Core BMP C-3 procedures derived from 2021 MSGP Part 2.1.2.3.
Sector R BMPs – Ship and Boat Building and Repair Yards			
R-1	Good Housekeeping Measures	Pressure Washing Area: (see BMP R-1(a)) Blasting and Painting Area: (see BMP R-1(b)) Material Storage Areas: (see BMP R-1(c)) Engine Maintenance and Repair Areas: (see BMP R-1(d)) Material Handling Area: (see BMP R-1(e)) Drydock Activities: (see BMP R-1(f))	Required in addition to the Core BMP C-2 procedures derived from 2021 MSGP Part 2.1.2.2. See BMPs R-1(a) through (f).

BMP Number	BMP Title	BMP	Note
R-1(a)	Pressure Washing Area	If pressure washing is used to remove marine growth from vessels, the discharged water must be permitted as a process wastewater by a separate NPDES permit.	Pressure washing to remove marine growth from vessels is allowed only at the car wash/wash racks.
R-1(b)	Blasting and Painting Area	Minimize the potential for spent abrasives, paint chips, and overspray to be discharged into receiving waters or the storm sewer system. Contain all blasting and painting activities or use other measures to prevent the discharge of the contaminants (e.g., hanging plastic barriers or tarpaulins during blasting or painting operations to contain debris). When necessary, regularly clean stormwater conveyances of deposits of abrasive blasting debris and paint chips.	Exterior vessel blasting is only allowed when operations are contained and exhaust is filtered. Over water vessel touch-up painting is only allowed when operations are contained.
R-1(c)	Materials Storage Areas	Store and plainly label all containerized materials (e.g., fuels, paints, solvents, waste oil, antifreeze, batteries) in a protected, secure location away from drains. Minimize the contamination of precipitation or surface runoff from the storage areas. If abrasive blasting is performed, discuss the storage and disposal of spent abrasive materials generated at the facility. Implement an inventory control plan to limit the presence of potentially hazardous materials on-site.	Store containerized materials with a potential to spill in a protected and secure location away from drains.
R-1(d)	Engine Maintenance and Repair Areas	Minimize the contamination of precipitation or surface runoff from all areas used for engine maintenance and repair through implementation of control measures such as the following, where determined to be feasible (list not exclusive): Perform all maintenance activities indoors, maintain an organized inventory of materials used in the shop, drain all parts of fluid prior to disposal, prohibit the practice of hosing down the shop floor, use dry cleanup methods, and treat and/or recycle stormwater runoff collected from the maintenance area.	Conduct small marine engine maintenance and repairs indoors. Engine flushing using potable water is allowed only at the wash racks.
R-1(e)	Material Handling Area	Minimize the discharge of pollutants in stormwater from material handling operations and areas (e.g., fueling, paint and solvent mixing, disposal of process wastewater streams from vessels) through implementation of control measures such as the following, where determined to be feasible (list not exclusive): Cover fueling areas, use spill and overflow protection, mix paints and solvents in a designated area (preferably indoors or under a shed), and minimize stormwater run-on to material handling areas.	All material handling must take place indoors or in areas where precipitation or surface runoff can be contained.

BMP Number	BMP Title	BMP	Note
R-1(f)	Drydock Activities	Routinely maintain and clean the drydock to minimize pollutants in stormwater runoff. Clean accessible areas of the drydock prior to flooding and at final cleanup following removal of the vessel and raising the dock. Include procedures for cleaning up oil, grease, or fuel spills occurring on the drydock. To minimize discharges of pollutants in stormwater from drydock activities, implement control measures such as the following, where determined to be feasible (list not exclusive): Sweep rather than hose off debris and spent blasting material from accessible areas of the drydock prior to flooding, and have absorbent materials and oil containment booms readily available to clean up and contain any spills.	More information regarding the drydock inspection and cleaning is provided in SWPPP Table 3-3, under the PSNS & IMF section.
R-2	Employee Training	As part of the employee training program, address, at a minimum, the following activities (as applicable): Used oil management, spent solvent management, disposal of spent abrasives, disposal of vessel wastewaters, spill prevention and control, fueling procedures, general good housekeeping practices, painting and blasting procedures, and used battery management.	Required in addition to the Core BMP C-8 procedures derived from 2021 MSGP Part 2.1.2.8.
R-3	Preventive Maintenance	As part of the preventive maintenance program, perform timely inspection and maintenance of stormwater management devices (e.g., clean oil/water separators and sediment traps to ensure that spent abrasives, paint chips, and solids will be intercepted and retained prior to entering the storm drainage system), and inspect and test facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters.	Required in addition to the Core BMP C-3 procedures derived from 2021 MSGP Part 2.1.2.3.
Sector AA BMPs – Fabricated Metal Products			
AA-1	Good Housekeeping Measures	**Raw Steel Handling Storage:** Minimize the generation of and/or recover and properly manage scrap metals, fines, and iron dust. Include measures for containing materials within storage handling areas. **Paints and Painting Equipment:** Minimize exposure of paint and painting equipment to stormwater.	Required in addition to the Core BMP C-2 procedures derived from 2021 MSGP Part 2.1.2.2.

BMP Number	BMP Title	BMP	Note
AA-2	Spill Prevention and Response Procedures	Ensure that the necessary equipment to implement a cleanup is available to personnel. The following areas should be addressed. **Metal Fabricating Areas:** Maintain clean, dry, orderly conditions in these areas. Use dry clean-up techniques where practicable. **Storage Areas for Raw Metal:** Keep these areas free of conditions that could cause or impede appropriate and timely response to spills or leakage of materials through implementation of control measures such as the following, where determined to be feasible (list not exclusive): Maintain storage areas so that there is easy access in the event of a spill, and label stored materials to aid in identifying spill contents. **Metal Working Fluid Storage Areas:** Minimize the potential for stormwater contamination from storage areas for metal working fluids. **Cleaners and Rinse Water:** Control and clean up spills of solvents and other liquid cleaners, control sand buildup and disbursement from sand-blasting operations, and prevent exposure of recyclable wastes. Substitute environmentally benign cleaners when possible. **Lubricating Oil and Hydraulic Fluid Operations:** Minimize the potential for stormwater contamination from lubricating oil and hydraulic fluid operations. Use monitoring equipment or other devices to detect and control leaks and overflows where feasible. Install perimeter controls such as dikes, curbs, grass filter strips, or equivalent measures where feasible. **Chemical Storage Areas:** Minimize stormwater contamination and accidental spillage in chemical storage areas. Include a program to inspect containers and identify proper disposal methods.	Required in addition to the Core BMP C-4 procedures derived from 2021 MSGP Part 2.1.2.4.
AA-3	Spills and Leaks	In consideration of spill prevention and response procedures, required by 2021 MSGP Part 2.1.2.4, pay attention to the following materials (at a minimum): chromium, toluene, pickle liquor, sulfuric acid, zinc and other water priority chemicals, and hazardous chemicals and wastes.	Required in addition to the requirements of 2021 MSGP Part 6.2.3.3.

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4.3 Numeric Effluent Limitations Based on Effluent Limitations Guidelines

Part 2.1.3 of the 2021 MSGP provides coverage for stormwater discharges from several types of facilities that are subject to numeric effluent limitations. At NAVBASE Kitsap Bangor, discharges from the coal handling areas associated with the [redacted] (Bldg. 2800) were previously subject to compliance monitoring. Coal handling at the facility ceased in the year 2000, and compliance monitoring is no longer required. None of the current industrial activities at NAVBASE Kitsap Bangor are subject to the 2021 MSGP numeric effluent limitations.

4.4 Water Quality-Based Effluent Limitations and Water Quality Standards

Discharges from NAVBASE Kitsap Bangor must be controlled as necessary to meet applicable water quality standards. If it is determined that a discharge from the facility does not meet applicable water quality standards, the Navy must take corrective action(s) and document them as required in Section 7 of this SWPPP.

The EPA considers a facility as a discharger to impaired waters if the first water of the U.S. receiving the discharge is identified by a state, tribe, or the EPA as not meeting an applicable water quality standard, and:

- Requires development of a TMDL (pursuant to Section 303(d) of the CWA);
- Is addressed by an EPA approved or established TMDL; or
- Is not in either of the above categories, but the waterbody is covered by a pollution control program that meets the requirements of 40 CFR 130.7(b)(1).

For discharges that enter a municipal or non-municipal separate storm sewer system prior to discharge, the first water of the U.S. to which the facility discharges is the waterbody that receives the water from the storm sewer system.

Portions of Hood Canal on the west side of NAVBASE Kitsap Bangor and also Clear Creek southeast of the base are listed on the 303(d) list (Category 5) for low dissolved oxygen. Outfalls 7, 8, 10, 11A, 11B, 11C and 11D discharge stormwater to the Hood Canal dissolved oxygen impaired receiving waters. Outfalls 1 and 2 discharge to tributaries of Clear Creek with dissolved oxygen impaired waters. The sampled outfalls are sampled for COD to address anything related with industrial activity that may contribute to the low dissolved oxygen of these impaired waters. The dissolved oxygen impairment is not on the Table-1 of 2021 MSGP Part 9.19.7.2, therefore it is to be sampled annually per Part 4.2.5 of 2021 MSGP.

Clear Creek, which drains the east side of NAVBASE Kitsap Bangor, is included on the 303(d) list for high fecal coliform. Outfalls 1 and 2 discharge stormwater to these receiving waters. Table-1 of 2021 MSGP Part 9.10.7.2 mandates that discharges to impaired waters without an EPA approved or established TMDL be monitored once per quarter for impaired waterbody pollutants.

Discharges to Puget Sound Sediment Cleanup Sites (Category 4b) must be monitored once per quarter for TSS in accordance with Table-2 of 2021 MSGP Part 9.10.7.2. Portions of the Hood

Canal on the west side of Bangor are classified as Puget Sound Sediment Cleanup Sites. Outfalls 7, 8, 9, 10, 11A, 11B, 11C, and 11D discharge stormwater into these receiving waters.

Table 4-2 lists the impaired waterbodies that receive discharges from NAVBASE Kitsap Bangor, the parameters for which the waterbodies are impaired, and the industrial outfalls within the impaired areas.

Table 4-2: Impaired Receiving Waters and Associated Parameters and Outfalls

Impaired Waterbody	Parameter	Water Quality Category	Associated Outfall(s)
Hood Canal	Dissolved Oxygen	Category 5	OF7, OF8*, OF10*, OF11A*, OF11B*, OF11C, OF11D*
	Sediment	Category 4B	OF 7, OF8*, OF9, OF10*, OF11A*, OF11B*, OF11C, OF11D*
Clear Creek	Fecal Coliform	Category 5	OF1, OF2
	Dissolved Oxygen	Category 5	OF1, OF2

* categorized as a substantially identical outfall, represented by Outfall 7 (See Section 5.7)

Table 4-3 summarizes the Water Quality Assessment Categories, as provided on the Washington State Department of Ecology (WDOE) website.

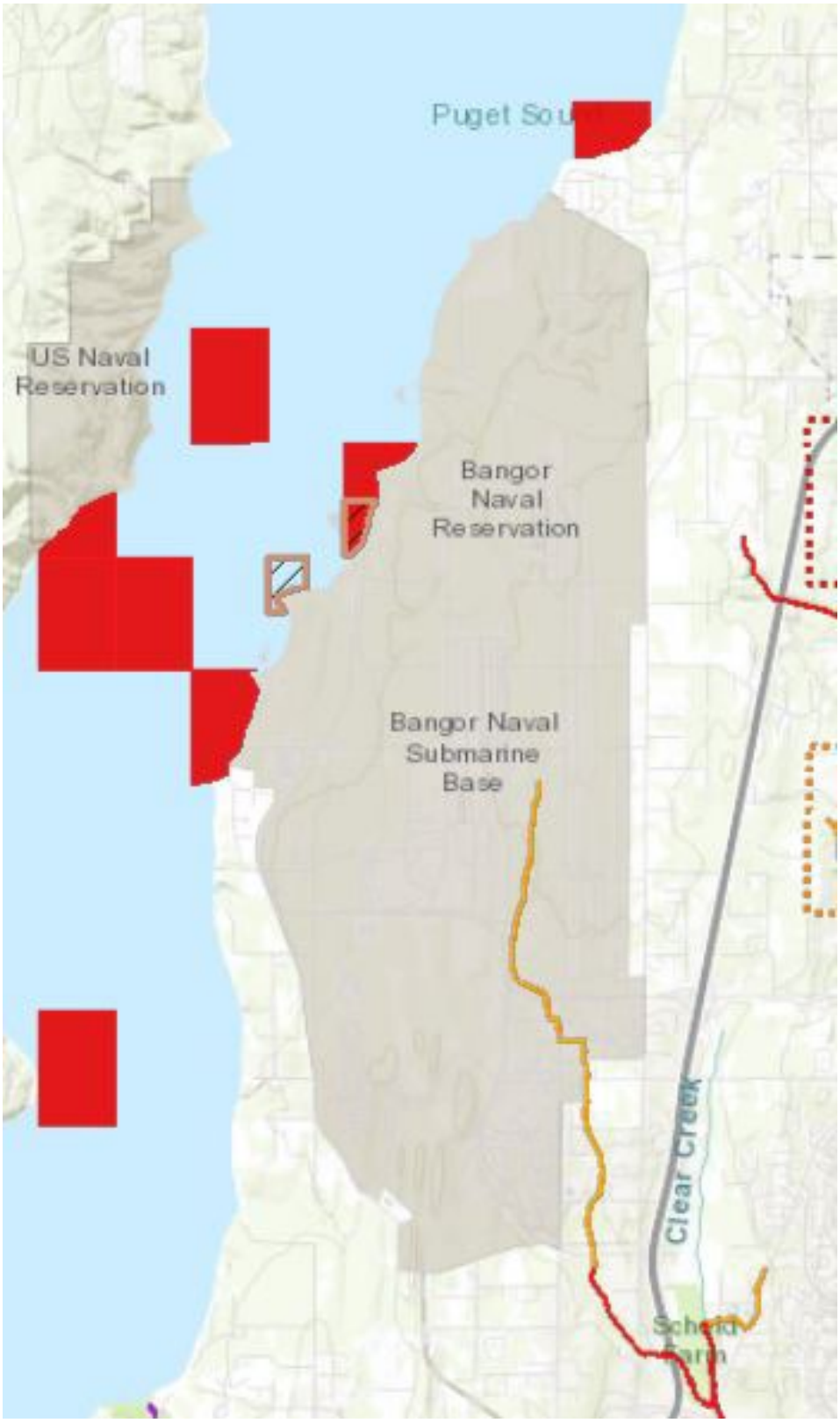
Table 4-3: Water Quality Assessment Categories

Category	Summary	Description
1	Meets tested standards for clean waters	Placement in this category does not necessarily mean the waterbody is free of all pollutants. Most water quality monitoring is designed to detect a specific array of pollutants, so placement in this category means that the waterbody met standards for all tested pollutants. Specific information about the monitoring results may be found in the individual listings.
2	Waters of concern	Waters where there is some evidence of a water quality problem, but not enough to require production of a Water Quality Improvement (WQI), including TMDL, at this time.
3	Insufficient data	Water where there is insufficient data to meet minimum requirements according to WDOE's Policy 1-11 "Assessment of Water Quality for the Clean Water Act Section 303(d) and 305(b) Integrated Report."
4	Polluted waters that do not require a TMDL	Waters that have pollution problems that are being solved in one of three ways: **Category 4A** Waterbodies that have an approved TMDL in place that is actively being implemented. **Category 4B** Waterbodies that have a pollution control program in place that is expected to solve the pollution problems. While pollution control programs are not TMDLs, they must have many of the same elements, and there must be some legal or financial guarantee that they will be implemented. **Category 4C** Waterbodies impaired by causes that cannot be addressed through a TMDL. These impairments include low water flow, stream channelization, and dams.

		These problems require complex solutions to help restore streams to more natural conditions.
5	Polluted waters that require a TMDL or other WQI project	Waterbodies on the list of impaired waterbodies traditionally known as the 303(d) list. Starting with the 2008 Water Quality Assessment, Washington's 303(d) list of polluted waters were placed under Category 5 in the approved assessment.

Figure 4-1 identifies the waterbodies near NAVBASE Kitsap Bangor that are currently included as impaired on the 303(d) list and those classified as Puget Sound Sediment Cleanup Sites. Monitoring requirements associated with industrial outfalls at NAVBASE Kitsap Bangor discharging to impaired waters are provided in Section 5.7 of this SWPPP.

Figure 4-1: Impaired Waterbodies



5 Schedules and Procedures

Prior sections of this SWPPP identify the potential pollutant sources at NAVBASE Kitsap Bangor's industrial areas and the stormwater control measures implemented to minimize the potential for water pollution from these areas in accordance with the MSGP. The following subsections describe the schedules and procedures established by NAVBASE Kitsap Bangor to comply with the relevant requirements of the 2021 MSGP.

5.1 Good Housekeeping

Routine sweeping of paved surfaces is conducted primarily by a contractor. Frequencies of sweeping vary by location and industrial usage, but certain industrial areas undergo sweeping several times per week as needed. Generally, roads are swept once every two months. Parking lots are swept on a rotating schedule throughout the year. Locations requiring sweeping and cleaning are also evaluated during routine facility inspections and recorded for corrective action (see SWPPP Section 7).

Routine garbage disposal services are conducted primarily by a contractor. Refuse dumpsters and roll-off containers are kept closed when not in use. Those without lids or with non-functioning lids are evaluated during routine inspections and recorded for corrective action if a potential impact to stormwater discharges is observed.

5.2 Maintenance

In accordance with 2021 MSGP Part 9.10.7.2, dischargers to Puget Sound Sediment Cleanup Sites, including the Navy, must remove accumulated solids from storm drain lines (including inlets, catch basins, sumps, conveyance lines, and oil/water separators) at least once during the permit term. Removed storm drain solids and liquids shall be disposed of in accordance with applicable laws and regulations and documented in the SWPPP. Prior to removing storm drain solids, the Navy must sample and analyze them in accordance with Table-3 of 2021 MSGP 9.10.7.2. Storm drain solids must be sampled from a representative catch basin, sump, pipe, or other storm drain system feature that corresponds to the discharge point where TSS samples are collected.

Catch basin inspection and cleaning is conducted primarily by a contractor. Frequency of cleaning varies by location and need. Generally, catch basins are cleaned at a minimum of annually but more often if needed. Catch basins are inspected on a rotating schedule throughout the year. Locations requiring cleaning are also evaluated during routine facility inspections and recorded for corrective action (see SWPPP Section 7) if a need for cleaning is identified.

Filterra units and media filter cartridge vault inspection, cleaning and filter cartridge replacement is conducted by a contractor. Frequency of maintenance of these structures is based upon the manufacturer's recommendations.

Oil/water separator inspection and maintenance is conducted primarily by a contractor. Frequencies of inspection and maintenance vary by location and industrial usage. Generally, oil/water separators are inspected at a minimum of monthly and are cleaned at a minimum of annually. Oil/water separators are also evaluated during routine facility inspections and recorded for corrective action (see SWPPP Section 7) if a deficiency or need for additional action is noted.

Further information regarding maintenance activities for major stormwater management control measures and equipment is available in Appendix E.

5.3 Spill Prevention and Response Procedures

Spill prevention procedures are delineated in the NAVBASE Kitsap Bangor SPCC plan. The SPCC plan describes the design and construction requirements for aboveground and underground storage tanks and containers; their piping, valves and appurtenances; and leak detection equipment. The SPCC plan additionally describes tank and container inspection and testing requirements.

Fuel facilities, tanks, and containers identified in the SPCC plan are checked daily or after every rainfall for spills, leaks, and related concerns. Fuel storage facilities are additionally inspected on a monthly and annually basis. The monthly and yearly inspections are recorded on checklists, which are retained for at least 3 years following the inspections. Required testing occurs in accordance with manufacturer's specifications.

Spill response procedures are described in COMNAVREG NW ICP. Annex G of the Regional ICP provides installation specific spill contingency guidance for NAVBASE Kitsap Bangor. When spills occur or are discovered, they are reported immediately to Regional Dispatch at (360) 396-4444, or at 911 from an on-base telephone. Regional Dispatch coordinates with appropriate federal, state and local agencies as required.

5.4 Erosion and Sediment Control

Industrial facilities at NAVBASE Kitsap Bangor are evaluated for erosion and sedimentation issues on a quarterly basis during routine facility inspections. Findings are recorded and addressed through the corrective action process, in accordance with SWPPP Section 7.

Stormwater discharges from construction activities can have a significant impact on water quality. Construction activities that disturb at least one acre of land, or smaller sites that are part of a larger common plan of development, at NAVBASE Kitsap Bangor are generally managed under the EPA's CGP process (see SWPPP Section 1.5). Conformance to the CGP requires completion of a construction site-specific SWPPP that includes the selection and implementation of temporary and/or permanent erosion and sediment controls throughout the construction project. Also the new Naval Base Kitsap Municipal Separate Storm Sewer System (MS4) permit has additional requirements for new development, redevelopment and construction site runoff control.

A number of sources are available that describe BMPs for erosion and sediment control on construction sites. Much of this information has been complied and modified to reflect local (Puget Sound) conditions in WDOE's Stormwater Management Manual for Western Washington.

5.5 Employee Training

In accordance with the 2021 MSGP, NAVBASE Kitsap Bangor personnel must be trained as necessary to meet the requirements described in SWPPP Section 4.1.8 and the sector-specific requirements described in Section 4.2. Employees that work in industrial areas are trained upon arrival and at least annually thereafter to meet these requirements.

Example training logs are provided in Appendix D. As training is conducted, copies of completed training records should be included in Appendix D or stored in a location that is referenced in the appendix.

5.6 Inspections and Assessments

The following subsections identify inspection and assessment requirements in accordance with the 2021 MSGP.

5.6.1 Routine Facility Inspections

2021 MSGP Part 3.1 requires NAVBASE Kitsap Bangor to conduct periodic routine facility inspections at least quarterly or in some instances more frequently. The inspections must include areas on base covered by the MSGP requirements, including the following:

- Areas where industrial materials or activities are exposed to stormwater,
- Areas identified in the SWPPP and those that are potential pollutant sources,
- Areas where spills and leaks have occurred in the past 3 years,
- Discharge points/outfalls, and
- Control measures used to comply with the effluent limits contained in the MSGP.

At least one member of the stormwater pollution prevention team must participate in the facility inspections. Inspections must be conducted during normal facility operating hours. At least once per year, the inspection must be completed while stormwater is discharging.

Inspection findings must be tracked, and follow-up actions must be conducted. The corrective measures implemented as a result of the inspections and the measures previously in place to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the MSGP. Any need for additional measures must be identified.

Routine facility inspection requirements for each MSGP industrial sector are listed in Table 5-1. The facilities requiring inspection and applicable MSGP industrial sectors are identified in Table 3-3. Note that certain facilities are classified under multiple industrial sectors and must meet the requirements for each applicable sector. An example form that may be used to document routine facility inspections is included in Appendix F. Completed facility inspection forms must be included in Appendix F or stored in a location that is referenced in the appendix.

Table 5-1: Industrial Sectors and Associated Facility Inspection Requirements

Industrial Sector	Inspection Schedule	Inspection Requirements
Sector N – Scrap and Waste Recycling Facility	Quarterly	Inspect inbound recyclable, waste storage, and stockpile areas (outdoor, covered, and/or indoors); waste processing areas; and lead-acid battery storage areas. Check for liquids stored without secondary containment or significant materials exposed to stormwater. Inspect for application of Core and Sector N BMPs provided in SWPPP Section 4.1 and 4.2.1.

Industrial Sector	Inspection Schedule	Inspection Requirements
Sector P – Land Transportation and Warehousing	Quarterly	Inspect storage areas for vehicles/equipment awaiting maintenance, fueling areas, indoor and outdoor vehicle/equipment maintenance areas, material storage areas, vehicle/equipment cleaning areas, and loading/unloading areas. Inspect for application of Core and Sector P BMPs provided in SWPPP Section 4.1 and 4.2.2.
Sector Q - Water Transportation	Quarterly	Inspect pressure washing areas; blasting, sanding, and painting areas; material storage areas; engine maintenance and repair areas; material handling areas; drydock areas; and general yard areas. Inspect for application of Core and Sector Q BMPs provided in SWPPP Section 4.1 and 4.2.3.
Sector R – Ship and Boat Building and Repair Yards	Quarterly	Include pressure washing area; blasting, sanding, and painting areas; material storage areas; engine maintenance and repair areas; material handling areas; drydock areas; and general yard areas. Inspect for application of Core and Sector R BMPs provided in SWPPP Section 4.1 and 4.2.4.
Sector AA - Fabricated Metal Products	Quarterly	At a minimum, include the following areas in all inspections: metal fabricating areas, raw metal storage areas, finished product storage areas, material and chemical storage areas, and cleaner and rinse water. Inspect for application of Core and Sector AA BMPs provided in SWPPP Section 4.1 and 4.2.5.

5.6.2 Quarterly Visual Assessment of Stormwater Discharges

The MSGP requires quarterly visual assessment of stormwater discharges at outfalls associated with industrial activity. Quarterly periods for the visual assessments are defined as January through March, April through June, July through September, and October through December.

As described in SWPPP Section 2.4.5, the MSGP allows for the grouping of substantially identical outfalls and assessment of a single representative of that group. However, visual examination of each outfall within a substantially identical group must be conducted on a rotating basis throughout the permit period. An evaluation of substantially identical outfalls at NAVBASE Kitsap Bangor was conducted in SWPPP Section 2.4.5. The significantly identical outfall groups identified therein will be applied to visual assessments. Table 5-2 shows the Stormwater Visual Assessment program schedule for NAVBASE Kitsap Bangor.

Table 5-2: Quarterly Stormwater Discharge Visual Assessment Schedule

Substantially Identical Outfall Group	Outfall	1st year	2nd year	3rd year	4th year	Future Years
1	OF7	X			X	Following the 4th year of permit authorization, repeat the monitoring cycle until coverage under the 2021 MSGP is terminated.
	OF8		X			
	OF10			X		
	OF11A	X			X	
	OF11B		X			
	OF11D			X		
2	OF3A	X		X		
	OF12		X		X	
N/A	OF1	X	X	X	X	

Substantially Identical Outfall Group	Outfall	1st year	2nd year	3rd year	4th year	Future Years
	OF2	X	X	X	X	
	OF3B	X	X	X	X	
	OF9	X	X	X	X	
	OF11C	X	X	X	X	

Quarterly visual observations must be conducted through collection of grab samples within the first 30 minutes (or as soon as practical thereafter) of when runoff begins to discharge. The storm event should be large enough to produce measurable flow and occur at a minimum of 72 hours from the previously measurable storm event. The assessment should be conducted in a well-lit area using a clean, clear container. The grab sample must be evaluated for: color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, or other obvious indicators of stormwater pollution.

Documentation of the visual examinations must include the examination date and time, examination personnel, visual quality of the stormwater discharge, and probable sources of any observed stormwater contamination. The documentation must also include an explanation of why a sample could not be collected within the first 30 minutes of discharge, if applicable. Reports must be maintained with the SWPPP. An example form for documenting quarterly stormwater discharge visual assessments is in Appendix G. Completed facility inspection reports must be included in Appendix G or stored in a location that is referenced within the appendix.

When adverse weather conditions prevent the collection of samples during the quarter, a substitute sample must be taken during the next qualifying storm event. Documentation of the rationale for not conducting the scheduled visual assessment for the quarter must be included in Appendix G. Adverse conditions are those that are dangerous or create inaccessibility for personnel, such as local flooding, high winds, electrical storms, extended frozen conditions, or situations that make sampling impractical.

5.6.3 Exception for Inactive and Unstaffed Sites

The requirement to conduct facility inspections on a routine basis does not apply at an inactive and unstaffed facility. This exception does not currently apply at NAVBASE Kitsap Bangor.

5.7 Monitoring

In accordance with the 2021 MSGP, monitoring is to commence during the first full quarter of permit authorization. EPA authorized 2015 MSGP permit coverage in September 2016; however, NAVBASE Kitsap Bangor did not receive formal notice of the permit authorization until late October 2016. As a result of this delay, and ongoing discussions between the Navy and EPA Region 10 regarding issuance of additional monitoring requirements, the Navy requested that the implementation of monitoring requirements under the 2015 MSGP be delayed until the January through March 2017 quarter. EPA Region 10 approved this request on October 28, 2016. Until the 2021 MSGP is authorized for NAVBASE Kitsap Bangor sampling will continue per the 2015 MSGP requirements.

The 2021 MSGP includes five types of required analytical monitoring:

- Quarterly benchmark monitoring,
- Quarterly indicator monitoring,
- Annual effluent limitations guidelines monitoring,
- State- or tribal-specific monitoring,
- Impaired waters monitoring, and
- Other monitoring as required by the EPA.

An overview of these monitoring provisions is covered in the following subsections. A summary of analytical monitoring requirements is in Table 5-3. Applicable monitoring requirements apply to each outfall authorized by the MSGP, except as otherwise exempt from monitoring as a substantially identical outfall, as discussed in SWPPP Section 2.4.5.2. Freshwater benchmark values applicable to certain hardness-dependent metals are summarized in Table 5-4.

Table 5-3: 2021 MSGP Analytical Monitoring or NAVBASE Kitsap Bangor

Analytical Parameter	Outfall						
	OF1	**OF2**	**OF3A[a]**	**OF3B**	**OF7[b]**	**OF9**	**OF11C**
Industrial Sectors	**Q**	**N, P, Q, AA**	**Q, R**	**P, Q, R, AA**	**Q**	**Q**	**Q**
Receiving Water	**Fresh-water**	**Fresh-water**	**Fresh-water**	**Fresh-water**	**Saltwater**	**Saltwater**	**Saltwater**
Aluminum (benchmark)	Quarterly (1,100 µg/L)	Quarterly (1,100 µg/L)	Quarterly (1,100 µg/L)	Quarterly (1,100 µg/L)	Quarterly (1,100 µg/L)	Quarterly (1,100 µg/L)	Quarterly (1,100 µg/L)
Copper (benchmark)	n/a	Quarterly (5.19 µg/L)	n/a	n/a	n/a	n/a	n/a
Lead (benchmark)	Quarterly[h] (69 µg/L)	Quarterly[h] (69 µg/L)	Quarterly[h] (69 µg/L)	Quarterly[h] (69 µg/L)	Quarterly (210 µg/L)	Quarterly (210 µg/L)	Quarterly (210 µg/L)
Zinc (benchmark)	Quarterly[h] (107 µg/L)	Quarterly[h] (107 µg/L)	Quarterly[h] (107 µg/L)	Quarterly[h] (107 µg/L)	Quarterly (90 µg/L)	Quarterly (90 µg/L)	Quarterly (90 µg/L)
COD (benchmark, indicator, impaired)	Annually[f] (120 mg/L)	Quarterly[d] (120 mg/L)	Quarterly[c]	Quarterly[c]	Annually[f] (120 mg/L)	n/a	Annually[f] (120 mg/L)
Nitrate-Nitrite (benchmark)	n/a	Quarterly (0.68 mg/L)	n/a	Quarterly (0.68 mg/L)	n/a	n/a	n/a
TSS (benchmark, indicator, benchmark)	n/a	Quarterly[g] (100 mg/L)	Quarterly[c]	Quarterly[c]	Quarterly[e] (30 mg/L)	Quarterly[e] (30 mg/L)	Quarterly[e] (30 mg/L)
PAHs (indicator)	n/a	Bi-annually[c]	Bi-annually[c]	Bi-annually[c]	n/a	n/a	n/a
Fecal Coliform (impaired)	Quarterly[e] (See note[i])	Quarterly[e] (See note[i])	n/a	n/a	n/a	n/a	n/a
pH (indicator)	n/a	Quarterly[c]	Quarterly[c]	Quarterly[c]	n/a	n/a	n/a

Notes:
Metal analyses are total recoverable.
[a] Representative outfall for the substantially identical outfall group comprised of OF3A and OF12.
[b] Representative outfall for the substantially identical outfall group comprised of OF7, OF8, OF10, OF11A, OF11B and OF11D.
[c] pH, TSS, COD and PAHs required for certain subsector indicator monitoring. No benchmarks, report only, no thresholds or baseline values.
[d] Required for benchmark monitoring, indicator monitoring and MSGP impaired waters requirements.
[e] In accordance with state-specific impaired water requirements (SWPPP Section 5.7.3).
[f] In accordance with MSGP impaired waters requirements (SWPPP Section 5.7.4).
[g] Required for benchmark and indicator monitoring.
[h] Freshwater benchmark values for certain metals are dependent on receiving water hardness as shown in Table 5-4.
[i] No applicable MSGP benchmark. Samples compared to the Sinclair-Dyes Watershed Bacteria TMDL and Implementation Plan goals of 73 cfu/100 mL geometric mean and 90th percentile value of 146 cfu/100 mL.

Table 5-4: Freshwater Benchmark Values for Certain Hardness-Dependent Metals

Freshwater Hardness Range (mg/l)	Lead (mg/L)	Zinc (mg/L)	
0-24.99	0.014	0.037	
25-49.99	0.024	0.052	
50-74.99	0.045	0.080	
75-99.99	0.069	0.107	
100-124.99	0.095	0.132	
125-149.99	0.123	0.157	
150-174.99	0.152	0.181	
175-199.99	0.182	0.204	
200-224.99	0.213	0.227	
225-249.99	0.246	0.249	
250+	0.262	0.260	

For each of the monitoring requirements described below, when adverse weather conditions prevent the collection of samples according to the relevant monitoring schedule, a substitute sample must be collected during the next qualifying storm event. Adverse weather does not result in an exemption from filing a DMR for the reporting period. Instead, any failure to monitor can be identified in the DMR using a "no data" or "No Discharge (NODI)" code for the reporting period.

Monitoring records and results must be included in Appendix H or stored in a location that is referenced in the appendix.

5.7.1 Quarterly Benchmark and Indicator Monitoring

Quarterly benchmark and indicator monitoring is designed to provide feedback for facility operators to assess the effectiveness of the SWPPP. Benchmark values are pollutant concentrations that, when exceeded, could impair water quality or affect human health. Indicator monitoring does not include benchmark values, analysis results are for report only, no thresholds or baseline values.

The 2021 MSGP specifies the benchmark and indicator monitoring parameters that are applicable to certain industrial sectors and subsectors. As identified in SWPPP Section 3.1, the industrial sectors identified at NAVBASE Kitsap Bangor include the following:

- Sector N: Scrap Recycling and Waste Recycling Facilities
- Sector P: Land Transportation and Warehousing
- Sector Q: Water Transportation
- Sector R: Ship and Boat Building and Repair Yards
- Sector AA: Fabricated Metal Products

Sector-specific benchmark and indicator monitoring applicable to Sector N, Sector P, Sector Q, Sector R, and Sector AA facilities are identified in 2021 MSGP Tables 8.N-1 and 8.N-2, Table 8.P-1, Tables 8.Q-1 and 8.Q-2, Table 8.R-1, and Tables 8.AA-1 and 8.AA-2, respectively.

Benchmark monitoring must be conducted quarterly at least for the first and fourth years of permit coverage. After collection of four quarterly samples the first year of coverage, if the average of four quarterly monitoring values of a pollutant is less than the benchmark value, the monitoring requirement under 2021 MSGP is fulfilled for that pollutant at the associated outfall until the beginning of the fourth year of coverage. The benchmark sampling must be restarted at the beginning of the fourth year and then the same conditions for stopping sampling apply. If the average of four quarterly monitoring values exceeds the benchmark, facility operators must review and revise the SWPPP, make necessary modifications (see SWPPP Section 7, Corrective Actions) at the facility to rectify the condition(s) causing the exceedance, and continue monitoring on a quarterly basis until the average value no longer exceeds the benchmark. Additionally the Additional Implementation Measures (AIM) process of 2021 MSGP Part 5.2 must be followed for benchmark exceedances.

Indicator monitoring is to be performed quarterly for the entirety of the permit. Indicator monitoring for PAHs is bi-annually in the first and fourth years of coverage.

Table 5-3 summarizes the analytical monitoring requirements for NAVBASE Kitsap Bangor.

5.7.2 Annual Effluent Limitations Guidelines Monitoring

Certain stormwater discharges authorized for coverage under the 2021 MSGP are subject to effluent limitation guidelines. 2021 MSGP Table 4-3 identifies the effluent limits for the associated regulated activities. None of the current industrial activities at NAVBASE Kitsap Bangor are subject to the numeric effluent limitations defined in the 2021 MSGP.

5.7.3 State- and Tribal-Specific Monitoring

2021 MSGP Part 9 mandates state- and tribal-specific monitoring requirements. 2021 MSGP Part 9.10.7 contains requirements for areas in Washington State, except those located on Native American tribal lands, subject to industrial activity by a federal operator. As a military facility in Washington State, NAVBASE Kitsap Bangor is subject to these state-specific requirements, including additional sampling requirements within 2021 MSGP Part 9.10.7.2.

As discussed in SWPPP Section 4.4, NAVBASE Kitsap Bangor Outfall 1 and 2 discharge to tributaries of Clear Creek that is on the 303(d) list for high fecal coliform. Table 1 of 2021 MSGP Table Part 9.10.7.2 mandates that discharges to waters listed as Category 5, with their impairment is listed in the table, be sampled quarterly with the associated benchmark listed in the table. Outfall 1 and 2 are impaired by fecal coliform bacteria and will be monitored for fecal coliform once per quarter with no benchmark. Outfalls 7, 8, 9, 10, 11A, 11B, 11C, and 11D

discharge stormwater into sections of Hood Canal identified as Puget Sound Sediment Cleanup Sites (Category 4B). In accordance with Table 2 of 2021 MSGP Part 9.10.7.2, these outfalls must be monitored once per quarter for TSS with a benchmark of 30 mg/L. Since Outfall 7 is the representative outfall for significantly identical Outfalls 8, 10, 11A, 11B, and 11D, Outfall 7 is monitored for TSS in lieu of the others.

Table 5-3 summarizes the analytical monitoring requirements for NAVBASE Kitsap Bangor.

5.7.4 Impaired Waters Monitoring

MSGP Part 4.2.5 mandates monitoring requirements for certain industrial facilities discharging to impaired waters. As discussed in SWPPP Section 4.4, NAVBASE Kitsap Bangor Outfalls 7, 8, 10, 11A, 11B, 11C, and 11D discharge to portions of Hood Canal that are listed on the 303(d) list (Category 5) for low dissolved oxygen. Additionally, Outfalls 1 and 2 discharge to Clear Creek which is on the 3039d) list (Category 5) for low dissolved oxygen. Dissolved oxygen is not listed in the Table 1 of 2021 MSGP Part 9.10.7.2, therefore Outfalls 1, 2, 7, and 11C will be sampled annually for COD, unless COD is required more frequently for benchmark or indicator monitoring. Outfalls OF1 and OF2 discharge to Clear Creek, which is included on the 303(d) list (Category 4a) for high fecal coliform. 2021 MSGP Part 4.2.5.1 mandates that discharges to impaired waters without an EPA approved or established TMDL be monitored for all pollutants for which the waterbody is impaired at least once per year for the first and fourth years if results are in an acceptable range, otherwise annually for entirety of permit.

Note:

Although impaired monitoring is only required once per year under the impaired waters requirements in 2021 MSGP Part 4.2.5, the state-specific requirements in MSGP Part 9, discussed above in SWPPP Section 5.7.3, mandate quarterly monitoring for some impairments. As such, the more stringent frequency is followed.

Table 5-3 summarizes the analytical monitoring requirements for NAVBASE Kitsap Bangor.

5.7.5 Other Monitoring as Required by EPA

MSGP Part 4.2.6 reserves the right of the EPA to enforce additional discharge monitoring requirements, as determined necessary to meet the permit's effluent limitations. In a 25 January 2017 letter, the EPA required additional benchmark monitoring for copper and zinc at Outfall 2 and 3A. Monitoring must follow the standard benchmark monitoring procedures outlined in 2015 MSGP Part 6.2.1, with the frequency of monitoring at monthly rather than quarterly. At Outfall 2, which discharges to a freshwater body, the target levels are 5.6 µg/L for copper and 50 µg/L for zinc. At Outfall 3A, which discharges to a marine (saltwater) receiving water, the target levels are 14 µg/L for copper and 117 µg/L for zinc.

Monthly sampling at these outfalls has not yet been assigned for the 2021 MSGP.

5.8 Reporting

The 2021 MSGP requires that most reporting information be submitted electronically via one of two EPA managed electronic systems: NPDES eReporting tool (NeT-MSGP) and NetDMR. Certain additional information is required to be submitted to the EPA Regional Office by mail, on an infrequent basis. Other information is to be maintained in-house and only reported to EPA upon request. Table 5-5 identifies the reporting methods for various types of deliverables mandated in the permit.

Table 5-5: MSGP Reporting Requirements for Various Deliverables

EPA Reporting Method	Required Reports	Submittal Frequency
NeT MSGP	Notice of Intent (NOI) (2021 MSGP Part 1.3)	At least 30 days prior to new permit issuance
	No Exposure Certification (NOE) (MSGP Part 1.5)	When eligible under "no exposure exclusion"
	Notice of Termination (NOT) (MSGP Part 1.4)	Within 30 days of termination eligibility
	Annual Report (MSGP Part 7.4)	January 30th each year of permit coverage, containing information generated during the prior calendar year.
NetDMR	Discharge Monitoring Report (MSGP Part 7.3)	Within 30 days after receiving complete laboratory results for a reporting period
Mailing (hardcopy)	New Dischargers and New Sources to Water Quality Impaired Waters (MSGP Part 1.1.6.2)	As required
	Exceedance Report for Numeric Effluent Limitations (MSGP Part 7.5)	As required (Effluent limitation monitoring is not currently required at NAVBASE Kitsap Bangor)
	Additional Reporting (MSGP Part 7.6)	As required
Reporting only Required upon EPA Request	Routine Facility Inspection Reports (MSGP Part 3.1)	Only upon EPA request
	Quarterly Stormwater Discharge Visual Assessments Reports (MSGP Part 3.2)	Only upon EPA request

NeT MSGP is accessible through the Central Data Exchange (CDX) website at:

https://cdx.epa.gov/

From there, request access to the Program Service Name "NETEPAMSGP: NeT – EPA NPDES Stormwater Industrial Multi-Sector General Permit." New users will be prompted to identify a user role (certifier, duly authorized representative, permit administrator, or preparer).

For registration assistance, contact the CDX Help Desk at HELPDESK@EPACDX.NET or by telephone at (888) 890-1995.

NetDMR is accessible at:

https://netdmr.epa.gov/netdmr/public/home.htm

Select "EPA Region 10 – Washington" from the dropdown list and click "Go.". The first person creating the account must have the legal signatory authority (certifier or duly authorized representative). New users must register for an account and then subsequently request access to a particular permit.

For further assistance, contact the NetDMR Help Desk at R10NetDMR@epa.gov or by telephone at (206) 553-8508 or (206) 553-0705.

Hardcopy submittals must be mailed to the following address:

U.S. EPA Region 10
NPDES Stormwater Program
1200 6th Avenue (OWW-191)
Seattle, WA 98101-3140

The following subsections further describe the routine reporting requirements mandated by the 2015 MSGP.

5.8.1 Annual Reports

Annual reports must be submitted electronically to the EPA via NeT-MSGP by January 30 for each year of permit coverage containing information generated from the prior calendar year. The following information must be included:

- A summary of the past calendar year's routine facility inspection documentation.
- A summary of the past year's quarterly visual assessment documentation.
- A summary of the past year's corrective action and any required AIM documentation (see MSGP Part 5 and SWPPP Section 7). If a corrective action is not yet completed at the time of submission of the annual report, describe the status of any outstanding corrective action(s). Also describe any incidents of noncompliance in the past year or currently ongoing, or if none, provide a statement that the facility is in compliance with the permit.

The Annual Report must include a statement that is signed and certified in accordance with MSGP Appendix B, Subsection 11.

5.8.2 Discharge Monitoring Reports

NAVBASE Kitsap Bangor is required to submit all monitoring results obtained within 30 days of receiving the complete laboratory results. The date and duration in hours of the rainfall event,

measurement or estimate of the total rainfall, and time interval since previous storm event must be recorded for each sampling event. Reports must be submitted via NetDMR.

Adverse weather, extended dry weather periods resulting in no discharge, or other situations resulting in a lack of data collection do not exempt NAVBASE Kitsap Bangor from filing a DMR for the reporting period. Instead, any failure to monitor must be identified in the DMR using a "no data" or "NODI" code for the reporting period.

Once monitoring requirements have been completely fulfilled, the installation is no longer required to report monitoring results using NetDMR. If the requirements are only partially fulfilled, a "no data" or "NODI" code must be used for any monitoring parameters that have been fulfilled.

5.8.3 Effluent Limitations Monitoring Reports

NAVBASE Kitsap Bangor is not currently required to conduct effluents limitation monitoring. Previously, effluent limitation monitoring of stormwater discharging from the coal handling areas of the [redacted] (Bldg. 2800) was required. Coal handling ceased at the facility in the year 2000. This section is preserved in the SWPPP as a reminder of the requirement in the event that such monitoring is required in the future.

5.8.4 Storm Drain Solids Sampling Reports

All storm drain solids sampling data collected in accordance with 2021 MSGP Table 9.10.7.2 shall be reported to the EPA no later than the DMR due date for the reporting period in which the solids were sampled. A copy of the lab report shall be submitted to the EPA. See Section 5.2 of this SWPPP for additional information.

5.8.5 Routine Facility Inspection Reports

Findings from routine facility inspections must be maintained with this SWPPP and summarized in the Annual Report. They are not required to be submitted to the EPA unless specifically requested. Hard copies of routine facility inspection reports may be maintained in Appendix F.

5.8.6 Quarterly Stormwater Discharge Visual Assessment Reports

Results of quarterly stormwater discharge visual assessments must be maintained with this SWPPP and summarized in the Annual Report. They are not required to be submitted to the EPA unless specifically requested. Hard copies of the visual assessment reports may be maintained in Appendix G.

6 Eligibility Considerations under Other Federal Laws

Coverage under the 2021 MSGP is available only if NAVBASE Kitsap Bangor's stormwater discharges, allowable non-stormwater discharges, and stormwater discharge-related activities meet certain eligibility criteria associated with Endangered and Threatened Species and Critical Habitat Protection and with Historic Properties Preservation. NAVBASE Kitsap Bangor's eligibility considerations are described in the subsections below.

6.1 Endangered and Threatened Species

2021 MSGP Part 1.1.4 authorizes permit coverage only if discharges and discharge-related activities are the subject of an Endangered Species Act (ESA) consultation or an ESA Section 10 permit or if the discharges and discharge-related activities are not likely to adversely affect any federally listed endangered or threatened species and any habitat designated as "critical habitat" under the ESA. A facility must meet one of five criteria for eligibility.

NAVBASE Kitsap Bangor filed for permit coverage under Criterion C for the 2015 MSGP. As defined in Criterion C, federally listed threatened and/or endangered species and/or their designated critical habitat(s) are likely to occur in or near NAVBASE Kitsap Bangor's "action area," and the installation's industrial discharges and discharge-related activities are not likely to adversely affect listed threatened or endangered species or critical habitat.

For the 2021 MSGP NAVBASE Kitsap Bangor will be filing for permit coverage under Criterion C1 (Facility eligible for Criterion C in the 2015 MSGP with NO CHANGE to listed species, critical habitat, or action area). There were no additions to species, critical habitat, or action area but the Canary Rockfish was removed from the species list. The basis statement for Criterion C1 is included with the NOI and is also in Appendix C.

6.2 Historic Properties

Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to take into account the effects of federal "undertakings" on historic properties that are either listed on or eligible for listing on, the National Register of Historical Places. The EPA issuance of the 2020 MSGP is a federal undertaking within the meaning of the NHPA regulations. To address any issues relating to historic properties in connection with issuance of the MSGP, the EPA included criteria for applicants to certify that potential impacts of their covered activities on historic properties have been appropriately considered and addressed.

2021 MSGP Part 1.1.5 authorizes permit coverage only if discharges and discharge-related activities meet one of four criteria for historic property preservation. NAVBASE Kitsap Bangor filed for permit coverage under Historic Properties Preservation Criterion A. As defined in Criterion A, the installation's stormwater discharges and allowable non-stormwater discharges do not have the potential to have an effect on historic properties; and the installation is not constructing or installing new stormwater control measures on-site that cause subsurface disturbance. Should any individual construction projects be planned that include impacts from stormwater discharge, new construction, or updates to existing stormwater utility lines, consultation would be done separately, outside of the permit, with the State Historic Preservation Office and Tribes (THPO).

The NOI submitted in documents NAVBASE Kitsap Bangor's eligibility under Criterion A. A copy of the NOI is in Appendix C.

7 Corrective Actions and Additional Implementation Measures

Part 5 of the 2021 MSGP requires implementation and documentation of corrective actions in response to certain deficiencies in the stormwater pollution prevention program. This section describes conditions which may trigger corrective action and the general responses required by the Navy.

If the event triggering the review is a permit violation (e.g., non-compliance with an effluent limit), correcting it does not remove the original violation. Additionally, failing to take corrective action in accordance with this section is an additional permit violation. EPA will consider the appropriateness and promptness of corrective action in determining enforcement responses to permit violations.

7.1 Conditions Requiring SWPPP Review/Revision to Ensure Effluent Limits are Met

When any of the following conditions occur or are detected during an inspection, monitoring, or other means or EPA informs the Navy that any of the following conditions have occurred, NAVBASE Kitsap Bangor must review and revise, as appropriate, this SWPPP (e.g., sources of pollution; spill and leak procedures; non-stormwater discharges; the selection, design, installation and implementation of control measures) so that the MSGP's effluent limits are met and pollutant discharges are minimized:

- An unauthorized release or discharge (e.g., spill, leak, or discharge of non-stormwater not authorized by this or another NPDES permit to a water of the U.S.) occurs at the facility.
- A discharge violates a numeric effluent limit listed in 2021 MSGP Table 2-1 and Part 8 sector-specific requirements.
- Existing control measures are not stringent enough for the discharge to meet applicable water quality standards or the non-numeric effluent limits in this permit.
- A required control measure was never installed, was installed incorrectly, or not in accordance with 2021 MSGP Parts 2 and/or 8, or is not being properly operated or maintained.
- Whenever a visual assessment shows evidence of stormwater pollution (e.g., color, odor, floating solids, settled solids, suspended solids, foam).

7.2 Conditions Requiring SWPPP Review to Determine if Modifications are Necessary and Additional Implementation Measures (AIM)

If any of the following conditions occur, NAVBASE Kitsap Bangor must review this SWPPP (e.g., sources of pollution, spill and leak procedures, non-stormwater discharges, selection, design, installation and implementation of control measures) to determine if modifications are necessary to meet the effluent limits in the MSGP:

- Construction or a change in design, operation, or maintenance at the facility that significantly changes the nature of pollutants discharged in stormwater from the facility or significantly increases the quantity of pollutants discharged.

If the average of four quarterly sampling results exceeds an applicable benchmark (see MSGP Part 5.2). If less than four benchmark samples have been taken, but the results are such that an exceedance of the four quarter average is mathematically certain (i.e., if the sum of quarterly sample results to date is more than four times the benchmark level) this is considered a benchmark exceedance, triggering this review. Also the Additional Implementation Measure process of 2021 MSGP Part 5.2 will be followed.

Notes:

A benchmark exceedance does not trigger a corrective action if it is determined that the exceedance is solely attributable to natural background sources or if it is found that no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice (see 2021 MSGP Part 5.2.6.1).

When run-on to the facility causes a benchmark exceedance, in addition to reviewing and revising, as appropriate, this SWPPP, the installation should notify the other operators contributing run-on to NAVSTA Everett discharges to abate their pollutant contribution. Where the other operators fail to take action to address the stormwater run-on, the Navy should contact the EPA Regional Office.

7.3 Corrective Actions and Deadlines

If corrective action is needed, the MSGP requires that NAVBASE Kitsap Bangor immediately take all reasonable steps necessary to minimize or prevent the discharge of pollutants until a permanent solution is installed and made operational, including cleaning up any contaminated surfaces so that the material will not discharge in subsequent storm events. "Immediately" is defined as the same day such a condition requiring corrective action is identified. However, if a problem is identified at a time in the work day when it is too late to initiate corrective action, the initiation of corrective action must begin no later than the following work day.

If additional changes are necessary beyond those discussed above, the new or modified controls must be installed and made operational or repairs completed before the next storm event if possible and within 14 calendar days from the time of discovery. If it is infeasible to complete the corrective action within 14 calendar days, the Navy must document why it is infeasible to complete the corrective action within the 14-day timeframe. The Navy must also identify the schedule for completing the work, which must be done as soon as practicable after the 14-day timeframe but no longer than 45 days after discovery. If the completion of corrective action will exceed the 45-day timeframe, the Navy must notify the EPA Regional Office of its intention to exceed 45 days, the rationale for an extension, and a completion date, which must also be included in the corrective action documentation (see 2021 MSGP Part 5.1.3). Where the corrective actions result in changes to any of the controls or procedures documented in this SWPPP, the SWPPP must be revised accordingly within 14 calendar days of completing corrective action work.

These time intervals are not grace periods but are schedules considered reasonable by the EPA for documenting findings and for making repairs and improvements.

7.4 Corrective Action Documentation

Within 24 hours of becoming aware of any condition listed in SWPPP Section 7.1 or 7.2, the following information must be documented:

- Description of the condition triggering the need for corrective action review. For any spills or leaks, include a description of the incident including material, date/time, amount, location, and reason for spill, and any leaks, spills or other releases that resulted in discharges of pollutants to waters of U.S., through stormwater or otherwise.
- Date the condition was identified.
- Description of immediate actions taken to minimize or prevent the discharge of pollutants. For any spills or leaks, include response actions, the date/time cleanup completed, notifications made, and staff involved. Also include any measures taken to prevent the reoccurrence of such releases (see 2021 MSGP Part 2.1.2.4).
- A statement signed and certified in accordance with MSGP Appendix B, Subsection 11.

The corrective action documentation is not required to be submitted to EPA unless the Navy is specifically requested to do so. However, applicable findings must be documented in the annual report to the EPA. Include the following information in the documentation:

- Summary of corrective actions taken or to be taken (or for triggering events in SWPPP Section 7.2 where it is determined that corrective action is not necessary, the basis for this determination) within 14 days from the time of discovery of any of those conditions;
- Dates when each corrective action was initiated;
- Dates when each corrective action was completed (or is expected to be completed);
- If applicable, why it is infeasible to complete the necessary installations or repairs within the 14-day timeframe;
- If applicable, the schedule for installing the controls and making them operational as soon as practicable after the 14-day timeframe; and,
- If applicable, the rational for an extension if the 45 day timeframe must be exceeded.

Completed corrective action documentation must be included in Appendix I or stored in a location that is referenced within the appendix.

7.5 Corrective Actions at Substantially Identical Outfalls

If the event triggering corrective action is associated with an outfall that had been identified as a "substantially identical outfall," the review must assess the need for corrective action for all related substantially identical outfalls. Any necessary changes to control measures that affect these other outfalls must also be made before the next storm event if possible or as soon as practicable following that storm event.

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APPENDIX A: SITE MAPS AND FIGURES

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The NAVBASE Kitsap Bangor SWPPP, including all appendices, is available in electronic (disc) and hardcopy format. The disc includes a copy of the facility/site maps and figures. For access, contact the Stormwater Manager at (360) 315-1992.

The general location map, Figure 2-1, is in Section 2. Individual facility/site maps are in this appendix.

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APPENDIX B: 2015 MULTI-SECTOR GENERAL PERMIT

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The NAVBASE Kitsap Bangor SWPPP, including all appendices, is available in electronic (disc) and hardcopy format. The disc includes a copy of the 2015 MSGP. For access, contact the Stormwater Manager at (360) 315-1992.

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APPENDIX C: NOTICE OF INTENT AND SUPPORTING DOCUMENTATION

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The NAVBASE Kitsap Bangor SWPPP, including all appendices, is available in electronic (disc) and hardcopy format. The disc includes a copy of the NOI and supporting information, permit-specific correspondence between the Navy and EPA, and the acknowledgement received from EPA containing the NPDES ID number. For access, contact the Stormwater Manager at (360) 315-1992.

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APPENDIX D: EMPLOYEE TRAINING

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Stormwater management is a topic included in both New Employee Indoctrination (Indoc) training and Hazardous Waste Originator training at NAVBASE Kitsap Bangor. Attendees must sign a training log to record their attendance at the classes.

Sample training logs are provided on the following page. These logs are for reference only and are not required for use during training if an alternative preferred log is used.

NAVBASE Kitsap Environmental maintains stormwater training records electronically. For access, contact the Stormwater Manager at (360) 315-1992.

Training Date: Insert Date of Training	
Training Description: Insert Description of Training	
Trainer: Insert Trainer(s) names	
Employee(s) trained	**Employee signature**
Insert Name	
Insert Name	
Insert Name	
Insert Name	
Insert Name	
Insert Name	

Training Date: Insert Date of Training	
Training Description: Insert Description of Training	
Trainer: Insert Trainer(s) names	
Employee(s) trained	**Employee signature**
Insert Name	
Insert Name	
Insert Name	
Insert Name	
Insert Name	
Insert Name	

Training Date: Insert Date of Training	
Training Description: Insert Description of Training	
Trainer: Insert Trainer(s) names	
Employee(s) trained	**Employee signature**
Insert Name	
Insert Name	
Insert Name	
Insert Name	
Insert Name	
Insert Name	

Training Date: Insert Date of Training	
Training Description: Insert Description of Training	
Trainer: Insert Trainer(s) names	
Employee(s) trained	**Employee signature**
Insert Name	
Insert Name	
Insert Name	
Insert Name	
Insert Name	
Insert Name	

APPENDIX E: MAINTENANCE

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Maintenance procedures are described in Section 5.2 of this SWPPP.

NAVBASE Kitsap Public Works maintains maintenance records electronically. For access, contact the Stormwater Manager at (360) 315-1992.

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APPENDIX F: ROUTINE FACILITY INSPECTION REPORTS

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An example Stormwater Industrial Facility Routine Inspection Form is provided on the following pages.

NAVBASE Kitsap Environmental maintains completed Facility Inspection Forms electronically. For access, contact the Stormwater Manager at (360) 315-1992.

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Stormwater Industrial Facility Routine Inspection Form

[redacted] – Sector Q	**General Information**	
	Inspector Name:	
	Inspector Signature:	
	Inspection Date:	Inspection Time:
	Weather Information	
	Weather at time of this inspection? ☐ Clear ☐ Cloudy	
	☐ Rain ☐ Sleet ☐ Fog ☐ Snow ☐ High Winds	
	☐ Other:	Temperature:
	Buildings and areas to inspect:	
	[redacted]	[redacted]
	BMPs:	
	Leaking Materials	Properly Stored Materials
	Condition of Storm Drains	Materials Stored Outside
	Spill Kits	Vehicle Leaks
	Use Oil Containment Booms	Lids on Trash Receptacles
	No Detergents Used for Wash Water	

[redacted] Industrial Facility Information

Bldg./ Area	Previously Unidentified Discharges of Pollutants?	Control Measures Operating Effectively?	If No, In Need of:			Maintenance, Corrective Actions, or Additional Control Measures Needed; and Notes
			Maintenance	Repair	Replacement	
7100	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7105	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7042	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7043	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7101	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7108	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7041	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7130	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7109	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7110	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7125	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	

Stormwater Industrial Facility Routine Inspection Form

[redacted] – Sector Q	General Information	
	Inspector Name:	
	Inspector Signature:	
	Inspection Date:	Inspection Time:
	Weather Information	
	Weather at time of this inspection? ☐ Clear ☐ Cloudy	
	☐ Rain ☐ Sleet ☐ Fog ☐ Snow ☐ High Winds	
	☐ Other:	Temperature:
	Buildings and areas to inspect:	
	[redacted]	
	BMPs:	
	Leaking Materials	Properly Stored Materials
	Condition of Storm Drains	Materials Stored Outside
	Spill Kits	Vehicle Leaks
	Use Oil Containment Booms	Lids on Trash Receptacles
	Tarp Usage for Outdoor Activities	Soft Metals Covered (Zn, Pb)

[redacted] Industrial Facility Information

Bldg./ Area	Previously Unidentified Discharges of Pollutants?	Control Measures Operating Effectively?	If No, In Need of:			Maintenance, Corrective Actions, or Additional Control Measures Needed; and Notes
			Maintenance	Repair	Replacement	
7273	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7136	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7658	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
Parking & Laydown	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	

Stormwater Industrial Facility Routine Inspection Form

[redacted]. – Sectors Q, R	**General Information**	
	Inspector Name:	
	Inspector Signature:	
	Inspection Date:	Inspection Time:
	Weather Information	
	Weather at time of this inspection? ☐ Clear ☐ Cloudy	
	☐ Rain ☐ Sleet ☐ Fog ☐ Snow ☐ High Winds	
	☐ Other:	Temperature:
	Buildings and areas to inspect:	
	[redacted]	
	BMPs:	
	Leaking Materials	Properly Stored Materials
	Condition of Storm Drains	Materials Stored Outside
	Spill Kits	Vehicle Leaks
	Use Oil Containment Booms	Lids on Trash Receptacles
	Tarp Usage for Outdoor Activities	Blind Sumps (empty if needed)

[redacted]. Industrial Facility Information

Bldg./ Area	Previously Unidentified Discharges of Pollutants?	Control Measures Operating Effectively?	If No, In Need of:			Maintenance, Corrective Actions, or Additional Control Measures Needed; and Notes
			Maintenance	Repair	Replacement	
7400	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7418	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7419	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7425	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7415	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7417	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7429	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7431	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7432	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7022	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7039	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7040	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7202	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7426	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7428	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7436	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7450	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7420	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7201	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	

[redacted] Industrial Facility Information (continued)

Bldg./ Area	Previously Unidentified Discharges of Pollutants?	Control Measures Operating Effectively?	If No, In Need of:			Maintenance, Corrective Actions, or Additional Control Measures Needed; and Notes
			Maintenance	Repair	Replacement	
7203	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7051	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	

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Stormwater Industrial Facility Routine Inspection Form

[redacted] – Sector Q	**General Information**	
	Inspector Name:	
	Inspector Signature:	
	Inspection Date:	Inspection Time:
	Weather Information	
	Weather at time of this inspection? ☐ Clear ☐ Cloudy	
	☐ Rain ☐ Sleet ☐ Fog ☐ Snow ☐ High Winds	
	☐ Other:	Temperature:
	Buildings and areas to inspect:	
	[redacted]	
	BMPs:	
	Leaking Materials	Properly Stored Materials
	Condition of Storm Drains	Materials Stored Outside
	Spill Kits	Vehicle Leaks
	Maintain Oil/Water Separators	Lids on Trash Receptacles
	Secondary Containment for ASTs	Oil and Grease on Pavement

[redacted] Industrial Facility Information

Bldg./ Area	Previously Unidentified Discharges of Pollutants?	Control Measures Operating Effectively?	If No, In Need of:			Maintenance, Corrective Actions, or Additional Control Measures Needed; and Notes
			Maintenance	Repair	Replacement	
7501	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7511	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7512	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	

Stormwater Industrial Facility Routine Inspection Form

[redacted] – Sector Q	**General Information**	
	Inspector Name:	
	Inspector Signature:	
	Inspection Date:	Inspection Time:
	Weather Information	
	Weather at time of this inspection? ☐ Clear ☐ Cloudy	
	☐ Rain ☐ Sleet ☐ Fog ☐ Snow ☐ High Winds	
	☐ Other:	Temperature:
	Buildings and areas to inspect:	
	[redacted]	
	BMPs:	
	Leaking Materials	Properly Stored Materials
	Condition of Storm Drains	Materials Stored Outside
	Spill Kits	Vehicle Leaks
	Lids on Trash Receptacles	Secondary Containment for ASTs
	Temporary Tarp Cover	Use Oil Containment Booms

Industrial Facility Information

Bldg./ Area	Previously Unidentified Discharges of Pollutants?	Control Measures Operating Effectively?	If No, In Need of: Maintenance	Repair	Replacement	Maintenance, Corrective Actions, or Additional Control Measures Needed; and Notes
7176	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7604	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7408	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7064	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7068	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7030	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7031	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7032	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7071	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
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	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
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	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	

Stormwater Industrial Facility Routine Inspection Form

[redacted] – Sectors P, Q, R, AA	**General Information**	
	Inspector Name:	
	Inspector Signature:	
	Inspection Date:	Inspection Time:
	Weather Information	
	Weather at time of this inspection? ☐ Clear ☐ Cloudy	
	☐ Rain ☐ Sleet ☐ Fog ☐ Snow ☐ High Winds	
	☐ Other:	Temperature:
	Buildings and areas to inspect:	
	[redacted]	[redacted]
	BMPs:	
	Leaking Materials	Properly Stored Materials
	Condition of Storm Drains	Materials Stored Outside
	Spill Kits	Vehicle Leaks
	Pressure Wash in Designated Area	Lids on Trash Receptacles
	Tarp Usage for Outdoor Activities	No Open Flames near Flammables

			Industrial Facility Information			
Bldg./ Area	**Previously Unidentified Discharges of Pollutants?**	**Control Measures Operating Effectively?**	**If No, In Need of:**			**Maintenance, Corrective Actions, or Additional Control Measures Needed; and Notes**
			Maintenance	**Repair**	**Replacement**	
7000	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7003	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7029	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7048	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7052	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7058	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7069	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7080	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7089	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7142	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	

Stormwater Industrial Facility Routine Inspection Form

[redacted] – Sectors N, P, Q	**General Information**	
	Inspector Name:	
	Inspector Signature:	
	Inspection Date:	Inspection Time:
	Weather Information	
	Weather at time of this inspection? ☐ Clear ☐ Cloudy	
	☐ Rain ☐ Sleet ☐ Fog ☐ Snow ☐ High Winds	
	☐ Other:	Temperature:
	Buildings and areas to inspect:	
	[redacted]	
	BMPs:	
	Leaking Materials	Properly Stored Materials
	Condition of Storm Drains	Materials Stored Outside
	Spill Kits	Vehicle Leaks
	Lids on Trash Receptacles	Secondary Containment for ASTs
	Temporary Tarp Cover	Use Oil Containment Booms

[redacted] **Industrial Facility Information**

Bldg./ Area	Previously Unidentified Discharges of Pollutants?	Control Measures Operating Effectively?	If No, In Need of:			Maintenance, Corrective Actions, or Additional Control Measures Needed; and Notes
			Maintenance	Repair	Replacement	
4070	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
4073	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
4075	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
6035	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
6036	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
6037	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
6074	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
6079	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
6080	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
6081	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
2800	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
6099	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
2802	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
2820	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
2821	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
2822	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
2823	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
2824	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	

Stormwater Industrial Facility Routine Inspection Form

[redacted] – Sector AA	**General Information**	
	Inspector Name:	
	Inspector Signature:	
	Inspection Date:	Inspection Time:
	Weather Information	
	Weather at time of this inspection? ☐ Clear ☐ Cloudy	
	☐ Rain ☐ Sleet ☐ Fog ☐ Snow ☐ High Winds	
	☐ Other:	Temperature:
	Buildings and areas to inspect:	
	[redacted]	[redacted]
	BMPs:	
	Leaking Materials	Properly Stored Materials
	Condition of Storm Drains	Materials Stored Outside
	Spill Kits	Vehicle Leaks
	Lids on Trash Receptacles	Temporary Tarp Cover
	Secondary Containment for ASTs	

[redacted] Industrial Facility Information

Bldg./ Area	Previously Unidentified Discharges of Pollutants?	Control Measures Operating Effectively?	If No, In Need of:			Maintenance, Corrective Actions, or Additional Control Measures Needed; and Notes
			Maintenance	Repair	Replacement	
5000	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
5002	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
5003	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
5061	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
5941	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
5063	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
5065	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
5731	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
5066	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
5067	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
5945	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
5094	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
5095	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
5937	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	

Stormwater Industrial Facility Routine Inspection Form

[redacted] – Sectors P, Q	**General Information**	
	Inspector Name:	
	Inspector Signature:	
	Inspection Date:	Inspection Time:
	Weather Information	
	Weather at time of this inspection? ☐ Clear ☐ Cloudy	
	☐ Rain ☐ Sleet ☐ Fog ☐ Snow ☐ High Winds	
	☐ Other:	Temperature:
	Buildings and areas to inspect:	
	[redacted]	[redacted]
	BMPs:	
	Leaking Materials	Properly Stored Materials
	Condition of Storm Drains	Materials Stored Outside
	Spill Kits	Vehicle Leaks
	Lids on Trash Receptacles	Secondary Containment for ASTs
	Temporary Tarp Cover	

[redacted] Industrial Facility Information

Bldg./ Area	Previously Unidentified Discharges of Pollutants?	Control Measures Operating Effectively?	If No, In Need of:			Maintenance, Corrective Actions, or Additional Control Measures Needed; and Notes
			Maintenance	Repair	Replacement	
6575	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
6005	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
6072	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
6403	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
6400	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
6405	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
6002	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
6056	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
6073	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
6687	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7717	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7718	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
7719	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	

Stormwater Industrial Facility Routine Inspection Form

[redacted] – Sectors N, P, Q	**General Information**	
	Inspector Name:	
	Inspector Signature:	
	Inspection Date:	Inspection Time:
	Weather Information	
	Weather at time of this inspection? ☐ Clear ☐ Cloudy	
	☐ Rain ☐ Sleet ☐ Fog ☐ Snow ☐ High Winds	
	☐ Other:	Temperature:
	Buildings and areas to inspect:	
	[redacted]	[redacted]
	BMPs:	
	Leaking Materials	Properly Stored Materials
	Condition of Storm Drains	Materials Stored Outside
	Spill Kits	Vehicle Leaks
	Lids on Trash Receptacles	Temporary Tarp Cover
	Secondary Containment	

[redacted] **Industrial Facility Information**

Bldg./ Area	Previously Unidentified Discharges of Pollutants?	Control Measures Operating Effectively?	If No, In Need of:			Maintenance, Corrective Actions, or Additional Control Measures Needed; and Notes
			Maintenance	Repair	Replacement	
1012	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
1025	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
1016	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
1268	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
1034	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
1014	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
1206	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
1021	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
1038	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
1048	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
1201	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
1049	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
1203	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
1204	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
1205	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
1460	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
1247	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
2003	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	
	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N	

Industrial Outfall/Discharge Point Information

Outfall	Industrial Sector(s) Supported	Discharge occurring at outfall?	Pollution, or potential for pollution, observed?	Controls Adequate?	If No, In Need of Maintenance, Repair, or Replacement?	Observations regarding the physical condition of and around the outfall; maintenance, corrective actions, or additional control measures needed; and notes
OF1	Q	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	
OF2	N, P, Q,	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	
OF3	P, Q, R, AA	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	
OF3A	Q, R	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	
OF7	Q	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	
OF8	Q	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	
OF9	Q	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	
OF10	Q	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	

Industrial Outfall/Discharge Point Information (continued)

Outfall	Industrial Sector(s) Supported	Discharge occurring at outfall?	Pollution, or potential for pollution, observed?	Controls Adequate?	If No, In Need of Maintenance, Repair, or Replacement?	Observations regarding the physical condition of and around the outfall; maintenance, corrective actions, or additional control measures needed; and notes
OF11	Q	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	
OF12	Q	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	
OF13	P	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	

Non-Compliance

Describe any incidents of non-compliance observed and not described above:

Certification Statement (2021 MSGP Appendix B Subpart 11)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated 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.

Name: Title:

Signature: Date Signed:

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APPENDIX G: QUARTERLY VISUAL ASSESSMENT REPORTS

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Example Quarterly Visual Assessment Forms are provided on the following pages.

NAVBASE Kitsap Environmental maintains completed Visual Assessment Forms electronically. For access, contact the Stormwater Manager at (360) 315-1992.

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Quarterly Visual Assessment Form – 1st Year

Observation Date:	Observer Name:	Observer Signature:

Days Since Last Discharge:

Estimated Time Discharge Began:

Nature of Discharge: ☐ Runoff ☐ Snowmelt

Quarter (Check one): ☐ Jan – Mar ☐ Jul – Sep ☐ Apr – Jun ☐ Oct – Dec

Considerations for each outfall:
(1) Description of sample observations.
(2) Probable sources of observed stormwater contamination.
(3) If applicable, why it was not possible to collect samples within the first 30 minutes.
(4) If applicable, why it was not possible to collect a sample.
(5) If a 72-hour interval is not possible, provide supporting documentation.

Outfall No.	Outfall Location	Time	*Check in box if present*								Observations
			Color	Odor	Clear	Floating Solids	Settled Solids	Suspended Solids	Foam	Oil Sheen	
OF1	[redacted]										
OF2	[redacted]										
OF3A	[redacted]										
OF3B	[redacted]										
OF7	[redacted]										
OF9	[redacted]										
OF11A	[redacted]										
OF11C	[redacted]										

Certification Statement (2021 MSGP Appendix B Subpart 11):
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated 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.

Name: Title:

Signature: Date Signed:

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Quarterly Visual Assessment Form – 2nd Year

Observation Date:	Observer Name:	Observer Signature:

Days Since Last Discharge:

Estimated Time Discharge Began:

Nature of Discharge: ☐ Runoff ☐ Snowmelt

Quarter (Check one): ☐ Jan – Mar ☐ Jul – Sep ☐ Apr – Jun ☐ Oct – Dec

Considerations for each outfall:
(1) Description of sample observations.
(2) Probable sources of observed stormwater contamination.
(3) If applicable, why it was not possible to collect samples within the first 30 minutes.
(4) If applicable, why it was not possible to collect a sample.
(5) If a 72-hour interval is not possible, provide supporting documentation.

Outfall No.	Outfall Location	Time	*Check in box if present*								Observations
			Color	Odor	Clear	Floating Solids	Settled Solids	Suspended Solids	Foam	Oil Sheen	
OF1	[redacted]										
OF2	[redacted]										
OF3B	[redacted]										
OF8	[redacted]										
OF9	[redacted]										
OF11B	[redacted]										
OF11C	[redacted]										
OF12	[redacted]										

Certification Statement (2021 MSGP Appendix B Subpart 11):
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated 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.

Name: Title:

Signature: Date Signed:

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Quarterly Visual Assessment Form – 3rd Year

Observation Date:	Observer Name:	Observer Signature:

Days Since Last Discharge:

Estimated Time Discharge Began:

Nature of Discharge: ☐ Runoff ☐ Snowmelt

Quarter (Check one): ☐ Jan – Mar ☐ Jul – Sep ☐ Apr – Jun ☐ Oct – Dec

Considerations for each outfall:
(1) Description of sample observations.
(2) Probable sources of observed stormwater contamination.
(3) If applicable, why it was not possible to collect samples within the first 30 minutes.
(4) If applicable, why it was not possible to collect a sample.
(5) If a 72-hour interval is not possible, provide supporting documentation.

Outfall No.	Outfall Location	Time	*Check in box if present*								Observations
			Color	Odor	Clear	Floating Solids	Settled Solids	Suspended Solids	Foam	Oil Sheen	
OF1	[redacted]										
OF2	[redacted]										
OF3A	[redacted]										
OF3B	[redacted]										
OF9	[redacted]										
OF10	[redacted]										
OF11C	[redacted]										
OF11D	[redacted]										

Certification Statement (2021 MSGP Appendix B Subpart 11):
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated 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.

Name: Title:

Signature: Date Signed:

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Quarterly Visual Assessment Form – 4th Year

Observation Date:	Observer Name:	Observer Signature:

Days Since Last Discharge:

Estimated Time Discharge Began:

Nature of Discharge: ☐ Runoff ☐ Snowmelt

Quarter (Check one): ☐ Jan – Mar ☐ Jul – Sep ☐ Apr – Jun ☐ Oct – Dec

Considerations for each outfall:
(1) Description of sample observations.
(2) Probable sources of observed stormwater contamination.
(3) If applicable, why it was not possible to collect samples within the first 30 minutes.
(4) If applicable, why it was not possible to collect a sample.
(5) If a 72-hour interval is not possible, provide supporting documentation.

Outfall No.	Outfall Location	Time	*Check in box if present*								Observations
			Color	Odor	Clear	Floating Solids	Settled Solids	Suspended Solids	Foam	Oil Sheen	
OF1	[redacted]										
OF2	[redacted]										
OF3B	[redacted]										
OF7	[redacted]										
OF9	[redacted]										
OF11A	[redacted]										
OF11C	[redacted]										
OF12	[redacted]										

Certification Statement (2021 MSGP Appendix B Subpart 11):
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated 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.

Name: Title:

Signature: Date Signed:

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APPENDIX H: MONITORING RESULTS

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A data summary of stormwater monitoring conducted during the prior permit term is provided in Section 3.5 of this SWPPP.

NAVBASE Kitsap Environmental maintains monitoring results under the existing permit electronically. For access, contact the Stormwater Manager at (360) 315-1992.

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APPENDIX I: CORRECTIVE ACTION DOCUMENTATION

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NAVBASE Kitsap Environmental maintains an up-to-date corrective actions tracking system electronically. For access, contact the Stormwater Manager at (360) 315-1992.

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APPENDIX J: MISCELLANEOUS DOCUMENTATION

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Instructions:

Use this section to keep records of any additional documentation that relates to your compliance with the permit.

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