STORMWATER POLLUTION PREVENTION PLAN

Prepared for: Port of Bremerton
Bremerton National Airport
8850 SW State Highway 3
Bremerton, Washington 98367
(360) 674-2381

SIC Code: 45xx

Industrial Stormwater General Permit Number WAR-000901
Issuance Date: November 20, 2019
Effective Date: January 1, 2020
Expiration Date: December 31, 2024

March 6, 2020

Project Number 02-12002

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Corporation

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RECORD OF MODIFICATIONS

This document supersedes and replaces the previous Stormwater Pollution Prevention Plan for the Port of Bremerton's Bremerton National Airport site and incorporates all previous modifications to the plan.

Modification Number	Date	Person Responsible for Modification	Affected Pages	Nature of Modification
0	3-1-03	Bill Kane (Eco Compliance)	All	Original
1	10-12-07	Bill Kane (Eco Compliance)	All	Update
2	6-3-11	Bill Kane (Eco Compliance)	All	Update
3	12-9-15	Bill Kane (Eco Compliance)	All	Update
4	3-6-20	Bill Kane (Eco Compliance)	All	Update

Conditions for modifying this plan are provided in Section 3.

STATEMENT OF SUPPORT

The management of the Port of Bremerton support this Stormwater Pollution Prevention Plan for their Bremerton National Airport site located in Bremerton, Kitsap County, Washington, and are committed now and in the future to providing available manpower and resources as reasonably necessary to ensure its implementation.

Port of Bremerton, Bremerton National Airport

3.11.2020
Date

FRED SALISBURY COO
Name and Title

CERTIFICATION STATEMENT

I certify under penalty of law that this SWPPP 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 information to determine compliance with the Industrial Stormwater General Permit. Based on my inquiry of the person or persons who are responsible for stormwater management at my facility, this SWPPP is, to the best of my knowledge and belief, true, accurate and complete, and in full compliance with permit Conditions S3 and S8, including the correct Best Management Practices (BMPs) from the applicable Stormwater Management Manual for Western Washington. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

FRED SALISBURY
Operator's Printed Name

COO
Title

Operator's Signature

7.11.2020
Date

I certify that this SWPPP is reasonably expected to meet the Industrial Stormwater General Permit benchmarks upon implementation.

Bill Kane, Eco Compliance Corporation
Name of Qualified Industrial Stormwater Professional

President
Title

Bill Kane

Signature of Qualified Industrial Stormwater Professional

March 6, 2020
Date

Is this SWPPP certification in response to a Level 1, 2 or 3 corrective action?

____ Yes

_X_ No

If Yes, indicate the type of corrective action:

____ Level 1 – Operational source control BMPs (exceedance of a discharge limit for any applicable stormwater pollutant as identified in the permit).

Within 14 days of a Level 1 exceedance, the Bremerton Airport must:

- Conduct an inspection to investigate the cause.
- Review the SWPPP and ensure that it fully complies with the Industrial Stormwater General Permit, and contains the correct BMPs from the applicable Stormwater Management Manual for Western Washington.
- Make appropriate revisions to the SWPPP to include additional Operational Source Control BMPs with the goal of achieving the applicable benchmark value(s) in future discharges.

In addition, the Airport shall sign/certify and fully implement the revised SWPPP as soon as possible, but no later than the DMR due date for the quarter the benchmark was exceeded.

Also, the Airport must summarize the Level 1 Corrective Actions in the Annual Report.

____ Level 2 – Structural source control BMPs (exceedance of a discharge limit for any applicable stormwater pollutant as identified in the permit for any two quarters during a calendar year).

As soon as possible but not later than August 31st of the year following a Level 2 exceedance, the Bremerton Airport shall:

- Review the SWPPP and ensure that it fully complies with the Industrial Stormwater General Permit.
- Make appropriate revisions to the SWPPP to include additional Structural Source Control BMPs with the goal of achieving the applicable benchmark value(s) in future discharges.

- Sign/certify and fully implement the revised SWPPP.

In addition, the Airport must summarize the Level 2 Corrective Actions (planned or taken) in the Annual Report.

____ Level 3 – Treatment BMPs (exceedance of a discharge limit for any applicable stormwater pollutant as identified in the permit for any three quarters during a calendar year).

As soon as possible but not later than September 30th of the year following a Level 3 exceedance, the Bremerton Airport shall:

- Review the SWPPP and ensure that it fully complies with the Industrial Stormwater General Permit.

- Make appropriate revisions to the SWPPP to include additional Treatment BMPs with the goal of achieving the applicable benchmark value(s) in future discharges. Revisions shall include additional Operational and/or Structural Source Control BMPs if necessary for proper performance and maintenance of Treatment BMPs.

- Fully implement the revised SWPPP.

In addition, the Airport must summarize the Level 3 Corrective Actions (planned or taken) in the Annual Report.

Also, for Level 3 corrective actions, a Qualified Industrial Stormwater Professional must review the revised SWPPP, and sign and certify below:

> The Permittee has made appropriate revisions to the SWPPP to include additional Treatment BMPs with the goal of achieving the applicable benchmark value(s) in future discharges. Based on my review of the SWPPP, discharges from the facility are reasonably expected to meet the ISGP benchmarks upon implementation.

_____	_____
Name of Qualified Industrial Stormwater Professional	Title
_____	_____
Signature of Qualified Industrial Stormwater Professional	Date

See Page 2 for the date of the update/revision to this SWPPP. Other conditions for modifying this plan are provided in Section 3.

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1. BACKGROUND

Stormwater discharges have been increasingly identified as a source of water pollution in numerous nationwide studies on water quality. To address this problem, the Clean Water Act Amendments of 1987 required the Environmental Protection Agency (EPA) to publish regulations to control stormwater discharges under the National Pollutant Discharge Elimination System (NPDES).

EPA published NPDES regulations on November 16, 1990 with the goals of eliminating violations of surface water quality standards caused by stormwater, and reducing or eliminating the pollution of stormwater from municipal and industrial point sources by requiring the implementation of technology-based stormwater pollution prevention plans (SWPPP).

2. INTRODUCTION

This SWPPP has been prepared for the Port of Bremerton's Bremerton National Airport (Airport) facility located at 8850 SW State Highway 3 in Bremerton, Kitsap County, Washington (Figure 1).

The Airport encompasses approximately 1,004 total acres. Of this, the approximate western half of the site is developed (runway, buildings, perimeter and interior access roads, various grassy fields [airplane run-off areas], etc.), while the approximate eastern half consists of wetland and forested areas (Figure 2).

In general, all stormwater from the Airport either infiltrates into the soil in un-paved areas of the facility, or is collected and discharged offsite through a wetland area and a culvert along the northern portion of the property, or through an engineered piping network and detention pond along the southern portion of the site (Figure 3).

The Bremerton National Airport is covered under Stormwater Baseline General Permit number WAR-000901. This permit was issued November 20, 2019, with an effective date of January 1, 2020 and an expiration date of December 31, 2024.

2.1 SCOPE

This SWPPP identifies the personnel responsible for assuring implementation of the plan, the procedures to monitor compliance with the intent of the Washington State Department of Ecology's (Ecology's) pollution control program, the sources and characteristics of chemicals handled and wastes generated at the Airport, and the practices and associated implementation schedule to reduce or eliminate the pollution of stormwater from contact with these chemicals and wastes.

Figure 1. Site location map.

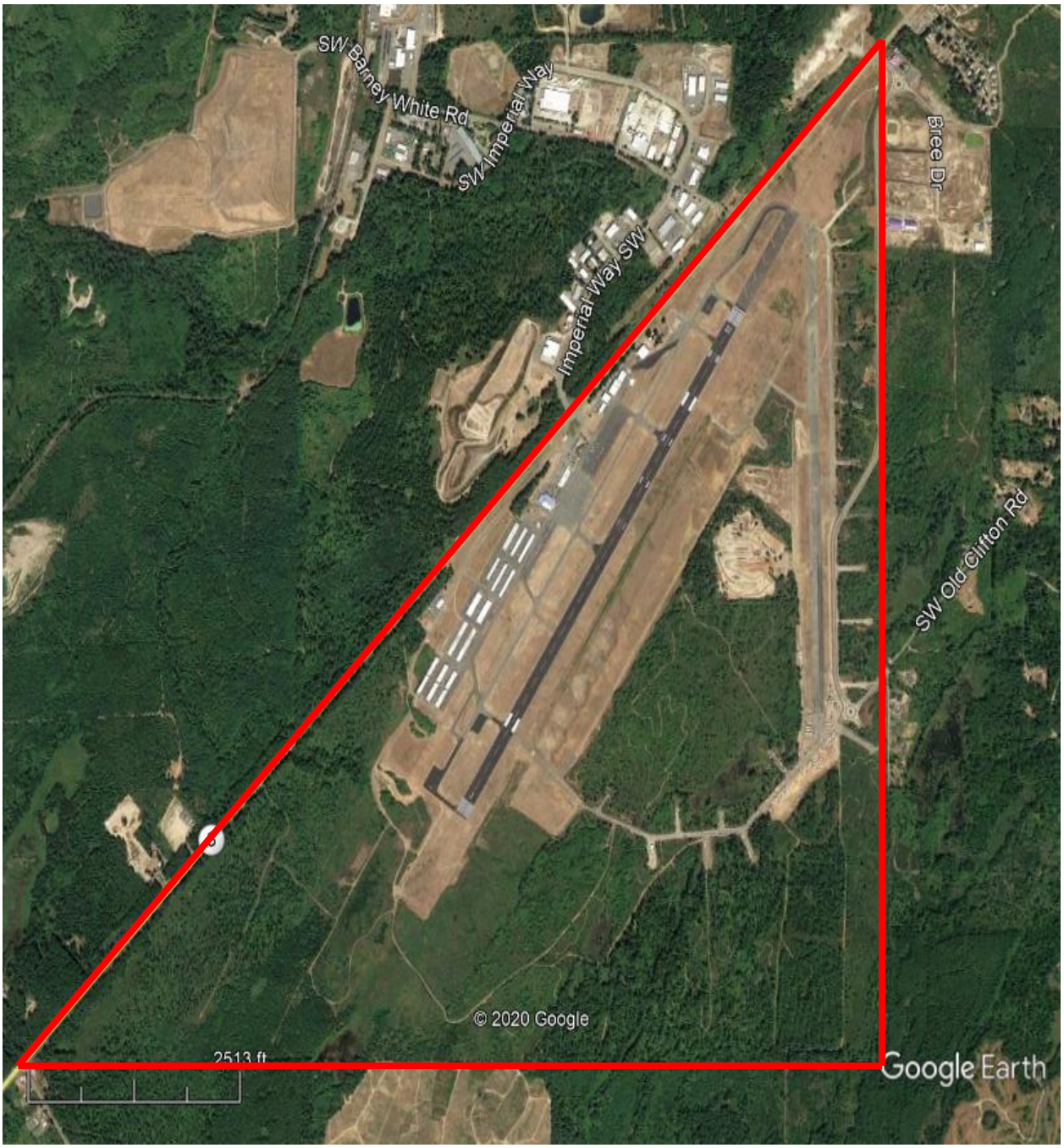

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Figure 2. Subject property.

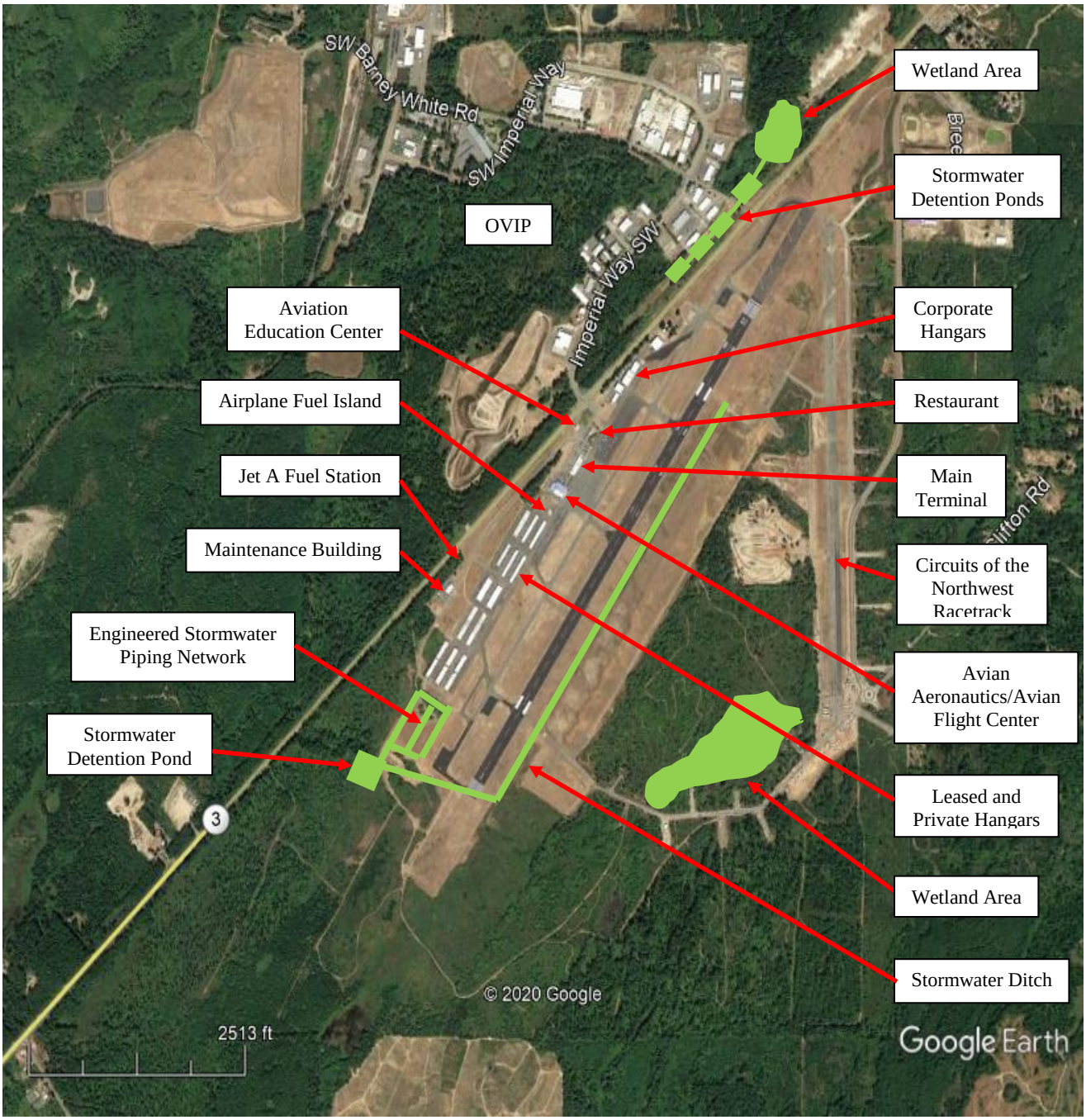

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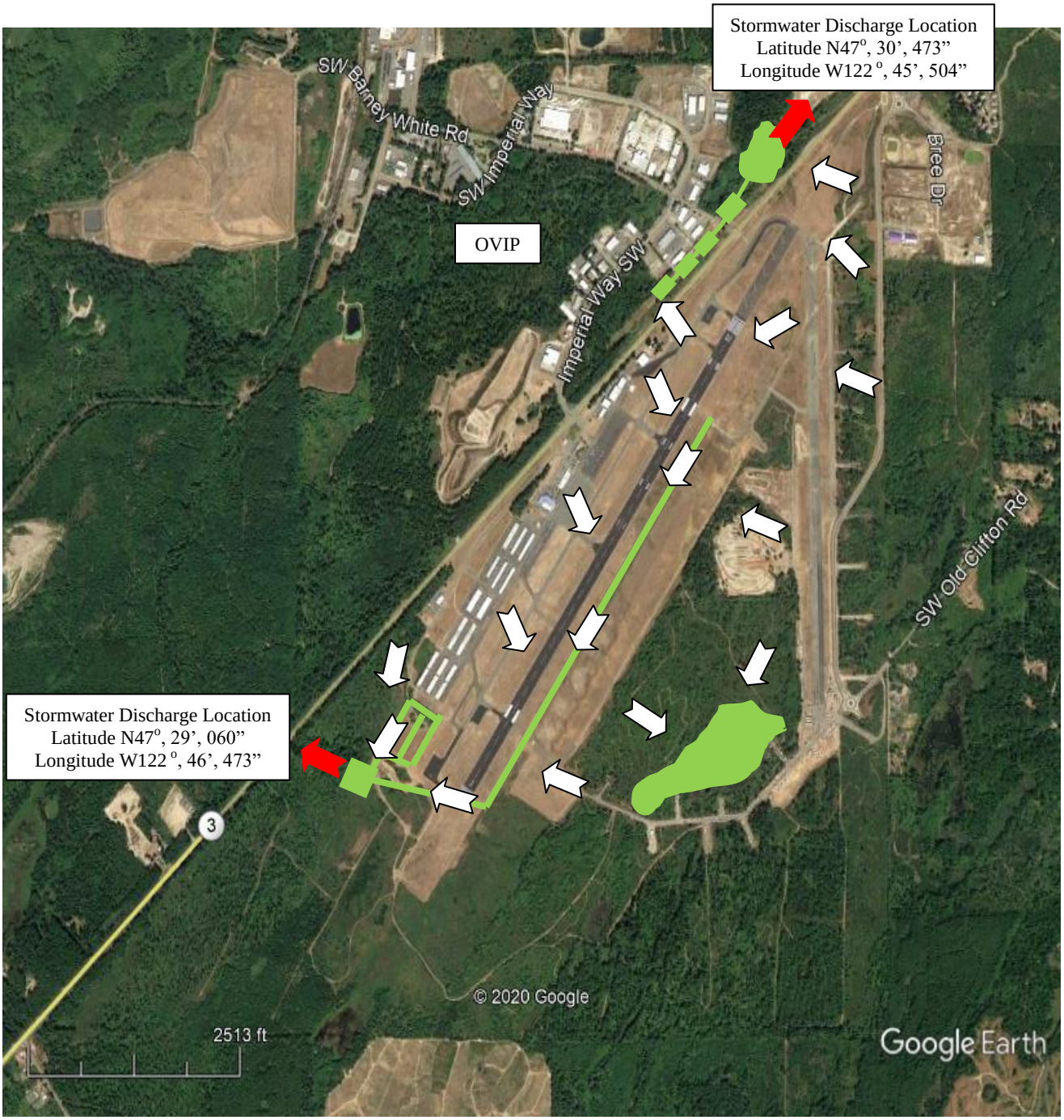
Figure 3. Stormwater flow directions and discharge locations.



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2.2 OBJECTIVES

The objectives of this SWPPP are:

- To implement BMPs as possible to identify, reduce, eliminate and prevent the pollution of stormwater;

- To prevent violations of applicable surface water quality, groundwater quality and sediment management standards;

- To prevent adverse water quality impacts, including impacts on beneficial uses of receiving waters, by controlling peak rates and volumes of stormwater run-off;

- To manage discharges from unpaved areas and during construction activities to reduce sediment load to stormwater drainage systems or to surface waters.

3. PLAN LOCATIONS AND MODIFICATIONS TO THE PLAN

Copies of this SWPPP can be found onsite in the Port of Bremerton office located inside the main terminal building, and in the maintenance building (see Figure 2).

Modifications to this SWPPP will be made:

- Whenever there is a change in the design, construction, operation or maintenance at the facility which causes the plan to be less effective in controlling potential stormwater pollutants, that significantly changes the nature of pollutants discharged in stormwater from the facility, or significantly increases the quantity of pollutants discharged.

- Whenever there is an exceedance of a discharge limit for any applicable stormwater pollutant as identified in the permit (Level 1, 2 or 3 corrective action).

- If non-stormwater discharges are detected at the site and cannot be eliminated within 30 days. In such a case, the Airport will apply to the state for an appropriate NPDES or State Waste Discharge permit. Ecology would be notified of any such non-stormwater discharges or permit non-compliance issues as soon as possible but not later than 30 days.

- As necessary to include additional or modified BMPs designed to correct problems identified.

- Whenever self-inspections, or investigations or inspections by applicable state or local authorities, reveal the description of potential pollutant sources or the pollution prevention measures and controls identified in this SWPPP are inadequate or ineffective in eliminating or significantly minimizing pollutants in stormwater discharges from the site.

- To correct deficiencies identified in writing from Ecology within 30 days of notice.

Also, the Airport will review this SWPPP and make necessary modifications at least every 5 years or whenever a new permit becomes effective.

As necessary, the facility will modify the SWPPP and implement any changes to the plan in a timely manner or timeframe applicable to the modification or action required.

4. FACILITY LOCATION AND DESCRIPTION

The Bremerton National Airport is located at 8850 SW State Highway 3 in Bremerton, Kitsap County, Washington (see Figure 1). The Airport services general and corporate aircraft. The SIC Code for this municipal facility is 45xx. The Airport is not located on Indian or federal land. There are fewer than 1,000 jet departures per year from the facility.

The Airport was constructed in 1936 under government ownership, and expanded during World War II. In 1948, the Airport was surplused to Kitsap County and re-named the Kitsap County Airport. The Port of Bremerton assumed ownership of the Airport in 1963, and in 1983 the facility was re-named the Bremerton National Airport.

As noted above, the Airport encompasses approximately 1,004 total acres. Of this, the approximate western half of the site is developed (runway, buildings, perimeter and interior access roads, various grassy fields [airplane run-off areas], etc.), while the approximate eastern half consists of wetland and forested areas (see Figure 2).

Structures within the developed area of the Airport include the main terminal building, maintenance building, airplane fuel island and Jet A fuel station (see Figure 2). There are also various tenant-occupied areas including an aviation education building, restaurant, an airplane repair and flight instruction business (Avian Aeronautics/Avian Flight Center), airplane hangars and the Circuits of the Northwest racetrack. There are no manufacturing operations at the Airport. Most buildings and operations are open during normal business hours, including weekends as necessary. General and corporate aircraft can use the runway and fueling facilities as needed.

5. STORMWATER FLOW AND DIRECTION

5.1 STORMWATER COLLECTION AND DISCHARGE AREAS

The direction, flow and discharge of stormwater at the Bremerton National Airport is controlled by means of site grading and the presence of forested and wetland areas, grassy fields (airplane run-off areas), drains, drainage ditches, culverts, detention ponds and outfalls. Stormwater collection and discharge areas are discussed below and summarized in Table 1.

Undeveloped portions of the Bremerton National Airport include forested and wetland areas. Stormwater within the forested area either evaporates, infiltrates into the surrounding soil, is absorbed by the onsite vegetation, or is collected in the Airport's stormwater collection system and discharged offsite (see Figure 3) (see Table 1). Stormwater within and generally surrounding the wetland area is collected in a large onsite pond. The presence of water in this pond is seasonal, where it generally either evaporates, infiltrates into the underlying soil, is absorbed by onsite vegetation, or is collected in the Airport's stormwater collection system and discharged offsite.

The majority of stormwater within the developed portion of the Airport, including discharges from the restaurant, aviation education building, main terminal building, airplane fuel island, Jet A fuel station, Avian Aeronautics/Avian Flight Center building, south hangar area, maintenance building, runway, Circuits of the Northwest racetrack area and airplane run-off areas, is collected and routed through various storm drains, oil/water separators, culverts and drainage ditches to an engineered piping network and detention pond located along the southern portion of the property (see Figure 3) (see Table 1). Water from this pond either evaporates, infiltrates into the underlying soil, or is control-discharged through an outfall to Stream 0512. The latitude and longitudinal coordinates of this outfall are N47^{o}, 29', 060" and W122 ^{o}, 46', 473".

Stormwater primarily from the northwest portion of the developed area of the Airport, including discharges from the north hangar area and airplane run-off area north of the runway, is collected and routed to a wetland area and a culvert located offsite in the Port of Bremerton's Olympic View Industrial Park (OVIP) west of the Airport (see Figure 3) (see Table 1). Water from this culvert and wetland area are combine-discharged to an un-named tributary to the east fork of the Union River. The latitude and longitudinal coordinates of this combined discharge location is N47^{o}, 30', 473" and W122 ^{o}, 45', 504".

Table 1. Summary of stormwater collection and discharge areas.

Areas of Stormwater Collection	Stormwater Collection Facility	Stormwater Discharge Location
Undeveloped portions of the Airport including forested and wetland areas.	Forested area: Evaporation, infiltration into the surrounding soil, absorption by the onsite vegetation, or collection in the Airport's stormwater collection system and engineered piping network and detention pond located along the southern portion of the Airport property. Wetland area: Collection in a large, seasonal onsite pond where it generally either evaporates, infiltrates into the underlying soil, is absorbed by onsite vegetation, or is collected in the Airport's stormwater collection system and engineered piping network and detention pond located along the southern portion of the Airport property.	Evaporation, infiltration, absorption or control-discharge from the south detention pond through an outfall to Stream 0512. The latitude and longitudinal coordinates of this outfall are N47°, 29', 060" and W122°, 46', 473".
Majority of the developed portion of the Airport, including the restaurant, aviation education building, main terminal building, airplane fuel island, Jet A fuel station, Avian Aeronautics/Avian Flight Center building, south hangar area, maintenance building, runway, Circuits of the Northwest racetrack area and airplane run-off areas.	Storm drains, oil/water separators, culverts and drainage ditches to an engineered piping network and detention pond located along the southern portion of the Airport property.	Evaporation, infiltration or control-discharge from the south detention pond through an outfall to Stream 0512. The latitude and longitudinal coordinates of this outfall are N47°, 29', 060" and W122°, 46', 473".
Northwest portion of the developed area of the Airport, including the north hangar area and airplane run-off area north of the runway.	Storm drains, oil/water separators, drainage ditches and engineered detention ponds to a wetland area and a culvert located offsite in the Port of Bremerton's Olympic View Industrial Park (OVIP) west of the Airport property.	Evaporation, infiltration or combined discharge from a wetland area and from a culvert to an un-named tributary to the east fork of the Union River. The latitude and longitudinal coordinates of this combined discharge location is N47°, 30', 473" and W122°, 45', 504".

6. ONSITE CHEMICALS AND WASTES

The Airport generates, consumes, accumulates, recycles and disposes of a variety of solid, liquid and gaseous chemicals and wastes as part of operation and maintenance of their facility. These chemicals and wastes are located in various areas of the site, and are stored in several types of containers including tanks, drums and bags. A summary of these materials and their locations is provided below in Table 2. Table 2 also provides a brief narrative as to the potential (possible [primary] or minimal [secondary]) for these chemicals and wastes to be present in stormwater from the Airport. This table is cross-referenced to Figure 2.

The Airport does not use any chemicals to de-ice airplanes or the runway areas. De-icer is used in limited quantities and as necessary on sidewalks and other paved public areas. Vegetation is controlled through frequent mulch-mowing, and a once-per-year agronomic application of herbicides around only the runway/taxiway and fence lines.

There have been no reportable spills or releases from the Airport in the past 5 years. There have been no exceedances of the stormwater discharge standards.

6.1 HISTORIC AREAS OF CONTAMINATION

The Bremerton National Airport was previously ranked a "5" under Ecology's Model Toxics Control Act (MTCA) program because of soil contamination from historic activities at the former Avian Aeronautics building, at the Burn Pit/Overturned Drum area, and because of stockpiles of Class 2 and Class 3 petroleum-contaminated soil at these locations and at an area across from the Burn Pit (Figure 4).

In early 2000, all Class 2 and Class 3 soil stockpiled at the former Avian Aeronautics building and at the Burn Pit/Overturned Drum area was loaded, transported and placed as subgrade material for a return road paralleling the Circuits of the Northwest racetrack area (see Figure 4). This subgrade layer of Class 2/3 soil varies from 4 - 6 inches in depth over an approximate 22-foot width and 975-foot length of the roadway. A gravel base of approximately 4 inches was placed over the Class 2/3 soils. The return road was completed on March 28, 2000 when it was paved with 2 inches of asphalt. Overall, approximately 288 cubic yards of Class 2/3 soil was placed in this roadway area.

In October and November of 2000, all Class 2 soil previously stockpiled at the area across from the Burn Pit was loaded, transported and placed as subgrade material for 2 sections of an access road along a wildlife fence east of the runway, and as subgrade for an access road from the Circuits of the Northwest racetrack area to a Non-Directional (Navigation) beacon (see Figure 4). This subgrade layer consists of 6 inches of Class 2 soil overlain by 2 inches of crushed rock. The 2 sections of access road along the wildlife fence are both 25 feet in width, and 850 feet and 210 feet in length. The access road from the closed runway to the Navigation beacon is 25 feet wide and 450 feet in length. The access roads were completed in June, 2001. Overall, approximately 700 cubic yards of Class 2 soil was used in these roadway areas.

Figure 4. Soil re-use areas.

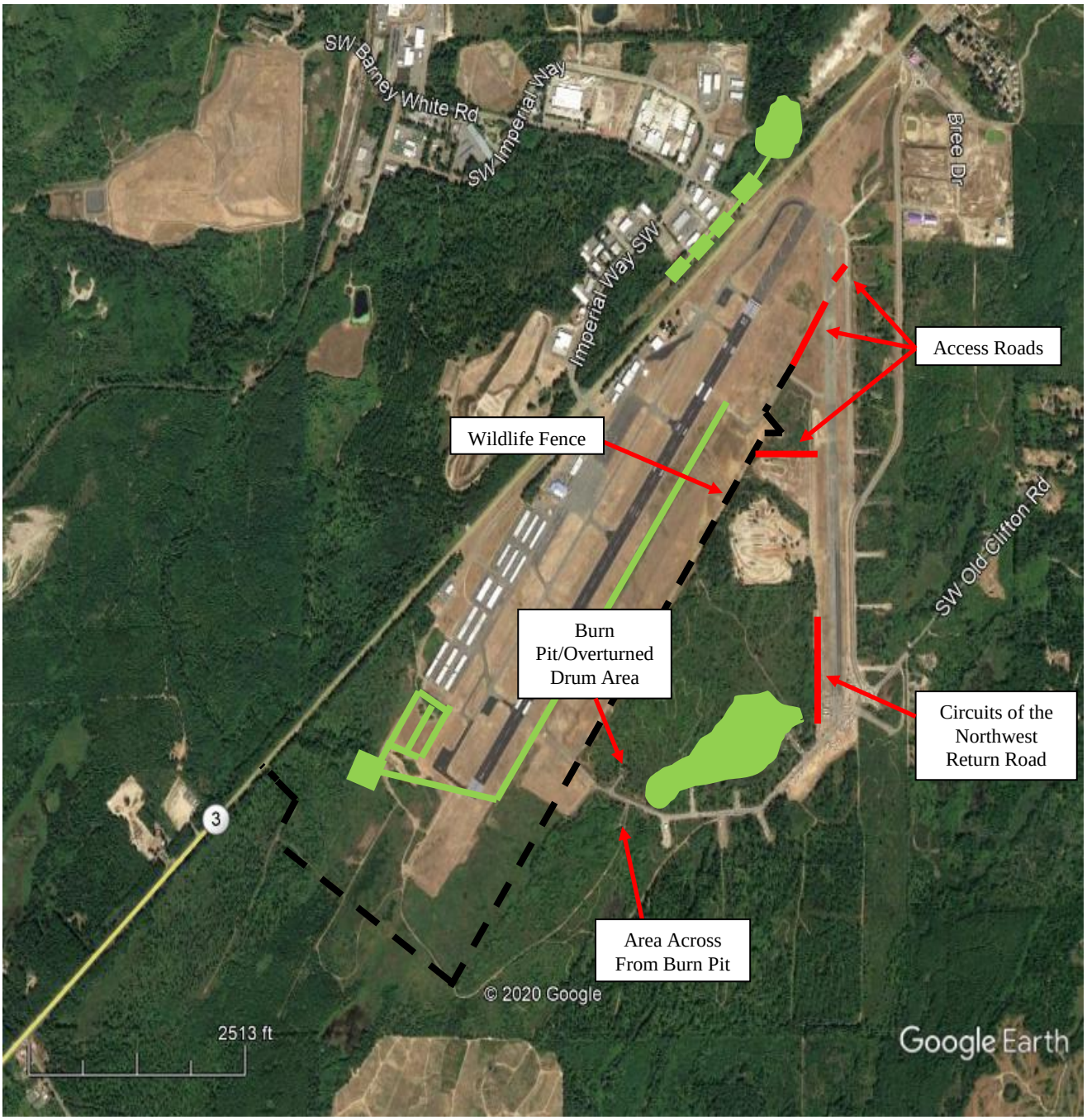

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Table 2. Chemical inventory and locations.

Location	Chemical or Waste Material	Container/Volume	Potential to be Present in Stormwater
Main Terminal Building.	Various household-type chemicals.	Minimal volumes only as needed in various small containers.	Minimal (secondary).
Maintenance Building.	New oil.	Various small containers and one (1) 55-gallon drum inside the building.	Minimal (secondary).
	Waste oil.	Two (2) 55-gallon drums inside the building.	Minimal (secondary).
	New hydraulic fluid.	One (1) 55-gallon drum inside the building.	Minimal (secondary).
	Waste hydraulic fluid.	One (1) 55-gallon drum inside the building.	Minimal (secondary).
	New antifreeze.	Various small containers as needed inside the building.	Minimal (secondary).
	Waste antifreeze.	Two (2) 55-gallon drums inside the building.	Minimal (secondary).
	Welding gases.	Minimal volumes only as needed in various cylinder tanks inside the building.	Minimal (secondary).
	Propane.	One (1) aboveground tank outside the building.	Minimal (secondary).
	De-icer	Minimal volumes only as needed in various small containers inside the building.	Minimal (secondary).
	Various household-type chemicals including biodegradable soap.	Minimal volumes only as needed in various small containers inside the building.	Minimal (secondary).
	Various products including herbicides, paint and oil.	Minimal volumes only as needed in bags (solids) and gallon-size containers (liquids) in flammable materials shed outside the building.	Minimal (secondary).

Table 2 (continued). Chemical inventory and locations.

Location	Chemical or Waste Material	Container/Volume	Potential to be Present in Stormwater
Maintenance Building (continued).	Gasoline.	Minimal volumes only as needed in small plastic gas cans in the larger plastic shed outside the building.	Minimal (secondary).
	Gasoline and diesel fuel.	Two (2) 2,000-gallon double-wall aboveground tanks outside the building.	Minimal (secondary).
Airplane Fuel Island.	Av-Gas.	Two (2) 12,000-gallon underground tanks.	Minimal (secondary).
Jet A Fuel Station.	Jet A fuel.	One (1) 10,000-gallon underground tank.	Minimal (secondary).
Various locations.	Waste fuel.	Numerous 3-gallon red-colored containers located in various areas of the airport facility for minor amounts of waste fuel generated as part of the pre-flight check of each airplane.	Minimal (secondary).
Aviation Education Center (tenant).	Various household-type chemicals.	Minimal volumes only as needed in various small containers inside the building.	Minimal (secondary).
Restaurant (currently being remodeled).	Waste oil/grease.	To be determined.	Minimal (secondary).
	Various household-type chemicals.	To be determined.	Minimal (secondary).

Table 2 (continued). Chemical inventory and locations.

Location	Chemical or Waste Material	Container/Volume	Potential to be Present in Stormwater
Avian Aeronautics/ Avian Flight Center (tenant).	New oil and hydraulic fluid.	Various small containers as needed inside the building.	Minimal (secondary).
	Waste oils and hydraulic fluid.	One approximate 250-gallon aboveground tank inside the building.	Minimal (secondary).
	Waste solvents and chemicals.	Various small containers as needed inside the building.	Minimal (secondary).
	Welding gases.	Minimal volumes only as needed in various cylinder tanks inside the building.	Minimal (secondary).
	Various household-type chemicals.	Minimal volumes only as needed in various small containers inside the building.	Minimal (secondary).
	Paint.	Various small containers including aerosol cans as needed inside the building.	Minimal (secondary).
	Av-Gas and Jet A fuel.	Two (2) mobile fuel trucks with 2,000 gallons of Av-Gas and 3,000 gallons of Jet A fuel.	Minimal (secondary).
Hangars (leased and private tenants).	Various fuels, oil and grease.	Limited volumes in various small containers inside the building.	Minimal (secondary).
Hangars (corporate tenants).	Various fuels, oil and grease.	Limited volumes in various small containers inside the building.	Minimal (secondary).
	Jet A fuel.	One (1) 10,000-gallon double-wall aboveground tank.	Minimal (secondary).

Table 2 (continued). Chemical inventory and locations.

Location	Chemical or Waste Material	Container/Volume	Potential to be Present in Stormwater
Circuits of the Northwest (tenant).	Racing fuel. Various fuels, oils and other chemicals.	Various portable containers as needed in covered and bermed area. Various portable containers stored in metal containers.	Minimal (secondary). Minimal (secondary).
Paved and Un-paved portions of the parking, runway, maintenance building, hangars, Circuits of the Northwest racetrack and Avian Aeronautics/ Avian Flight Center areas.	Oil leakage from employee, tenant and visitor vehicles, airplanes and equipment.	Minimal quantities typical of parking areas.	Possible (primary).
Subgrade material for a return road paralleling the Circuits of the Northwest racetrack area.	Class 2 and Class 3 petroleum-contaminated soil.	4 - 6 inches of Class 2 and Class 3 soil (288 cubic yards) over an approximate 22-foot width and 975-foot length of the roadway, overlain with 4 inches of gravel and 2 inches of asphalt.	Minimal (secondary).

Table 2 (continued). Chemical inventory and locations.

Location	Chemical or Waste Material	Container/Volume	Potential to be Present in Stormwater
Subgrade material for 2 sections of an access road along a wildlife fence east of the runway, and as subgrade for an access road from the Circuits of the Northwest racetrack area to a Non-Directional (Navigation) beacon.	Class 2 petroleum-contaminated soil.	6 inches of Class 2 soil (700 cubic yards) overlain by 2 inches of crushed rock. The 2 sections of access road along the wildlife fence are both 25 feet in width, and 850 feet and 210 feet in length. The access road from the closed runway to the Navigation beacon is 25 feet wide and 450 feet in length.	Minimal (secondary).
Subgrade material for a parking area along the south and west sides of the maintenance building.	Class 3 petroleum-contaminated soil.	6 inches of Class 3 soil (110 cubic yards) overlain by 2 inches of crushed rock and 2 inches of asphalt.	Minimal (secondary).

In October of 2000, all Class 3 soil previously stockpiled at the area across from the Burn Pit was loaded, transported and placed as subgrade material for a parking area along the south and west sides of the maintenance building (see Figure 4). This subgrade layer consists of 6 inches of Class 3 soil overlain by 2 inches of crushed rock. The area was paved with 2 inches of asphalt in November, 2000. Overall, approximately 110 cubic yards of Class 3 soil was used in this parking area.

Verification soil samples collected from remediated areas of the former Avian Aeronautics building, from the Burn Pit/Overturned Drum area, and from beneath the former soil stockpiles at the Burn Pit/Overturned Drum area and area across from the Burn Pit, do not contain contaminants at concentrations that are above current MTCA cleanup standards.

Based on these remediation and soil re-use activities, the Port of Bremerton has received a "No Further Action" determination from Ecology, and has been removed from Ecology's Hazardous Sites and Leaking UST Sites lists.

7. POTENTIAL PRIMARY SOURCES OF STORMWATER POLLUTION

Potential primary sources of stormwater pollution at the Airport are leakage of petroleum from various vehicles, airplanes and equipment in outside paved and un-paved areas of the property. These outside locations include the parking, runway, maintenance building, hangars, Circuits of the Northwest racetrack area and Avian Aeronautics/Avian Flight Center areas (see Table 2).

Stormwater within un-paved areas of the Circuits of the Northwest racetrack either evaporates, infiltrates into the surrounding soil or is absorbed by the onsite vegetation. Any run-off from this area and its paved portions and the paved parking, runway, maintenance building, hangar and Avian Aeronautics/Avian Flight Center areas is collected and routed through various storm drains, culverts and drainage ditches to an engineered piping network and detention pond located along the southern portion of the property (see Figure 3) (see Table 1). Water from this pond either evaporates, infiltrates into the underlying soil, or is control-discharged through an outfall to Stream 0512. The latitude and longitudinal coordinates of this outfall are N47^{o}, 29', 060" and W122 ^{o}, 46', 473". Over the next several years, the Port of Bremerton plans to install absorbent pads in all stormwater drains.

Petroleum leakage from employee and tenant vehicles is typical of most urban parking areas. Maintenance of trucks and other Airport equipment is performed on a routine schedule and as-needed basis to ensure proper and safe operation. Maintenance is performed inside the maintenance building as often as necessary and offsite as required. This building has a concrete floor with no floor drains. Airplanes are maintained by their owners in accordance with FAA regulations to ensure proper and safe operation. Airplane maintenance at the Avian Aeronautics/Avian Flight Center site is performed inside the building. This building has a concrete floor, with a drainage trench near the main hangar doors that connects to a 1,000-gallon dead-end sump. This sump contains petroleum-absorbent pads. There are no other trenches or drains inside the building. The Port of Bremerton requires the frequent removal and offsite disposal of chemicals and wastes from the Circuits of the Northwest racetrack area.

Overall, the potential significance of stormwater pollution from these primary areas of the Airport site is considered minor.

8. POTENTIAL SECONDARY SOURCES OF STORMWATER POLLUTION

Potential secondary sources of stormwater pollution at the Airport include those impacts from chemicals and wastes stored in various onsite buildings, as well as truck washing activities, the aboveground and underground fuel storage tanks and portable fuel trucks, and the soil re-use areas (see Table 2). Overall, however, there is minimal potential for these materials to directly impact stormwater.

8.1 ONSITE BUILDINGS

Most of the chemicals used and the wastes generated at the Bremerton National Airport are kept inside the various onsite buildings. These buildings are covered, and have impermeable floors with no floor drains and/or drains connected to dead-end sumps. Therefore, any spills are readily contained inside the structures, with the materials re-used as possible. Waste materials generated from spills or releases or as part of normal facility operations are properly recycled or disposed of.

There is a small paint booth associated with the Avian Aeronautics/Avian Flight Center building. This booth is used infrequently. The booth utilizes a waterfall operation to collect overspray, and is vented to the outside. Due to evaporation, water is typically added, not removed, from the paint booth. As a result, there is no wastewater generated from this activity. Water within the booth is adjusted as necessary for pH to ensure proper collection of overspray. Paints are kept only in small quantities, typically aerosol cans or small containers that can be used as needed.

Hangars leased from the Port of Bremerton are covered under a lease agreement that limits the types and amounts of chemicals that can be used or stored onsite, the types of maintenance activities the tenants can perform (minimal only), and the types of vehicles the tenants can store (airplanes only, or a vehicle if the airplane is being used). The lease also allows the Port of Bremerton to conduct quarterly inspections of the hangars to ensure compliance with the lease agreement. The hangars have concrete floors with no floor drains. Any spills in this area can be easily and readily cleaned up and re-used or thrown away.

Privately-owned hangars are located along the southern portion of the runway area. Limited quantities of chemicals (fuel, oils, grease, etc.) are typically kept inside these hangars as part of normal airplane maintenance and operation. The hangars have concrete floors with no floor drains. Any spills in this area can be easily and readily cleaned up and re-used or thrown away.

Corporate-owned hangars, located along the northern portion of the runway, also contain limited quantities of chemicals and have concrete floors with no floor drains. Any spills in this area can be easily and readily cleaned up and re-used or thrown away.

Fuel used at the Circuits of the Northwest racetrack area is kept in a covered and bermed area, while various oils and other chemicals are kept in portable containers stored in metal containers. The Port of Bremerton requires the frequent removal and offsite disposal of chemicals and wastes from the racetrack area.

8.2 TRUCK WASH

Airport vehicles are washed routinely at the maintenance building or offsite to minimize dirt on runway and access road areas. This action minimizes sediment impacts to storm drains, oil/water separators, drainage ditches and detention ponds. The storm drains, oil/water separators, drainage ditches and detention ponds are inspected routinely to ensure proper function.

Any washing performed at the maintenance building occurs within a paved area that has a storm drain connected to a 500-gallon dead-end sump. The sump contains petroleum-absorbent pads. The sump is inspected at least monthly and after large storms for unsaturated petroleum-absorbent pads, sediment build-up and available capacity. Liquid and sediment from the sump is removed and disposed of as necessary. The vehicles are washed using a standard water hose, bucket and biodegradable soap.

8.3 FUEL TANKS

There are two 2,000-gallon aboveground gasoline and diesel fuel storage tanks located at the maintenance building. These tanks are located under a covered area, and are compatible with the fuel material stored and pumped. The tanks are of double-wall construction with audible and visual alarms to prevent overfilling. The pumps have a backflow preventer to shut off flow to prevent overfilling. The fuel pumps operate only when the handle on a dispenser is pressed, and shut off automatically if the fuel hose is inadvertently detached from the dispenser. An emergency shut-off switch for the pumps is located approximately 75 feet east on the southwest exterior of the maintenance building. Fuel dispensed from the tanks is recorded manually on a fuel usage logsheet. This logsheet is reconciled approximately monthly to ensure proper accountability of all fuel bought and used, and to confirm there have been no leaks from the tanks. The tanks are inspected informally on an approximate daily basis as Airport personnel work in the general vicinity. The tanks are formally inspected on a monthly basis for structural and operational problems including rust, damage and leakage, and the presence of spill response materials including petroleum-absorbent pads and a storm drain cover. A storm drain is located adjacent to the aboveground tanks. This drain connects with a 500-gallon dead-end sump in the event of a spill or release from the tanks. The sump contains petroleum-absorbent pads. The sump is inspected at least monthly and after large storms for unsaturated petroleum-absorbent pads, sediment build-up and available capacity.

There are two 12,000-gallon underground Av-gas fuel tanks associated with the airplane fuel island. These tanks are compatible with the fuel material stored and pumped. The tanks are located within a small, locked-fence area of the Airport. Tank access manholes are covered to minimize exposure to the environment. The tanks are single-walled, with cathodic protection, a leak detection system, and audible and visual alarms to prevent overfilling. A fuel pump is connected to the tanks to fill a portable fuel truck operated by Avian Aeronautics/Avian Flight Center. The pump has a backflow preventer to shut off flow to prevent overfilling. The pump operates only when the handle on the dispenser is pressed, and shuts off automatically if the fuel hose is inadvertently detached from the dispenser. An emergency shut-off switch for the pump is located adjacent to the dispenser. Fueling operations are clearly described in a sign adjacent to the dispenser. Fuel dispensed from the tanks is automatically recorded as part of the tanks' leak detection software. A printout of this information is obtained and reconciled quarterly. The tanks are inspected monthly by Airport personnel. This inspection includes a visual check for structural and operational problems including rust, damage and leakage. The spill response drums in these areas are inspected monthly for various materials including absorbent pads and a storm drain cover. The tanks and piping are tightness-tested annually. The leak detection system and the impressed current portion of the cathodic protection system is checked and inspected at least monthly, while the galvanic portion of the system is inspected every 3 years. A storm drain is located adjacent to the underground tanks. This drain connects directly with the Airport's stormwater system including drainage ditches and detention pond. A cover is placed over this storm drain prior to fuel transfers directly to or from the tanks. Storm drains are inspected monthly to ensure proper condition and function. The Port of Bremerton plans to install absorbent pads in all stormwater drains over the next several years.

There are 2 dispensers on the remote fuel island for public fueling of airplanes. The island has a roof structure overhead to reduce exposure to the environment, and cables to electrically bond the airplanes prior to fueling. The fuel pumps have a backflow preventer to shut off flow to prevent overfilling. The pumps operate only when the handle on the dispenser is pressed, and shut off automatically if the fuel hose is inadvertently detached from the dispenser. An emergency shut-off switch for the pumps is located approximately 100 feet south of the fuel island on the wall of an adjacent airplane hangar. Fueling operations are clearly described in a sign adjacent to the dispensers. Drainage trenches are located near both public dispensers. These trenches connect with an oil/water separator before discharging offsite through the Airport's stormwater drainage system. The oil/water separator contains petroleum-absorbent pads. The oil/water separator is inspected monthly and after large storms for unsaturated petroleum-absorbent pads, sediment build-up and available capacity. All aboveground equipment associated with the airplane fuel island is inspected on a daily, weekly and monthly basis by Avian Aeronautics/Avian Flight Center personnel. These inspections vary in the depth of coverage, but generally include verification that there is no damage to or leakage from the equipment, the equipment is functioning properly, and the dispensers are properly calibrated.

There is one 10,000-gallon underground tank associated with the Jet A fuel station. This tank is compatible with the fuel material stored and pumped. The fuel station is located within a small, locked-fence and un-paved area of the Airport, with a roof structure overhead to reduce exposure to the environment. The tank is single-walled, with cathodic protection, a leak detection system, and audible and visual alarms to prevent overfilling. A fuel pump is connected to the tank to fill a portable fuel truck operated by Avian Aeronautics/Avian Flight Center. The pump has a backflow preventer to shut off flow to prevent overfilling. The pump operates only when the handle on a dispenser is pressed, and shuts off automatically if the fuel hose is inadvertently detached from the dispenser. An emergency shut-off switch for the pump is located adjacent to the dispenser. Fueling operations are clearly described in a sign adjacent to the dispenser. Fuel dispensed from the tank is automatically recorded as part of the tanks' leak detection software. A printout of this information is obtained and reconciled quarterly. The tank is inspected monthly by Airport personnel. This inspection includes a visual check for structural and operational problems including rust, damage and leakage, and the presence of spill response materials including petroleum-absorbent pads and a storm drain cover. There are no storm drains adjacent to this tank area. The tanks and piping are tightness-tested annually. The leak detection system and the impressed current portion of the cathodic protection system is checked and inspected at least monthly, while the galvanic portion of the system is inspected every 3 years. All aboveground equipment associated with the Jet A fuel station is inspected on a daily, weekly and monthly basis by Avian Aeronautics/Avian Flight Center. These inspections vary in the depth of coverage, but generally include verification that there is no damage to or leakage from the equipment, the equipment is functioning properly, and the dispenser is properly calibrated.

Avian Aeronautics/Avian Flight Center operates and maintains 2 mobile fuel trucks at the Airport. The trucks contain 2,000 gallons of Av-Gas and 3,000 gallons of Jet A fuel. The truck containers are single-wall construction and compatible with the fuel material stored and pumped, with backflow preventers that shut off flow to prevent overfilling. The trucks are inspected daily, and maintained on a routine schedule and as-needed basis to ensure proper and safe operation. Each truck carries limited spill response equipment including a fire extinguisher, absorbent pads and a storm drain cover. When not mobilized to some onsite location, the trucks are parked on paved areas adjacent to the Avian building.

Fuel transfers directly to or from the aboveground and underground tanks as well as the portable fuel trucks are performed under the constant inspection of Airport, Avian Aeronautics/Avian Flight Center and/or corporate-hangar personnel. This inspection includes a visual and/or verbal verification of the volume and type of fuel to transfer prior to pumping. Drip pans and absorbent pads are also used as necessary to capture any spills or leaks from the fuel transfer process.

There is one 10,000-gallon aboveground Jet A fuel tank associated with the corporate hangars. This tank is of double-wall construction, and is inspected monthly by Airport personnel. Copies of these inspection records are kept in the Port of Bremerton office located inside the main terminal building. Fuel transfers to or from the tank are monitored to prevent spillage, and the tank has audible and visual alarms to prevent overfilling. A drip pan is also used to capture any spills or leaks from the fuel transfer process. An emergency shut-off switch for the fuel pump is located along the west side of the tank area. A blue 55-gallon spill response drum and several fire extinguishers are located within the aboveground tank area. A storm drain is located near the tank. This drain connects to an oil/water separator before discharging offsite through the Airport's stormwater drainage system. A cover is placed over this storm drain prior to fuel transfers to or from the tank. The oil/water separator contains petroleum-absorbent pads, and is inspected monthly and after large storms for unsaturated petroleum-absorbent pads, sediment build-up and available capacity.

8.4 SOIL RE-USE AREAS

Class 2 and Class 3 soil from historic remediation of and soil stockpiling at the Avian Aeronautics and Burn Pit/Overturned Drum areas has been re-used onsite as subgrade material for various roads and parking areas. At a minimum, this soil is covered with 2 inches of gravel, and in some cases also covered with 2 inches of asphalt.

The Port of Bremerton has documented the areas of this soil placement on applicable airport maps and diagrams, including reference to the petroleum content in the material. As necessary, the Port informs employees and/or contractors planning work in these areas of the existence of the soil. The Port inspects and maintains these re-use areas as necessary to minimize the exposure of the subgrade soil to stormwater and erosion.

9. BEST MANAGEMENT PRACTICES

The following Best Management Practices (BMPs) are identified to reduce, eliminate and prevent as possible the pollution of stormwater at the Bremerton National Airport.

9.1 OPERATIONAL SOURCE CONTROL BMPs

9.1.1 SWPPP Team

The following employees are identified as members of the SWPPP team and are holders of the plan for (Table 3). Copies of the plan are located onsite in the Port of Bremerton office inside the main terminal building, and in the maintenance building.

Table 3. SWPPP team members.

Name	Telephone
Warren Henrickson	Office (360) 813-0828 Cell (206) 999-3111
Ed Draper	Office (360) 813-0819 Cell (360) 265-3895
Mike Lozier	Office (360) 674-2381, extension 0 Maintenance building (360) 674-0283
Jim Garcia	Office (360) 674-2381, extension 0 Maintenance building (360) 674-0283

9.1.1.1 Responsibilities

Warren Henrickson has overall responsibility for implementation of and adherence to the SWPPP. He is responsible for modifying the plan based on inspections of the area or changes to the facility, waste materials or other elements as identified in this plan. He is also responsible for assuring updated pages or copies of the plan are distributed to other plan holders.

Other members of the SWPPP team are responsible for notifying Steven of changes to the facility or other items that may affect this plan.

All team members have read and are familiar with this SWPPP.

9.1.2 Good Housekeeping

The Bremerton National Airport is maintained in a clean and orderly manner. All SWPPP team members and other staff are responsible for housekeeping activities at the site.

Roads are maintained as necessary to ensure adequate accessibility and proper surface drainage. Debris is swept from the roadway surfaces approximately monthly to remove foreign objects (nails, metal, etc.). The roadways are vacuumed quarterly in accordance with the permit. Debris and particulates from the sweeping and vacuuming are recycled as possible or properly disposed of.

Airport vehicles are washed routinely at the maintenance building or offsite to minimize dirt on runway and access road areas, and to ensure minimal impacts to storm drains, oil/water separators, drainage ditches and detention ponds. The vehicles are inspected monthly.

Any washing performed at the maintenance building occurs within a paved area that has a storm drain connected to a 500-gallon dead-end sump. The sump contains petroleum-absorbent pads. The sump is inspected at least monthly and after large storms for unsaturated petroleum-absorbent pads, sediment build-up and available capacity. Liquid and sediment from the sump is removed and disposed of as necessary. The vehicles are washed using a standard water hose, bucket and biodegradable soap.

Storm drains, oil/water separators, drainage ditches and detention ponds are inspected routinely to ensure proper function and to minimize erosion and sediment build-up.

The Port of Bremerton requires the frequent removal and offsite disposal of chemicals and wastes from the Circuits of the Northwest racetrack area.

9.1.3 Preventative Maintenance

The Airport's operations, chemicals used and wastes generated have not changed and are not anticipated to change over time.

Maintenance of vehicles, airplanes and equipment is performed on a routine schedule and as-needed basis to ensure proper and safe operation. Maintenance is performed inside the maintenance and Avian Aeronautics/Avian Flight Center buildings as possible and offsite as required.

9.1.4 Spill Prevention Control and Countermeasure Plan

From the Airport's spill prevention control and countermeasure (SPCC) plan, spill kit materials including fire extinguishers, personal protective equipment and storm drain covers are located at the aboveground tanks adjacent to the maintenance building and corporate hangars, at the underground tank area associated with the airplane fuel island and Jet A fuel station, and at the Avian Aeronautics/Avian Flight Center building (see Figure 2). Similar equipment is also kept in the portable fuel trucks. As necessary, emergency equipment can be deployed to any onsite location in less than 10 minutes. Airport spill response kit materials are inspected monthly and replaced or updated as necessary by the Emergency Coordinators. Spill response materials within the Avian building and portable fuel trucks are replaced or updated as necessary by Avian personnel. Spill response materials associated with the aboveground tank at the corporate hangars are replaced or updated as necessary by appropriate corporate personnel.

A spill response trailer is located at the Port Orchard Marina approximately 20 minutes from the Airport. This trailer contains various materials including absorbent booms and pads, and can be mobilized to most onsite locations.

The Port of Bremerton and Avian Aeronautics/Avian Flight Center have contact with offsite spill response contractors to respond in the event of a major spill or release. The Airport is served by the South Kitsap Fire District located in Gorst, approximately 3 miles away.

Copies of the SPCC plan can be found onsite in the Port of Bremerton office located inside the main terminal building, the maintenance building and the Avian Aeronautics/Avian Flight Center office (see Figure 2). A summary of the SPCC plan can be found inside the spill response drums at the locations noted above.

As necessary, the Port of Bremerton requires its tenants to prepare, submit and regularly update an SPCC plan that is specific to their operations. Copies of these plans are kept in the Port of Bremerton office inside the main terminal building, and in the maintenance building.

9.1.4.1 Spill Response Summary

Personal protective equipment such as gloves and safety glasses should be worn whenever responding to a chemical spill. Appropriate protective equipment for each material stored onsite is discussed in the applicable Material Safety Data Sheets (MSDSs). Measures to combat other hazards associated with the spill, such as exposure or a fire, are also discussed in the MSDSs. Copies of MSDSs for the chemicals used by the Airport are available on-line, and can be accessed via computer located in the Port of Bremerton office inside the main terminal building, and in the maintenance building. Copies of MSDSs for the chemicals used by the tenants are available on-line and/or kept inside the tenant's building.

The following plan of action should be implemented whenever a spill is detected.

1. The first person at any spill site must report the spill to one of the following Emergency Coordinators:

   - Warren Henrickson Office (360) 813-0828
     Cell (206) 999-3111

   - Ed Draper Office (360) 813-0819
     Cell (360) 265-3895

   If verbal communication is not appropriate, contact the Emergency Coordinators using a cell phone or via telephone from various onsite locations including the main terminal building, maintenance building, Avian Aeronautics/Avian Flight Center office or the restaurant.

2. Clear the area of unnecessary personnel.

3. Wear appropriate protective equipment as described in the applicable MSDSs. Copies of MSDSs for the chemicals used by the Airport are available on-line, and can be accessed via computer located in the Port of Bremerton office inside the main terminal building, and in the maintenance building. Copies of MSDSs for the chemicals used by the tenants are available on-line and/or kept inside the tenant's building.

4. Determine the source of the spill and, if possible, stop the source immediately. Use other available personnel as needed.

5. Prevent the spill from reaching the storm drains by using any or all of the following measures:

   - Use spill kit materials in the yellow drums located at the aboveground tanks adjacent to the maintenance building and underground tank areas associated with the airplane fuel island and Jet A fuel station, the blue drum located at the aboveground tank at the corporate hangar area, or spill response materials in Avian's portable fuel trucks. Other materials including absorbent booms and pads are located in a spill response trailer located at the Port Orchard Marina approximately 20 minutes from the Airport.

   - Use storm drain covers located in the spill kits or Avian's portable fuel trucks to prevent spilled material from entering the drains.

   - Use soil from the facility to construct dams and containment areas around the spill.

   - Direct the spill toward paved areas of the property.

6. Begin logging the following information:

    - Date and time the spill was first observed.
    - Time of arrival at spill site.
    - Type of material spilled.
    - Volume of spill.
    - Cause of spill.
    - Weather conditions.
    - Type of action taken to contain and absorb the spill.
    - Personnel on scene and assisting with containment and cleanup.
    - Fire or health hazard, if any.
    - Log all telephone calls including person(s) talked to, time and date.

7. Inspect the stormwater system and outfall locations to ensure no spilled materials have impacted these areas (no odors, sheen, unusual materials, etc.).

8. Replace any materials used from the spill kits.

9. Spills of solid materials should be swept up and re-used if possible. If offsite disposal is necessary, place the material in a suitable container such as a 55-gallon drum and follow applicable federal, state and local regulations for waste storage and disposal. Keep records of all disposal activities and associated documentation.

10. Spills of liquid materials should be collected in 55-gallon drums or other suitable containers. If re-use is not possible and offsite disposal is necessary, follow applicable federal, state and local waste storage and disposal regulations. Keep records of all disposal activities and associated documentation.

11. For waste materials used to contain and collect spills that must be disposed of offsite, place the waste in a suitable container such as a 55-gallon drum and follow applicable federal, state and local waste storage and disposal regulations. Keep records of all disposal activities and associated documentation.

9.1.5 Employee Training

All team members identified in Section 9.1.1 have read and are familiar with this SWPPP. During the orientation of each new employee and during monthly safety meetings thereafter, training is provided as to the general types and locations of chemical and physical hazards at the site. Employees are made aware of the existence and location of MSDSs for all chemicals used at the site, the existence of this SWPPP plan and the SPCC plan, and the importance of preventing, controlling and containing spills and minimizing stormwater pollution. Employees also attend annual Hazardous Waste Operations (HAZWOPER) training. Attendance and training records for each employee are kept on file in the Port of Bremerton office located inside the main terminal building.

9.1.6 Inspections and Recordkeeping

In accordance with Ecology's stormwater pollution control program, inspection of the Airport facility is conducted monthly, including at least one inspection during a period of dry weather. All inspections are conducted by personnel identified in Section 9.1.1 of this SWPPP or other designated, qualified personnel. Inspection records will be maintained by the facility for at least 5 years. Inspections are documented using the form provided in Appendix A.

The purpose of the inspections is to verify the descriptions of potential pollutant sources is accurate, the site map reflects current conditions, and the controls and BMPs to reduce potential pollutants in stormwater are being implemented and are adequate. The inspections also include observations for site damage, stressed vegetation, unusual stains, and the presence of unpermitted non-stormwater discharges. Furthermore, the stormwater discharge locations are inspected for floating materials, suspended solids, petroleum sheen, oil and grease, discolorations, turbidity, odor or other characteristics that could indicate the pollution of stormwater.

In addition to the monthly inspections discussed above, the Airport facility is patrolled twice per day and checked multiple times per day.

9.1.6.1 Stormwater Monitoring

The majority of stormwater from the Airport is conveyed to an engineered piping network and detention pond located along the southern portion of the property (see Figure 3) (see Table 1). Water from this pond either evaporates, infiltrates into the underlying soil, or is control-discharged through an outfall to Stream 0512. The latitude and longitudinal coordinates of this outfall are N47^{o}, 29', 060" and W122 ^{o}, 46', 473".

Stormwater primarily from the northwest portion of the developed area of the Airport is conveyed to a wetland area and a culvert located offsite in the Port of Bremerton's Olympic View Industrial Park (OVIP) west of the Airport (see Figure 3) (see Table 1). Water from this wetland area and culvert are combine-discharged to an un-named tributary to the east fork of the Union River. The latitude and longitudinal coordinates of this combined discharge location is N47^{o}, 30', 473" and W122 ^{o}, 45', 504".

There are no industrial activities at these stormwater discharge locations. There are no exposed materials in these areas that would likely contribute to pollution of the stormwater.

Sampling and analysis of stormwater discharges from these 2 discharge locations is conducted and documented in accordance with the permit. All sampling is conducted by personnel identified in Section 9.1.1 of this SWPPP or other designated, qualified personnel. Copies of the sampling events/data/reports shall be maintained in the Port of Bremerton office located inside the main terminal building for a minimum of 5 years.

Stormwater samples (grab) from the Airport's 2 discharge locations are collected using laboratory-supplied containers. Chain-of-custody procedures and documentation follow all samples collected and submitted for analysis. Monitoring reports are submitted in accordance with the schedules specified in the permit.

Sampling and analysis of stormwater discharges to groundwater (through un-paved areas of the Airport) is not required under Ecology's stormwater pollution control program.

9.2 STRUCTURAL SOURCE CONTROL BMPs

There are various structural source control BMPs in place at the Airport to eliminate or minimize the exposure of stormwater to pollutants.

Most of the chemicals used and the wastes generated at the Bremerton National Airport are kept inside the various onsite buildings. Leased hangars have lease agreements and contractual language to limit potential environmental impacts from use of these areas. The buildings are covered, and have impermeable floors with no floor drains. Chemicals are limited in volume and used only as needed.

Maintenance of trucks, airplanes and equipment is performed on a routine schedule and as-needed basis to ensure proper and safe operation. Maintenance is performed inside the maintenance and Avian buildings as often as necessary and offsite as required. These buildings have concrete floors with no floor drains.

Fuel storage tanks and the portable fuel trucks are compatible with the fuel material stored and pumped. These containers are inspected at least monthly, and have various leak detection, flow restriction equipment and/or operational procedures to minimize releases.

The stormwater collection system at the Airport consists of various storm drains, oil/water separators, drainage ditches, culverts and detention ponds. These systems are inspected routinely to ensure proper function and to minimize erosion and sediment build-up. The Port of Bremerton plans to install absorbent pads in all stormwater drains over the next several years.

9.3 TREATMENT BMPs

There are no direct treatment BMPs in place at the Airport facility. Several oil/water separators onsite contain petroleum-absorbent pads that are inspected monthly and after large storms and changed as necessary. As noted above, the Port of Bremerton plans to install absorbent pads in all stormwater drains over the next several years.

Stormwater collected from the Airport is conveyed through various drains, ditches and culverts. Through this conveyance, potential chemical and sediment pollutants are minimized prior to discharging offsite.

9.4 STORMWATER PEAK RUN-OFF RATE AND VOLUME CONTROL BMPs

Stormwater run-off rates from the Airport are controlled by grading, and engineered drains and ditches including energy dissipating devices such as surge blocks and rip-rap. Discharge rates from the detention pond located along the southern portion of the Airport are controlled via an engineered piping network and engineering of the pond.

9.5 EROSION AND SEDIMENT CONTROL BMPs

The potential for soil erosion to contaminate stormwater is considered minimal at the Airport site. The majority of the Airport consists of gradual slopes, with all areas covered with buildings, pavement or vegetation.

Any construction activities at the Airport are required to have erosion control measures including minimizing the amount of exposed soil, restricting excavation slopes, routing stormwater through straw bails and filter fences, and covering drains with filter fabric.

Sediment present in the stormwater can be reduced or eliminated through the Airport's conveyance system including drains, ditches and detention ponds.

Erosion, sediment and flow control measures at the Airport are inspected at least monthly and maintained on a scheduled and as-needed basis.

9.6 OTHER BMPs

There are no innovative or other BMPs deemed necessary for the Airport site.

9.7 IMPLEMENTATION SCHEDULE

The schedule for implementation of BMPs at the Bremerton National Airport is provided below in Table 4.

10. REFERENCES

Stormwater Management Manual for Western Washington. Washington State Department of Ecology. Publication number 19-10-021. July, 2019.

Guidance Manual for Preparing/Updating a Stormwater Pollution Prevention Plan for Industrial Activities. Washington State Department of Ecology. Publication number 04-10-030. April, 2004.

Industrial Stormwater General Permit. Issuance date November 20, 2019. Effective date January 1, 2020. Expiration date December 31, 2024.

Table 4. BMP implementation schedule.

Best Management Practice	Implementation Schedule
Operational BMPs:	
SWPPP plan.	Maintain copies in the Port of Bremerton office inside the main terminal building, and in the maintenance building. Update as necessary based on inspections or changes in design, construction, operation or maintenance of BMP or facility.
SPCC plan.	Maintain copies in the Port of Bremerton office inside the main terminal building, maintenance building, and the Avian Aeronautics/Avian Flight Center office. Maintain summaries (see Appendix A) inside the spill response drums located at the aboveground tanks adjacent to the maintenance building and corporate hangars, at the underground tank area associated with the airplane fuel island and Jet A fuel station, and at the Avian Aeronautics/Avian Flight Center building. As necessary, require tenants to prepare, submit and regularly update an SPCC plan that is specific to their operations. Maintain copies of these plans in the Port of Bremerton office inside the main terminal building, and in the maintenance building.

Table 4 (continued). BMP implementation schedule.

Best Management Practice	Implementation Schedule
Operational BMPs (continued):	
Spill response materials.	Keep spill response drums at the aboveground tanks adjacent to the maintenance building and corporate hangar area, at the underground tank area associated with the airplane fuel island and Jet A fuel station, and at the Avian Aeronautics/Avian Flight Center building. Avian Aeronautics/Avian Flight Center keeps similar equipment in the portable fuel trucks. Keep spill response trailer and equipment at the Port Orchard Marina. Maintain contacts and communication as necessary.
Spill response contractors and South Kitsap Fire District.	Perform as needed (roads, vehicles, equipment, washing trucks, removal and disposal of chemicals and wastes from the Circuits of the Northwest racetrack area).
Good housekeeping.	Approximate monthly sweeping of paved surfaces. Quarterly vacuuming of paved surfaces. 5 – 8 years. Install absorbent pads in all stormwater drains. Clean oil/water separators by October 1 each year and after large storms as necessary.
Preventative maintenance.	Perform as required and as needed (roads, vehicles, airplanes and equipment).
Employee training.	Initial orientation and monthly thereafter. Annual HAZWOPER training.
Storm Drains and Catch Basins	Stencil warning signs at all stormwater catch basins and drains with "No Dumping – Drains To Stream" or similar.
Inspections.	Airport: Monthly. Patrol twice per day and check multiple times per day. Oil/water separators: Monthly and after large storms. Dead-end sumps: At least monthly and after large storms.

Table 4 (continued). BMP implementation schedule.

Best Management Practice	Implementation Schedule
Operational BMPs (continued):	
Inspections (continued).	Storm drains, ditches, detention ponds, wetlands, culverts, outfalls: Monthly. Spill response kits: Airport kits inspected monthly and replaced or updated as necessary by the Emergency Coordinators. Spill response materials within the Avian Aeronautics/Avian Flight Center building and portable fuel trucks are replaced or updated as necessary by Avian personnel. Spill response materials associated with the aboveground tank at the corporate hangars are replaced or updated as necessary by appropriate corporate personnel. Aboveground tanks: • Periodic informal inspections. • Monthly formal inspections. • Monthly reconciliation of fuel dispensed. Underground tanks: • Monthly formal inspections. • Impressed current monthly. • Leak detection monthly. • Cathodic protection every 3 years. • Tightness test annually. • Quarterly reconciliation of fuel dispensed. Portable fuel trucks: Daily by Avian personnel. Transfers directly to/from tanks and trucks: Constantly. Soil re-use areas: Monthly and as necessary. Leased hangars: Quarterly.
Stormwater monitoring.	In accordance with the permit from the 2 discharge locations.

Table 4 (continued). BMP implementation schedule.

Best Management Practice	Implementation Schedule
Structural Source Control BMPs:	
Keep chemicals and wastes inside buildings and containment areas.	As possible.
Limit chemical usage and waste generation.	As possible.
Maintain trucks, airplanes and equipment.	As required and as needed.
Install absorbent pads in storm drains.	5 – 8 years.
Treatment BMPs:	
None.	Not applicable.
Stormwater Peak Run-Off Rate and Volume Control BMPs:	
Grading, engineered drains, engineered ditches including energy dissipating surge blocks and rip-rap, engineered piping network and detention ponds.	Perform and maintain as necessary.
Erosion and Sediment Control BMPs:	
Site coverage with buildings, pavement and vegetation.	Implement and maintain as necessary.
Minimize amount of exposed soil, restrict excavation slopes, route stormwater through straw bails and filter fences, and cover drains with filter fabric.	Require as necessary during construction activities.

Storm Water Management for Industrial Activities. United States Environmental Protection Agency. EPA 833-R-92-002. October, 1992.

Title 40, Code of Federal Regulations, Part 122. EPA Administered Permit Programs: The National Pollutant Discharge Elimination System. Current as of February 21, 2020.

Title 40, Code of Federal Regulations, Part 125. Criteria and Standards for the National Pollutant Discharge Elimination System. February 21, 2020.

Chapter 15.04, Bremerton Municipal Code.

APPENDIX A

MONTHLY DRY AND WET SEASON INSPECTION CHECKLIST

PORT OF BREMERTON, BREMERTON NATIONAL AIRPORT
MONTHLY INSPECTION CHECKLIST

Inspection Criteria	Field Observations	Field Comments	Modifications to SWPPP Needed? (see Section 3)	Notification of Ecology Needed? Timeframe?
Are the descriptions of the potential primary and secondary pollutant sources provided in Sections 7 and 8 adequate? If not, describe. **Potential Primary Sources (Section 7):** • Leakage from vehicles, airplanes and equipment. • General unpaved areas of the Airport. • Run-off from paved parking areas. • Run-off from paved runway areas. • Run-off from paved areas outside buildings. • General unpaved areas of Circuits of the Northwest racetrack. • Run-off from Circuits of the Northwest racetrack area. **Potential Secondary Sources (Section 8):** • Chemicals and wastes inside buildings. • Paint booth at Avian building. • Owned and leased hangars. • Vehicle wash operations. • Aboveground tanks. • Underground tanks. • Airplane fuel island. • Portable fuel trucks. • Fuel transfers. • Soil re-use areas. • Fuel and chemicals at Circuits of the Northwest racetrack area.	Yes/No_____ Yes/No_____	_____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____	Yes/No_____ Yes/No_____	Yes/No_____ Yes/No_____

PORT OF BREMERTON, BREMERTON NATIONAL AIRPORT
MONTHLY INSPECTION CHECKLIST (continued)

Inspection Criteria	Field Observations	Field Comments	Modifications to SWPPP Needed? (see Section 3)	Notification of Ecology Needed? Timeframe?
Are there other pollutant sources observed that are not identified in Sections 7 or 8? If yes, describe and provide location(s).	Yes/No_____	_____	Yes/No_____	Yes/No_____
Are the stormwater flow descriptions and the site map depicting flow directions accurate? If not, describe. • Undeveloped forest and wetland areas. • Majority of developed area of Airport. • Northwest portion of developed area.	Yes/No_____	_____ _____ _____	Yes/No_____	Yes/No_____
Are the operational BMPs to reduce pollutants in stormwater discharges presented in Section 9.1 being implemented and are they adequate? If not, describe. **Operational BMPs (Section 9.1):** • All information given to Monroe Whitman. • Locations of SWPPP accurate. • Updates to SWPPP accurate. • Locations of SPCC plan accurate. • Tenant SPCC plans available. • Locations of spill response kits accurate. • Spill response trailer at Port Orchard Marina. • Spill response materials being maintained. • Contact with spill response contractors being maintained.	Yes/No_____	_____ _____ _____ _____ _____ _____	Yes/No_____	Yes/No_____

PORT OF BREMERTON, BREMERTON NATIONAL AIRPORT
MONTHLY INSPECTION CHECKLIST (continued)

Inspection Criteria	Field Observations	Field Comments	Modifications to SWPPP Needed? (see Section 3)	Notification of Ecology Needed? Timeframe?
Are the operational BMPs to reduce pollutants in stormwater discharges presented in Section 9.1 being implemented and are they adequate? If not, describe. (continued). **Operational BMPs (Section 9.1) (continued):** • General good housekeeping. • Paved surfaces maintained, swept and vacuumed. • Vehicles washed offsite or at maintenance building by dead-end sump. • Preventative maintenance inside buildings. • Employee training. • Fuel and chemicals at Circuits of the Northwest racetrack in contained areas and removed frequently. • Airport site patrolled and checked. • Monthly site inspections. • Oil/water separators. • Unsaturated absorbent pads. • Dead-end sumps. • Storm drains, ditches and detention ponds. • Wetlands, culverts and outfalls. • Aboveground tanks. • Underground tanks. • Portable fuel trucks. • Transfers to/from tanks and trucks. • Soil re-use areas. • Hangars. • Stormwater discharges being sampled.	Yes/No_____	_____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____	Yes/No_____	Yes/No_____

PORT OF BREMERTON, BREMERTON NATIONAL AIRPORT
MONTHLY INSPECTION CHECKLIST (continued)

Inspection Criteria	Field Observations	Field Comments	Modifications to SWPPP Needed? (see Section 3)	Notification of Ecology Needed? Timeframe?
Are the source control BMPs to reduce pollutants in stormwater discharges presented in Section 9.2 being implemented and are they adequate? If not, describe. **Structural Source Control BMPs (Section 9.2):** • Chemicals and wastes inside buildings. • Limited chemical use and waste generation. • Maintain vehicles, airplanes and equipment. • Cathodic protection on underground tanks. • Leak detection on underground tanks. • Enclosed containment area for chemicals associated with the Circuits of the Northwest racetrack area. • Avian trucks parked on paved areas. • Unsaturated absorbent pads.	Yes/No_____	_____ _____ _____ _____ _____	Yes/No_____	Yes/No_____
Are the stormwater peak run-off rate and volume control BMPs to reduce pollutants in stormwater discharges presented in Section 9.4 being implemented and are they adequate? If not, describe. **Stormwater Peak Run-Off Rate and Volume Control BMPs (Section 9.4):** • Site grading. • Engineered drains. • Engineered ditches including surge blocks and rip-rap. • Engineered piping network. • Engineered detention ponds.	Yes/No_____	_____ _____ _____ _____	Yes/No_____	Yes/No_____

PORT OF BREMERTON, BREMERTON NATIONAL AIRPORT
MONTHLY INSPECTION CHECKLIST (continued)

Inspection Criteria	Field Observations	Field Comments	Modifications to SWPPP Needed? (see Section 3)	Notification of Ecology Needed? Timeframe?
Are the erosion and sediment control BMPs to reduce pollutants in stormwater discharges as discussed in Section 9.5 being implemented and are they adequate? If not, describe. **Erosion and Sediment Control BMPs (Section 9.5):** • Site coverage with buildings, pavement and vegetation. • Minimize amount of exposed soil, restrict excavation slopes, route stormwater through straw bales and filter fences, and cover drains with filter fabric.	Yes/No_____	_____ _____ _____ _____ _____	Yes/No_____	Yes/No_____
Any presence of non-stormwater discharges such as process water? If yes, describe and provide location(s).	Yes/No_____	_____	Yes/No_____	Yes/No_____
Any observation of floating material, suspended solids, petroleum sheen, stressed vegetation, turbidity, discoloration, odor or other characteristics in the stormwater to indicate potential pollution? If yes, describe and provide location(s) and source(s).	Yes/No_____	_____ _____	Yes/No_____	Yes/No_____
Other observations not discussed or not adequate in the SWPPP? If yes, describe.	Yes/No_____	_____ _____	Yes/No_____	Yes/No_____

PORT OF BREMERTON, BREMERTON NATIONAL AIRPORT
MONTHLY INSPECTION CHECKLIST (continued)

I certify that this inspection checklist for the Bremerton National Airport facility is true, accurate and complete to the best of my knowledge and belief.

I further state that in my judgment as the inspector, this facility _____ is _____ is not in compliance with the terms and conditions of its SWPPP and its Industrial Stormwater General Permit.

Inspector: Name	Date:
Inspector: Signature	Time:
Supervisor: Signature	Weather:

This inspection record is to be kept on file by the Port of Bremerton for a minimum of 5 years.