Port of Portland Terminal 2

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Portland, OR 97208-3529

Stormwater Pollution Control Plan Port of Portland Terminal 2 Facility

January 30, 2017

By:
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(Revised December 21, 2017)

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Title Page

STORMWATER POLLUTION CONTROL PLAN (SWPCP)
For

Site Name: Port of Portland Terminal 2
Site Operator: Port of Portland

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Plan Date:
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Acronyms

AST	aboveground storage tank
BMP	best management practice
CEG	certified engineering geologist
CERCLA	Comprehensive Environmental Recovery, Cleanup, and Liability Act
CFR	Code of Federal Regulations
COD	chemical oxygen demand
CWA	Clean Water Act
DEQ	Oregon Department of Environmental Quality
DMR	Discharge Monitoring Report
DO	dissolved oxygen
EPA	U.S. Environmental Protection Agency
EPCRA	Emergency Planning Community Right to Know Act
mg/l	milligrams per liter
ml	milliliter
MSDS	Material Data Safety Sheet
NPDES	National Pollutant Discharge Elimination System
OAR	Oregon Administrative Rule
PE	professional engineer
S.U.	Standard Unit
SARA	Superfund Amendments and Reauthorization Act
SIC	standard industrial classification
SPCC	Spill Prevention, Control, and Countermeasure Plan
SWPCP	Stormwater Pollution Control Plan
TMDL	total maximum daily load

Standard Industrial Classification (SIC) Codes

The Port of Portland Terminal 2 is a marine bulk cargo facility with a primary function of bulk materials cargo between ships, trains, and trucks. The primary SIC code is ***4491 - Marine Cargo Handling***. Because of rail and truck operations, secondary SIC codes include 4013 Railroad Switching and Terminal Establishments, and 4225 General Warehousing and Storage A contractor operates a stevedoring operation at the site that includes a small maintenance facility for rolling stock and equipment used to move cargo. This secondary activity's SIC code is 4231 Terminal and Joint Terminal Maintenance Facilities for Motor Freight Transportation. Based on the primary activity at the facility, this Terminal 2 is subject to Sector Q - Water Transportation sector-specific requirements of the 1200-Z permit.

Certification

The signer below is duly authorized to sign all reports, updates and revision requirements of the National Pollutant Discharge Elimination System (NPDES) Stormwater Discharge Permit. In signing the Stormwater Pollution Control Plan (SWPCP), the authorized facility representative is attesting that the information contained in the plan is true and accurate. The authorized person's signature is required for all facilities covered by General Stormwater Permits, regardless of the number of employees or acreage of disturbance on the site.

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 gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

FW _____ 12-21-17

Signature Date

Vince Granato

Chief Operating Officer

Quick Reference Guide

This Stormwater Pollution Control Plan contains a significant amount of detailed information necessary to meet the requirements of the National Pollutant Discharge Elimination System (NPDES) 1200-Z general stormwater permit. This section contains a summary of action items that the users of the plan will perform on a recurring basis. This summary is intended to be a quick reference for the user.

Summary **Page**

Action Schedule

Frequency	Action
Daily	• Note spills, leaks, and other possible pollutants to stormwater system. • Notify plant supervisor of observations.
Monthly	• Inspect catch basins and oil/water separators (clean, if necessary). • Inspect areas of potential spills. • If storm event produces runoff, visually assess discharge for floating solids, and/or oil or grease sheen
Dry Periods	• Clean up debris, old equipment, and chemicals exposed to rainfall. • Sweep impervious areas regularly as needed. • Conduct non-stormwater investigation (look for flows).
Wet Periods	The monitoring period is from July 1 to June 30th. Grab samples must be representative of the discharge and must be taken at least 14 calendar days apart. Two samples must be collected on or before December 31, and two samples must be collected on or after January 1.
Annual	• Conduct employee training. • Conduct site survey. • Review Stormwater Pollution Control Plan.
Reporting to DEQ	• Tabulate data and submit to DEQ regional office by July 31st of each year. If a stormwater sampling result exceeds any of the benchmark values, the permit registrant must, within 30 calendar days of receiving the sampling results, investigate the cause of the elevated pollutant levels, review the SWPCP, and prepare an Action Plan to address sources.
Benchmark Compliance Evaluation	By June 30th of the 2nd year of permit coverage, the permit registrant must evaluate the last four samples collected from each outfall monitored and determine whether the geometric mean of the samples exceeds benchmark(s) unless the facility has achieved a permit wavier for that parameter. The permit registrant must report this information in a Discharge Monitoring Report (DMR) and submit the DMR to DEQ by July 31st of the 2nd year of permit coverage.

Stormwater Sampling Procedures

Refer to the Port of Portland Terminal 2 Stormwater Sampling Plan (copy held at Port Offices) for a description of sampling requirements.

Monthly Visual Observations

The Port of Portland or contractors must conduct inspections on a monthly basis when the facility is in operation of areas where industrial materials or activities are exposed to stormwater and areas where stormwater control measures, structures, catch basins, and treatment facilities are located.

Inspect and mitigate the facility for the following:

1. Industrial materials, residue, or trash that may have or could come into contact with stormwater.

2. Leaks or spills from industrial equipment, drums, tanks, and other containers.

3. Offsite tracking of industrial or waste materials, or sediment where vehicles enter or exit the site, excluding employee only entrances and exits.

4. Tracking or blowing of raw, final, or waste materials.

5. Evidence of, or the potential for, pollutants entering the drainage system.

6. Evidence of pollutants discharging to receiving waters at all outfall(s), unless outfalls are representative as described in Schedule B.2.c.ii, and the condition of and around the outfall.

7. Presence of floating solids (associated with industrial activity), foam, visible oil sheen, discoloration of the stormwater discharge at all outfall(s), unless outfalls are representative as described in Schedule B.2.c.ii. Conduct visual observations when stormwater discharge is occurring during regular business hours and safe conditions, and

8. Properly functioning stormwater control measures.

Record monthly inspections and any corrective actions on Form B.

Section 1: Introduction

This Stormwater Pollution Control Plan (SWPCP) was updated to reflect changes in material storage and the requirements of the new National Pollutant Discharge Elimination System (NPDES) General Permit 1200-Z industrial stormwater permit (new 1200-Z permit), effective 1 July 2012.

1.1 General

The Environmental Protection Agency (EPA) issued the industrial stormwater final rule on 16 November 1990. The final rule requires NPDES permits for the discharge of stormwater associated with industrial activities. Operation of an equipment maintenance facility is considered an industrial activity under the final rule.

Oregon has the authority to issue general NPDES permits. Oregon's Department of Environmental Quality (DEQ) has made general permits available for the discharge of stormwater from industrial facilities. The Port of Portland's Terminal 2 facility stormwater discharge is covered under the new 1200-Z permit. This SWPCP covers the requirements of the new 1200-Z permit, which is in effect from 1 July 2012 through 30 June 2017. Table I on page 3 of the new 1200-Z permit, in Appendix A, shows the sources covered by the new permit.

This SWPCP was written to address industrial activities and best management practice requirements applicable to Port, tenants, operators, contractors and similar entities at Terminal 2. Each entity performing an industrial activity is responsible for stormwater compliance in portions of the site they control. If industrial activities are planned that are not addressed in this SWPCP appropriate changes will be made to the SWPCP consistent with the timelines identified in the 1200-Z permit or in a future permit renewal application to DEQ.

1.2 Purpose of Plan

For the Port of Portland Terminal 2 facility, the primary emphasis of the NPDES stormwater regulations is pollution prevention. This SWPCP will accomplish pollution prevention by meeting three main objectives:

1. Help identify the sources of pollution that affect the quality of the Port of Portland Terminal 2 facility's stormwater discharges

2. Describe the implementation of practices to reduce pollutants in stormwater discharges from the Port of Portland Terminal 2 facility

3. Address compliance with the terms and conditions of the new 1200-Z permit issued by DEQ through a stormwater monitoring plan.

This plan identifies potential sources of pollution that may affect the quality of stormwater discharges associated with the Port of Portland Terminal 2 facility, evaluates the potential for stormwater contamination from these sources, and presents the management practices that will be used at the facility for reduction of pollutants in stormwater discharges.

The SWPCP will be reviewed periodically to so that the elements of the plan are effective and that the plan is in compliance with the terms of the new 1200-Z permit. Modifications to the SWPCP will be made as required to reflect changing conditions at the Port of Portland Terminal 2 facility. Changes to the plan will be tracked using the Record of Changes Form provided in Appendix B.

1.3 Plan Organization

The SWPCP has been designed to follow the requirements of the NPDES General Permit for Stormwater Discharges Associated with Industrial Activities issued by the State of Oregon and EPA. Specific requirements of the 1200-Z permit are presented in bold italics in the SWPCP and followed by the appropriate information necessary to address the requirements. The components of the 1200-Z permit and the corresponding sections of this SWPCP are listed in the accompanying SWPCP checklist.

1.4 Definitions

The following definitions are defined by the stormwater discharge permits issued by DEQ and EPA:

Corrective Action Plan means an addendum to the SWPCP developed in response to modification to the SWPCP or in response to a benchmark exceedance.

Best Management Practices (BMPs) are schedules of activities, prohibitions of practices, maintenance procedures, and other management practices designed to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control facility site runoff, spillage or leaks, sludge or waste disposal, and/or drainage from raw material storage. (EPA)

CERCLA is the Comprehensive Environmental Response, Compensation, and Liability Act. It is commonly referred to as the Superfund Act. (EPA)

Clean Water Act (CWA) was formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972. (EPA)

EPCRA is the Emergency Planning Community Right to Know Act. (EPA)

Hazardous Materials as defined in *The Code of Federal Regulations*, 40 CFR 302 - Designation, Reportable Quantities, and Notification.

Material Handling Activities include the storage, loading and unloading, and transportation or conveyance of raw material, intermediate product, finished product, by-product, or waste product.

Non-stormwater Discharges are not permitted under the new 1200-Z permit. This permit does not authorize the discharge of process wastewaters, vehicle wash waters, cooling waters, or any other wastewaters associated with the facility. Other discharges must be addressed in a separate NPDES permit.

Non-Port Operators means any entity leasing property owned by the Port or any entity performing activities at Terminal 2 subject to the tariff and with a stormwater discharge associated with the industrial activity that meets either of the following two criteria:

i. The entity has operational control over industrial activities, including the ability to modify those activities; or

ii. The entity has day-to-day operational control of activities at a facility necessary to ensure compliance with the permit (e.g., the entity is authorized to direct workers at a facility to carry out activities required by the permit).

Point Source Discharge is a discharge from any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, or conduit.

Reportable Quantities are those quantities of hazardous substances listed in Table 117.3 of *The Code of Federal Regulations*, 40 CFR 117.

Significant Material includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101(14) of the Comprehensive Environmental Recovery, Cleanup, and Liability Act (CERCLA); any chemical the facility is required to report pursuant to Section 313 of Title III of Superfund Amendments and Reauthorization Act (SARA); fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with stormwater discharges.

Significant Quantity is the volume, concentration, or mass of a pollutant in a stormwater discharge that can cause or threaten to cause pollution, contamination, or nuisance, adversely impact human health or the environment, and cause or contribute to a violation of any applicable water quality standards for the receiving water.

Stormwater is the runoff from a storm event, snow melt runoff, and/or surface runoff and drainage. It does not include infiltration and runoff from agricultural land.

Stormwater Associated with Industrial Activity is the discharge from any conveyance that is used for collecting and conveying stormwater directly pertaining to manufacturing, processing, or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program. The term includes, but is not limited to, stormwater discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at 40 CFR 401); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials and intermediate and finished products; and areas where industrial activity has taken place in the past at which significant remaining materials are exposed to stormwater. The term also includes stormwater discharges from all areas listed in the previous sentence (except access roads) where material handling equipment or activities, raw materials, intermediate product, final products, waste materials, by-products, or industrial machinery **are exposed to stormwater**. Material handling activities

include the: storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product, or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots, as long as the drainage from the excluded areas is not mixed with stormwater drained from the above described areas. Industrial facilities (including industrial facilities that are Federally, State, or municipally owned or operated that meet the descriptions of the facilities listed in this paragraph) include those facilities designated under 40 CFR 122.26(a)(1)(v).

Toxic Concentration refers to lethality to aquatic life as measured by a significant difference in lethal concentration between the control and 100-percent effluent in an acute bioassay test.

1.5 Information Sources

Sources of information used to assist with the development of this SWPCP include the following:

- EPA stormwater hotline: 1-703-821-4823
- Stormwater site walk survey (conducted January 2012)
- DEQ: 1-503-229-6776
- Oregon General Permit, 1200-Z (July 2012 through June 2017)
- Guidance Document for Preparation of the Stormwater Pollution Control Plan, DEQ, August 1997
- 55 Federal Register, page 47,990 (November 16, 1990), Preamble to Final Rule
- 40 CFR Part 122 (Final Rule)
- 56 Federal Register, page 41,304 (September 9, 1992), U.S. EPA Final General Permit
- Guidance Manual for the Preparation of NPDES Permit Applications for Stormwater Discharges Associated with Industrial Activity, EPA-505/8-91-002, April 1991
- Assessment of Non-Stormwater Discharge into Separate Storm Drainage Systems, U.S. EPA, 1990
- Stormwater Management for Industrial Activities, Developing Pollution Prevention Plans and Best Management Practices, EPA 832-R-92-006, September 1992.

1.6 Non-Port Operators

Terminal 2 tenants referenced in the SWPCP and entities performing industrial activities under the current tariff are covered under the 1200-Z permit and will comply with the permit and the Terminal 2 Stormwater Pollution Control Plan (SWPCP).

Non-Port operators providing services under the Tariff are responsible for complying with all of the following stormwater requirements:

- Implement planned control measures and best management practices identified in the SWPCP.
- Conduct and document monthly inspections of industrial areas and activities exposed to stormwater, stormwater control measures, structures, catch basins, and treatment

facilities including oil/water separators and catch basin filters in accordance with Schedule B.7.

- Perform any necessary preventative maintenance of stormwater control structures and facilities on leasehold.
- Participate in benchmark exceedance investigations and provide information as requested by the Port, local municipality or DEQ.
- Retain copies of inspection forms, preventative maintenance and repair documentation for a minimum of three years and provide copies to the Port, local municipality or DEQ upon request.
- Maintain a written schedule for regular pick-up and disposal of waste materials.
- Develop and implement a Spill Prevention and Response Plan (Spill Plan). The plan must include methods to prevent spills along with cleanup and notification procedures.
- Maintain a copy of the Spill Plan and adequate spill cleanup materials on-site at all times.
- Conduct and document an employee education program to inform personnel of the components and goals of the SWPCP and the Spill Plan consistent with 1200-Z permit requirements. The education and training should occur at the time of hire and annually thereafter.
- Entities preforming industrial activities under the current Tariff may be required to provide a written plan to the Port before services commence outlining, schedule of activities and inspection, potential pollutants, preventative maintenance procedures, best management practices to prevent or reduce the discharge of pollutants to waters of the state.
- Review the SWPCP whenever facility operations change.
    - Ensure activities are adequately represented in the SWPCP for compliance and accuracy.
    - Submit any revisions or updates within two weeks to the Port's Environmental Department.

1.7 SWPCP Revisions

The SWPCP must be updated to reflect any changes to activities at the Site within 30 days of the change. Not all revisions to the SWPCP require re-submittal of the SWPCP. SWPCP revisions must be submitted only if they are made for any of the following reasons:

- Change in site contact(s)
- In response to a corrective action or inspection;
- Changes to the site or control measures that may significantly change the nature of pollutants present in stormwater discharge; or significantly increase the pollutant(s) levels, discharge frequency, discharge volume or flow rate, and
- Changes to the monitoring locations or outfalls.

If there are name changes or other revisions to this SWPCP, The Port of Portland will submit two paper and one electronic (.pdf) copy of the revised SWPCP to the Oregon DEQ. The Port of Portland will also keep a copy of the revised SWPCP at The Port of Portland office and document the changes in the Record of Change form in Appendix B.

1.8 SWPCP Plan Review

While not a permit requirement a review of the SWPCP should be made by the registrant annually, prior to the onset of the rainfall season. The plan review should include a complete site inspection of all areas where potential spills of significant material can impact stormwater runoff, and a review of the existing and future stormwater controls. If no additional site controls are identified, the registrant shall state as such in an update to the plan. The annual plan review can be documented using the **Annual Plan Review Form (Form A)** located in Appendix B.

To facilitate the annual site survey and SWPCP review, a chronological record of all physical changes made to the facility and changes in the operation of the facility that could impact the stormwater quality should be kept throughout the year. This process will help document changes made to the facility and, when compared to the sampling data, will help determine the effectiveness of stormwater controls that have been implemented. Form B in Appendix B may be used to record the changes to the facility as they occur.

1.9 Tier I Corrective Actions

If stormwater sampling results exceed any of the statewide benchmarks in Schedule A.9 of the permit, sector specific benchmarks in Schedule E of the permit, or reference concentrations for impairment pollutants identified in the permit assignment letter and summarized in Table 5-2, the permit registrant must within 30 calendar days of obtaining the monitoring results:

- Investigate the cause of the elevated pollutant levels.
- Review the SWPCP and the selection, design, installation and implementation of control measures to ensure compliance with the permit. If permit registrant determines that SWPCP revisions are necessary based on corrective action review, submit the revised pages of the SWPCP to DEQ, including a schedule for implementing the control measures.
- Summarize the following information in a Tier I report that is retained at the Port Administrative Offices and submitted to DEQ or Agent upon request:
    - The results of the investigation.
    - Corrective actions taken or to be taken, including date corrective action completed or expected to be completed. Where the permit registrant determines that corrective action is not necessary, provide the basis for this determination. Document whether SWPCP revisions are necessary.
- Implement the corrective actions before the next storm event if possible or as soon as practicable.

1.10 Second Year Monitoring Data Evaluation

The Port of Portland must evaluate the sampling results collected during the second year of permit coverage and determine if the geometric mean of the samples collected at the monitored outfall exceeds any statewide benchmark in Schedule A.9 of the permit. The permit registrant must report this information with the Discharge Monitoring Report (DMR) form for that monitoring year.

- For the pH benchmark, Tier II is triggered if more than three of eight samples are outside of the pH benchmark range.
- Permit registrants are not required to conduct this evaluation for the benchmark parameter(s) where DEQ has granted a monitoring waiver in Schedule B.4 of the permit.

If the geometric mean of the sampling results exceeds any statewide benchmark (or if more than three of eight samples for any outfall are outside of the pH benchmark range), permit registrant must:

- Revise the SWPCP to include additional stormwater treatment measures, which may include a combination of source control and treatment measures, with the goal of achieving the benchmark(s) in Schedule A.9 of the permit in future discharges.
- Have a licensed professional engineer (PE) or certified engineering geologist (CEG) design and stamp the portion of the SWPCP that addresses the stormwater treatment measures.
- Submit the revised SWPCP to DEQ or Agent by December 31st of the third year of permit coverage. If the permit registrant does not receive a response from DEQ or Agent within 30 days of receipt, the proposed revisions are deemed accepted. If triggered, the Port of Portland must implement the treatment measures by June 30th of the 4th year of permit coverage.

1.11 Monitoring Reduction Evaluation

Per section B.4 (a) of the permit, The Port of Portland will evaluate monitoring reduction after completing at least four rounds of sampling data. If the geometric mean of four consecutive sampling results is below the statewide benchmarks in Schedule A.9 of the permit, sector specific benchmarks in Schedule E of the permit, or reference concentrations for impairment pollutants identified in the permit assignment letter, the permit registrant is not required to monitor for these pollutant(s) for the remainder of the permit term. The permit registrant must submit to DEQ or Agent the analytical laboratory results from the four sampling events. Results from sampling events cannot be averaged. The evaluation will include reduction of monitoring frequency for specific monitoring constituents.

The Port of Portland must submit to DEQ a request to exercise the monitoring waiver based on the conditions above and include the documentation to support the request. If DEQ does not comment within 30 calendar days, then the monitoring waiver will be approved. There is no reduction in monitoring allowed for visual observations or monitoring for federal numeric effluent limit guidelines.

Section 2: 2-1 Site Description

The Port of Portland Terminal 2 facility is located in the industrial northwest district of Portland, Multnomah County, Oregon (General Location Map, Figure 1). Facility location and emergency contact information are presented in Table 2.1. Except for dock edge drains, and rail drainage (see Section 2.6 below) all stormwater from the Port of Portland Terminal 2 facility drains via a system of catch basins and pipes that flow to two outfalls on the Willamette River.

Table 2.1: Facility Location and Emergency Contacts

Facility Name: **Facility Address:** **Business Hours**:	Port of Portland Terminal 2 3556 NW Front Avenue, Portland, OR 97210-1315 0800am -5:00pm	
Emergency Contact:	Marine Security Office	**Phone #:** (503) 240-2230
Emergency Contact: **Title:**	Danelle Peterson Water Quality Manager	**Phone #:** (503) 415-6722 or (503) 201-5099
Port office main number:		**Phone #:** (503) 415-6000

2.1 Industrial Activities Conducted On-Site

The Port of Portland Terminal 2 facility is an active marine terminal that also maintains equipment used for moving bulk and containerized cargo containers between ships, railcars and trailer trucks. The facility encompasses approximately 50.4 acres and consists of the following features: Main gate and truck check in area, administrative building, paved material storage areas, four large covered warehouses (203, 204, 205, and 206), a dock office, four electrical substations with transformers, two cargo cranes, employee parking lot, and a refrigerated cargo container staging area with electrical service. Mobile fuel trucks are used to refuel rolling stock; all mobile fueling is conducted within a designated fueling area (Figure 2).

Terminal 2 has the capability to handle a variety of bulk, commodity (e.g. rail, steel plate, steel coil), and containerized materials. The amounts and types of materials can vary depending on markets and shipping needs. The Port of Portland has provided a list of potential cargoes, which are discussed in Section 2.2 below. In addition, portions of Terminal 2 may be leased for other operations, such as the current use of berth and warehouse 203 by the U.S. Army Corps of Engineers. If new cargoes or uses of the facility not covered in this current SWPCP occur, this SWPCP will be updated to reflect the new uses.

The lower berth area (203) is currently occupied by the US Army Corps of Engineers as a base to support dredge ships; however, no materials are stored on the docks; all operations are ship board except for transfer of supplies on and off ships.

The facility also includes shops and storage areas to support stevedoring operations, currently occupied by Stevedoring Services of America (SSA). This area includes two Gearlocker buildings, including a vehicle maintenance shop, a fixed fueling area with a 5,000 gallon above ground diesel fuel tank and a 3,000 gallon aboveground and unleaded gasoline fuel tank, and fueling pad connected to an oil/water separator which drains to the storm sewer system. A

wash pad is also located next to one of the Gearlocker buildings and is connected to an oil/water separator that discharges to the sanitary sewer system. In addition to the BMPs described in this SWPCP, SSA implements additional procedures, BMPs and source controls outlined in the SSA Best Management Practices Plan Appendix D.

This SWPCP was written to include industrial activities by non-Port operators and to ensure that non-Port operators at Terminal 2 are responsible for stormwater compliance in portions of the site they control. If industrial activities are planned that are not addressed in this SWPCP appropriate changes will be made to the SWPCP consistent with the timelines identified in the 1200-Z permit or in a future permit renewal application to DEQ.

Figure 2 provides the description of the drainage characteristics and the areas of industrial activity as required in the general permit. Figure 2, Site Map, identifies:

- Drainage patterns
- Drainage and drainage discharge structures (catch basins piping, and outfall)
- Drainage Area for the Outfall
- Paved areas, equipment, tanks, and buildings in the drainage area
- Stormwater structural control measures (catch basin inserts and fueling pad that drains to oil/water separator and then to the storm sewer)
- Areas of outdoor storage of significant materials Storm sewer lines
- Structural control structures (catch basins)
- Because the site is mostly paved, there are no stormwater features to reduce flow or minimize impervious surfaces
- Used Oil and hazardous waste storage facility (inside Gearlocker maintenance shop); there is no hazardous waste treatment or disposal at the facility
- Location of surface water (Willamette River); there are no known wetlands or springs at the facility
- Other than sanitary waste from administrative building kitchens and bathrooms and the shop wash pad that flow to an oil/water separator and then to the sanitary sewer; and the fueling pad oil/water separator discharge that flows to the storm sewer, there are no non-stormwater discharges at the facility.
- Location of sampling points
- Loading and unloading areas
- Liquid storage tanks (diesel fuel tank)
- Liquid storage areas (only maintenance related materials inside SSA Gearlocker)
- Material storage areas
- There are no outdoor manufacturing areas within The Port of Portland facility.
- There are no known water or dry wells at the facility
- No areas at Terminal 2 are used for the treatment, storage, or disposal of wastes except for dumpsters for municipal refuse and dunnage.

The Port of Portland Terminal 2 facility is in an industrialized area southwest of the Willamette River. The area is flat, with drainage conveyances consisting of catch basins and piping. Except for the north edge of the dock and rail drains, the entire facility drains via a series of catch basins and collection pipes that flow to the Willamette River via two outfalls. The west basin (Basin A) comprises about 17.4 acres (14 of which are impervious) that drains to an outfall near the northwest corner of the site (Outfall A, Figure 2). The east basin, comprising approximately 33 acres (30.2 impervious) drains to an outfall located beneath and near the center of the dock edge.

Structural controls at the facility consist primarily of catch basins with inserts and inverted elbows. Stormwater draining from the area near the diesel fuel tank passes through an oil/water separator prior to discharging to the storm sewer system. The Gearlocker wash pad discharges to an oil/water separator prior to discharging to the sanitary sewer.

2.1.1 Impervious Area

Except for some landscaping along NW Front Ave and a riprap bank area on the northeast side of the facility, the entire drainage basin areas of The Port of Portland facility are used for industrial purposes and are impervious (See Table 2.2).

Table 2.2: Drainage Basin Area

Drainage Basin	Monitoring Point	Total Area (acres)	Impervious Area (acres)	Percent Impervious
A	001	17.4	14.0	82
B	002	31.2	28.4	92
B1 (sub-basin)		1.8	1.8	100

2.2 Source Description

Significant materials and industrial activity present at the Port of Portland Terminal 2 facility were identified by the Port of Portland and during a stormwater site walk survey performed in March 2012. A detailed description of these areas is shown on Figure 2 and described in Table 2.3. There are no known historical sources of significant materials on site from previous operations.

Outdoor activities include movement and temporary storage of break-bulk, bulk and containerized materials and fueling of container-moving equipment. All industrial activities that are exposed to stormwater at the site are located on impervious paved areas. The Port of Portland Terminal 2 facility includes maintenance of equipment used for moving cargo. All maintenance of this equipment occurs indoors; however, some equipment is stored outdoors.

The pollutant sources described in Table 2.3 would occur within the warehouses or outdoor storage areas shown on Figure 2. It should be noted that the list of potential cargoes included in Table 2.3 are *potential* cargoes that *could* be handled at the facility and that only a very few of

the cargoes listed will likely use be handled at the facility. The nature of the business at T2 is generally on a short term basis with very short notice of when vessels will arrive. The list of potential cargoes listed in Table 2.3 was developed to be able to have a permit in place that allows for the handling of these materials if and when the business may take place.

2.3 Sector-Specific Source Identification

The 1200-Z permit includes sector-specific requirements, including identification of industry-sector specific sources. The Port of Portland facility falls under industry sector Q – Water Transportation because its Primary Code is 4491. The following potential pollutant sources related to this sector were assessed:

Outdoor manufacturing or processing activities: No outdoor manufacturing or processing activities are currently conducted or anticipated at Terminal 2. However, if any such activities should occur in the future, this SWPCP will be amended to describe specific pollution prevention measures that will be taken to address specific manufacturing or processing activities.

Significant dust or particulate generating processes: No ship repair or painting activities that could generate dust or particulates are currently conducted or anticipated at Terminal 2. Handling and storage of fine bulk materials have the potential to generate dust. Typically these materials will be handled in a manner to minimize dust generation will be stored inside warehouse buildings.

Because land transportation and equipment maintenance takes place at the Terminal 2 facility, the following Sector P – Land Transportation and Warehousing related potential sources were also evaluated:

Onsite waste storage or disposal: all maintenance-related wastes generated at the site are contained within holding tanks with secondary containment that are indoors. Municipal refuse is held in covered dumpsters. Dunnage (typically wood spacers or straps used to secure cargo) may be held in open dumpsters pending recycling or disposal. Liquid wastes generated during equipment maintenance are recycled or disposed of according to state and federal regulations. Solid wastes are disposed of at a permitted solid waste disposal facility. Per Port of Portland policy, no wastes are disposed of onsite.

Dirt/gravel parking areas for vehicles awaiting maintenance: Vehicles awaiting maintenance are staged inside the Gearlocker building, adjacent warehouses or within the SSA yard on the south side of the maintenance building in the area shown on Figure 2. This area is paved so leaks can be detected.

Illicit plumbing connections between shop floor drains and the stormwater conveyance system: The Port of Portland has visually verified that all floor drains including warehouse drains and shop floor drains have been filled with concrete or otherwise plugged such that they do not flow to the storm sewer system.

Fueling area: Fueling takes place in a designated fueling area on the east side of the maintenance facility, as shown on Figure 2. This area, including the fuel nozzle rack, drains to the oil/water separator and then the storm sewer system. Spill kits are located in this area. The Port of Portland requires staff to be present during vehicle fueling.

Table 2.3: Potential Source Descriptions

				Bench Mark Parameters						Willamette Impairment Pollutants									Additional Pollutants (no benchmarks)			Overall
Material	**Constituents**	**Mobile Solids**	**Solubility**	**pH**	**TSS**	**Oil & Grease**	**T-Zinc**	**T-Copper**	**T-Lead**	**Aldrin**	**DDT**	**DDE**	**Dieldrin**	**PCBs**	**PCP**	**PAHs**	**T-Iron**	**T-Arsenic**	**T-Cadmium**	**T-Chromium**	**T-Nickel**	**Pollutant Risk**
Logs (with bark and de-barked)	Solids, tannins, oils	Moderate	Low	X	X	X																Moderate
Lumber	Tannins, oils	Low	Low	X	X	X																Moderate
Bulk ores:																						
Barite	Barium Sulfate, trace Fe, Hg, Cd, Cu Pb, Zn,sulfide, phosphate	High	Low		X		X	X	X								X		X			High
Manganese	Manganese Oxide	High	Low																			High
Urea	Assumes pure synthetic Urea in prill or granules, can break down to ammonia	High	High	7.5-9.5																		High
Bulk Fertilizers:																						
Soda Ash	Sodium carbonate	High	High	X	X																	High
Potash	Potassium carbonate/chloride/sulfate/magnesium sulfate/nitrate	High	High	X	X																	High
Other Dry Bulks:																						
Grains	Carbohydrates, proteins, fiber	High	Low		X																	Moderate
Wood/bio pellets	Solids, tannins, oils	Moderate	Low	X	X	X																Moderate
Hay and other animal feed	Carbohydrates, proteins, fiber	High	Low	X	X																	Moderate
Cotton seed	Carbohydrates, proteins, oils, fiber	High	Low	X	X	X																Moderate
Salt (Chile)	Sodium chloride, trace Al, Fe, Mg, K, Sr	High	High		X												X					High
Fracking Sand	Quartz, silica, ceramic, possilbe resin	HIgh	Low		X																	Moderate
Scrap metal	Iron, copper, lead, zinc, alumnium	Moderate	Moderate	X	X	X	X	X	X					X		X	X		X	X	X	HIgh
Steel Rail	Iron, trace copper (0.4 to 0.6%), manganese (1.65%)	Low	Low														X					Low
Steel Plate	Iron, trace copper (0.4 to 0.6%), manganese (1.65%)	Low	Low														X					Low
Rolled Steel	Iron, trace copper (0.4 to 0.6%), manganese (1.65%)	Low	Low														X					Low
Transformers and other mechanical equipment	Painted steel, oils	Low	Low			X																Low
Containers	Materials inside Painted Steel Containers	Low	Low																			Low
Relief Trailers	Materials inside Painted Steel Containers	Low	Low																			Low
Barge Components	Steel, oils	Low	Low			X																Low
Military Equipment	Steel, oils	Low	Low			X																Low
Roll-on/Roll off vehicles	Steel, oils	Low	Low			X																Low
Sediment (dewatered)	Sand and silt, possible low level contaminants	HIgh	Low		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	High
Containerized Waste	Materials inside Painted Steel Containers	Low	Low																			Low

Note: Many of the bulk materials would be stored inside of warehouses, but will be transferred to/from ships and other vehicles at the facility.

2.4 Sources with a Reasonable Pollution Potential

Rankings of *none, low, moderate* or *high* potential for pollutants to be present in significant quantities in the stormwater discharge were determined based on the following criteria:

- Presence of materials in significant quantities exposed to stormwater
- The potential of exposure through spills or leaks
- Existing structural controls (e.g., berms, cover) and non-structural controls (e.g., housekeeping, materials management practices)
- Evidence of historical spills (e.g., stains, structural damage to pavement or catch basins)
- Mobility of the materials
- The distance to the stormwater conveyance system (i.e., can the material be contained and cleaned up prior to entering the storm drain system?).

By using the flow chart, the following pollution potential classifications were determined:

None: pollutant is not present in significant quantities; or significant quantities of pollutant are not exposed to stormwater, nor do they have the potential for exposure to stormwater through leaks or spills.

Low: significant quantities of pollutant are only exposed to stormwater by leaks or spills, and structural controls are **adequate** to prevent contamination of stormwater.

Moderate: significant quantities of the materials are exposed to stormwater, and structural controls are **adequate** to prevent contamination of stormwater; or significant quantities of pollutant are only exposed to stormwater through leaks or spills, and structural controls are potentially **ineffective** in preventing contamination of the stormwater.

High: significant quantities of the materials may be exposed to stormwater, and structural controls are potentially **inadequate** to prevent contamination of stormwater; this may include areas with evidence of historical spills.

Based on the pollution potential assessment, some of the bulk materials contain potential pollutants that have been determined to have a **reasonable potential** to be present in the stormwater discharge in significant amounts. Only areas with a moderate or high risk potential were considered as having a reasonable potential of impacting the quality of the stormwater.

2.5 Receiving Waters

Most of the stormwater from the Port of Portland Terminal 2 facility drains via a system of catch basins and pipes to two outfalls on the Willamette River. A series of drain scuppers at the edge of the dock and below dock rail drains also flow directly to the Willamette River. The dock rail drains are simply openings below the rail on the dock, and are not considered a point source. However, runoff to adjacent scupper drains should be substantially the same because they are located in the same areas of the dock.

2.6 Stormwater Monitoring Locations

DEQ requires that the monitoring locations be located such that samples and measurements are taken prior to the effluent joining other water bodies or waste streams. For the Port of Portland Terminal 2 facility, this means that samples must be taken prior to the discharge leaving the Terminal 2 property. Samples must be taken at a monitoring point before the stormwater joins or is diluted by stormwater from a different drainage area of the facility or areas outside the facility.

The Port of Portland Terminal 2 facility has two drainage basins and dock drains that encompass all covered industrial activities present at the facility. Stormwater samples will be collected at Outfalls A and B (Figure 2).

Outfall A
This outfall is located in Basin A on the northern section of the site beneath Berth 203. Grab samples will be collected from stormwater flowing through Manhole 1, and is designated as sample point 001. Samples collected at this monitoring station represent runoff from Basin A. The designated mobile fueling area has been relocated to Basin A where any stormwater quality impact from fueling would be detected at outfall A.

Outfall B
This outfall is located in the northeast corner of Basin B (between Berths 204 and 205) and receives stormwater from the SSA leasehold, south storage area, and areas around Warehouses 204 and 205. Grab samples will be collected from stormwater flowing through Manhole 2 and is designated as sample point 002. Samples collected at this monitoring station represent runoff from both Port and SSA-managed areas.

One small area within Basin B (sub-basin B1 on Figure 2), comprising approximately 1.8 acres (approximately 5 percent of the total impervious area in Basin B), is not monitored at the designated monitoring point for basin B. This is because the catch basins within sub-basin B1 flow to the discharge line after the last accessible monitoring point. The Basin B outfall is located below the dock and cannot be safely accessed for stormwater monitoring.

However, with the relocation of the designated fueling location, all activities within sub-basin B1 are substantially similar to activities within the rest of Basin B. See the Petition to sample substantially similar outfalls (narrative description/site map) provided in Appendix C.

Dock Drains
There are 20 dock drainage scuppers that capture a small amount of runoff at the dock edge. Three are also an undetermined number of small rail drains on the dock portion of the site. The rail drains are approximately one inch diameter holes bored through the concrete deck of the dock structure and are not accessible from the surface. The holes drain the water that falls along the rail for trains. The drain holes are not attached to the stormwater collection system and weep the water from along and beneath the rail through the bottom of the dock.

The Port of Portland has selected one drain designated as sample point 003 and is near the 400 foot mark on Berth 206 for monitoring to represent dock activities, including the rail drains. All these drains have similar loading/unloading activities along the entire length of the dock. These drains are expected to have effluent that is substantially similar to the effluent(s) of the monitored drain. The same BMPs are implemented and maintained at the all the areas that

lead to the drains. Substantially similar effluent(s) are discharges from drainage areas serving comparable activities where the discharges are expected to be similar in composition. The Port of Portland does not have monitoring data for these drains and it would be impractical to sample all 20 of the drains. Hence the determination of substantial similarity or effluent(s) is based on activities rather than on past monitoring.

Section 3: Site Controls

3.1 General

Implementation of site stormwater pollution controls will help reduce the quantity of pollutants in the stormwater runoff. Source controls are usually the most effective mechanisms for decreasing contamination and are typically less expensive than constructing end-of-pipe treatments.

Oregon is an NPDES-approved state with the authority to write general permits. DEQ has established benchmarks as a means of assessing pollution control effectiveness. Except for federal limits associated with certain industries, benchmarks are not effluent limits. The Port of Portland will follow the intent of the stormwater regulations by implementing appropriate stormwater controls to reduce pollutant concentrations. BMPs and other forms of stormwater controls are expected to be implemented even if the benchmarks are not exceeded.

3.2 Stormwater Best Management Practices

Stormwater management controls are often categorized as source controls that minimize exposure of pollutants to precipitation and runoff, and treatment to remove pollutants from stormwater. Both types of controls help reduce the amount of pollutants in the stormwater discharge.

Source controls help reduce the contact of stormwater with potential pollutants. The overall intent of the NPDES stormwater regulations is to improve the quality of stormwater discharges by eliminating or reducing the exposure of stormwater to potential contaminants. Examples of source controls include good housekeeping, improved material handling techniques, secondary containment, and covering of potential pollutant areas.

End-of-pipe controls can be either structural or non-structural. They are used to remove a pollutant after it has already entered the stormwater. Examples include oil/water separators, catch basins, and catch basin inserts.

Site controls include BMPs that target specific practices, including the following general requirements:

- ***Minimize Exposure***: The maintenance shop is a covered structure that was sized to allow for indoor repair of large equipment used at the site. Oils and other equipment fluids are stored inside the maintenance shop within an area with secondary equipment. Because of the size of the equipment, fueling cannot be covered; however fueling takes place on a pad that drains to an oil/water separator which discharges to a storm sewer. In addition the fueling dispensing nozzle storage location has been fitted with a cover. The SSA area includes a covered storage area for equipment that has oils or hydraulic reservoirs.

  Where possible, loose bulk materials are stored inside the covered warehouses.

- ***Oil and Grease***: Except for mobile fueling performed in the designated fueling area, petroleum products are stored and dispensed in the covered maintenance shop.

Pressure/steam cleaning is performed over a cleaning pad that drains to the oil/water separator and then to the sanitary sewer. Shop floors are routinely cleaned to prevent drag-out from the shop floor. Equipment carry oil spill containment materials and all spills are promptly reported and cleaned up.

- ***Waste Chemicals and Material Disposal:*** Waste materials consist of spent lubricating oils, spent antifreeze, and other vehicle fluids. These materials are held in the covered maintenance shop for recycling. Solid wastes including hot-drained oil filters are disposed of in a dumpster with at cover.

- ***Erosion and Sediment Control***: The entire area subject to traffic is paved to reduce erosion. . Annual pavement sweeping is conducted with post-handling sweeping being completed on as-needed basis. Any future construction at the site will follow good sediment control practices.

- **Debris Control**: Employees are required to keep work areas clean and free of debris. The yard area is swept as needed.

- ***Dust Generation and Vehicle Tracking:*** High traffic areas of the yard are paved and regularly swept. The shop floor is cleaned routinely to prevent tracking oil from the shop floor.

- ***Housekeeping***: The Port of Portland employees are required to keep work areas clean, to promptly report and clean any spills. Trash is bagged and placed into a covered dumpster nightly.

- ***Spill Prevention and Response:*** The Port of Portland has a Spill Prevention, Control, and Countermeasures (SPCC) plan for the facility which is provided as an adjunct to this plan. The SPCC plan includes regular inspection of the double-wall fuel tank, transformers, hydraulic systems, and oil/fluids holding tanks. Spill containment and cleanup materials are kept near the potential sources, including spill kits located at the northeast and southwest corners of Warehouses No. 205, the northeast corner of Warehouse No. 206, and . 203, and the dock office. Additional spill response equipment and materials are brought on site by the stevedoring companies responsible for cargo handling and are dependent upon the materials being transported.

- ***Preventative Maintenance:*** Equipment used at the site is routinely inspected for leaks, including engine and hydraulic system components. Equipment is on a manufacturer-specified maintenance schedule, including replacement of gaskets and hoses as recommended. The stormwater catch basins and wash pad are inspected monthly and will be cleaned as needed based on the inspections. Trash dumpsters are also inspected monthly (or when used) to help assure that they are closed and not overflowing. Trash dumpsters that are observed to be exposed to rain or are not containing trash will closed or replaced as needed.

- ***Employee Education:*** The Port of Portland staff members undergo annual stormwater pollution prevention and spill control training. Training is typically performed in the fall or winter. This training is also provided to new employees. Non-Port operators are required to trains their staff on best management practices listed in this SWPCP and spill response specific to their operations annually and within 30 days of hire.

- ***Non-Stormwater Discharges***: Kennedy/Jenks Consultants reviewed record drawings and physically assessed the facility. This assessment indicated that the Gearlocker shop floor drains are plugged. The fueling pad flows to an oil/water separator that discharges to the storm sewer. The shop restroom is self-contained. Employees are trained not to discharge any non-stormwater to the storm sewer system.

  Mobile fueling is performed in the designated area shown on Figure 2. When fueling, the potentially affected catch basin(s) are covered and spill kits are available. Therefore, a spill from mobile fueling, if it should occur, is not anticipated to result in a non-stormwater discharge.

Industry sector specific requirements include:

- E.Q.1.1 Additional Good Housekeeping Measures:

  - **E.Q.1.1.1 Pressure Washing Area**. Pressure washing is performed on a wash pad that collects and contains the discharges from the pressures washing area so that they are not co-mingled with stormwater discharges authorized by this permit. If warehouse floors or other storage areas are pressure washed, the cleanup is captured using vacuum trucks.

  - **E.Q.1.1.2 Blasting and Painting Area**. There is no ship blasting or painting activities performed at the site. Any painting of small equipment is done inside of the SSA Gearlocker maintenance building.

  - **E.Q.1.1.3 Material Storage Areas**. All containerized materials (e.g., fuels, paints, solvents, waste oil, antifreeze, batteries) are plainly labeled and stored in a protected, secure location away from drains (inside the SSA Gearlocker except for the exterior Except for the double-walled diesel fuel tank). This practice minimizes the contamination of precipitation or surface runoff from the storage areas. Materials stored indoors include oils, diesel fuel, lubricants, parts cleaners, and antifreeze/coolants. No abrasive blasting is performed at the facility. The Port of Portland has environmental policies, including requirements in lease agreements that to limit the presence of potentially hazardous materials onsite.

  - **E.Q.1.1.4 Engine Maintenance and Repair Areas**. All vehicle maintenance and repair is conducted indoors to minimize the contamination of precipitation or surface runoff from all areas used for engine maintenance and repair. SSA maintains an organized inventory of materials used in the shop.

  - **E.Q.1.1.5 Material Handling Areas**. The Port uses covered warehouses to temporarily store and handle most bulk materials. The maintenance shop is within a building and thus minimizes the contamination of precipitation or surface runoff from material handling operations and areas (e.g., fueling, paint and solvent mixing). There is no onsite disposal of process wastewater streams from vessels. Because of the size of the material handling equipment, it is not possible to cover the fueling area. However fueling takes place on a containment pad that has spill and overflow protection. Any mixing of paints and solvents is performed inside the SSA Gearlocker in a designated area.

- **E.Q.1.1.6 Drydock Activities.** There are no drydock activities at Terminal 2.

- **E.P.1.2 Employee Training**. The Port of Portland employee training addresses the following activities: used oil and spent solvent management; fueling procedures; general good housekeeping practices; proper painting procedures; and used battery management. Spill and stormwater training for MFM staff is conducted annually. Any new employee who conducts duties related to the implementation of the SWPCP will be trained within 30 calendar days of being hired. Stormwater and spill training typically consists of:

    - Introduction to SWPCP and Permit
    - Regulatory requirements
    - Stormwater protection and good housekeeping BMPs
    - Spill response goals
    - Responsibilities for spills
    - Spill kits and
    - Spill notification requirements.

    A relevant stormwater and environmental housekeeping video may also be shown during annual training. Attendance records are retained by the Environmental Operations staff at the Port of Portland Administrative Office.

- **E.Q.1.3 Preventive Maintenance**. As part of the Port of Portland and SSA preventive maintenance programs, staff perform timely inspection and maintenance of stormwater management devices (e.g., cleaning oil and water separators and sediment traps to ensure that solids will be 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.

Site controls were be selected for implementation based upon their effectiveness and cost. Where possible, source controls will be used. End-of-pipe controls may be used in situations where stormwater is required to be treated. Selection of controls is discussed in the following sections.

3.2.1 Existing Management Practices

Stormwater management controls that are presently in use at the site are listed in Table 3.1 and shown on Figure 2. Most maintenance activities are done inside without any exposure to stormwater.

In general, the existing structural controls include inverted outlet catch basins, catch basin inserts, secondary containment structures, and the covering of material storage and maintenance areas with roofs.

Table 3.1: Existing Stormwater Management Practices

Basin A	
Location of Significant Material, Activity, or Control	**Description of Control**
Materials Storage Area	Catch basin inserts (filter media) deployed at high risk locations within storage areas; annual pavement sweeping; post-handling sweeping on as-needed basis; routine visual observation of catch basins
Administration Building Parking Lot	Annual pavement sweeping; routine visual observation of catch basins
Berth 203/Dock	Annual pavement sweeping; routine visual observation of catch basins
Berth 204/Dock	Annual pavement sweeping; routine visual observation of catch basins
Warehouse No. 203	Visual observation of building interior for evidence of releases
Dock Office	Annual pavement sweeping; routine visual observation of catch basins
Administration Building	Annual pavement sweeping; routine visual observation of catch basins
Mobile Refueling Area	Designated refueling area, catch basin cover and spill kit readily available,
Basin B	
Location of Significant Material, Activity, or Control	**Description of Control**
SSA Fuel Tanks and Steam Cleaning Area	Fueling and washing occur on pad that drains to oil water separator. Visual observation of pad for signs of runoff, regular maintenance of oil/water separator.
SSA Gearlocker Maintenance Building	Visual inspection by SSA staff to assess secondary containment of liquid products, regular dry sweeping of shop floor.
SSA Equipment Storage Area	Visual inspection of equipment to look for oil/hydraulic leaks, prompt repair and cleanup of any leaking equipment, make sure equipment that can leak oil is inside or under covered storage, ensure dumpster cover is closed.
Materials Storage Area	Catch basin inserts (filter media) deployed at high risk locations within storage areas; annual pavement sweeping; post-handling sweeping on as-needed basis; routine visual observation of catch basins
Warehouse No. 204/206	Visual observation of building interior for evidence of releases
Warehouse No. 205	Visual observation of building interior for evidence of releases
Berth 205/Dock; Berth 206/Dock	Annual pavement sweeping; routine visual observation of catch basins
Electric Shop/Storage	Annual pavement sweeping; routine visual observation of catch basins
Common Parking Area	Annual pavement sweeping; routine visual observation of catch basins
Guard House	Annual pavement sweeping; routine visual observation of catch basins

3.2.1.1 Source Control BMPs

The following sections describe source control BMPs being implemented at Terminal 2.

Covered Storage, Material, and Maintenance Areas

Equipment and vehicle maintenance will be conducted either indoors or outside in a designated or covered area. Additionally, the warehouses will be used to store materials which would otherwise be potential sources of stormwater pollution if stored outside during precipitation events. Inert materials may be stored outdoors when practicable. Catch basin filters will be employed in the storage area and additional BMPs will be implemented, as needed.

A refueling area has been designated and marked in the northwest corner of Basin B (Figure 2). This area was selected for refueling based upon site drainage patterns and the potential to block the one down gradient catch basin in the event of a release. A spill kit, including a catch basin drain cover, is located at the edge of the refueling area. Types of equipment typically fueled in the refueling area include forklifts and front loaders brought onsite by the stevedores during periodic vessel unloading and transfer.

Break bulk materials are stored in designated areas both inside and outside at Terminal 2 depending on product characteristics. Break bulk materials typically consist of steel railroad rail, raw ores (barite and manganese) and miscellaneous lumber products—and are stored outside in designated areas with stormwater controls in place to prevent impact to stormwater drainage system. Some fertilizers (e.g. urea) are imported occasionally (1-2 times per year) and stored under cover inside W-205 until taken off site by train or truck. All floor drains in the Terminal 2 warehouses have been permanently blocked to prevent any potential runoff from incidental leaks or spills in accordance with the new 1200-Z permit requirements. BMPs such as catch basin sediment filters, sand bags in designated outside storage areas, pavement sweeping and catch basin clean out activities are conducted after load-out activities to prevent impacts to storm drainage system.

Waste Chemical Handling, Storage, and Disposal

Waste chemicals are not typically generated at Terminal 2. The stevedoring services contracted by the vessel on berth (through agreements documented in the Marine Terminal Tariff No.8 and the Port Marine Tenant Program BMP Manual) will be responsible for ensuring all wastes are recycled or disposed of at an appropriate off-site disposal facility and by a licensed contractor. Non-Port operators are responsible for managing waste and materials generated by their activities.

Good Housekeeping Practices

Good housekeeping practices implemented at Terminal 2 include under-cover or indoor storage of hazardous materials, use of covered dumpsters and waste bins when practicable, site cleaning practices, and erosion and sediment control practices. Sweeping of the terminal will be conducted annually by Marine Facilities Maintenance (MFM) staff. For cargo shipments which have an abnormally high amount of particulate (dusts or debris), the stevedoring company managing the shipment will conduct a post-transfer sweeping of the affected pavement or dock as needed. The unpaved portions of Terminal 2 are well vegetated and are not experiencing significant erosion and sediment problems. Unpaved areas are landscaped and will be

maintained by the Port's Properties Maintenance Department staff. All new construction will comply with the provisions of the Port's NPDES General Stormwater 1200-CA Permit to minimize the sediment loading at stormwater outfalls during construction activities.

3.2.1.2 Break-Bulk and Bulk Source Control BMPs

The contractor will implement BMPs identified in this SWPCP during all work activities at Terminal 2 involving break-bulk or bulk products. Storm drains potentially impacted by the work will be protected, the area will be regularly cleaned, and waste materials disposed of properly. Catch basin inserts (filter media) will be deployed at any high risk location within break-bulk or bulk storage areas. Warehouses and surrounding terminal areas will be thoroughly cleaned as soon as possible following completion of break-bulk or bulk products activities. Product dust will be swept up and disposed of safely, in accordance with applicable laws and BMPs. Routine visual inspections of catch basins by both the contractor and Port staff will be conducted and documented. Equipment will be maintained to control dust and spillage and the product will be protected from the elements (rain, wind, snow, etc.) where practical. The non-Port operator should also develop a plan that addresses additional BMPs to be implemented if the bulk activity is conducted during wet weather if the routine BMPs are inadequate to prevent pollutant discharges.

Section 4: Procedures and Schedules

4.1 Spill Prevention and Response Procedures

The following is a summary of spill response procedures. Non-Port operators are required to develop and implement spill prevention and response procedures specific to their operations.

PORT OF PORTLAND TERMINAL 2 FACILITY SPILL RESPONSE PLAN

PLEASE REFER TO THE FOLLOWING PROCEDURES WHEN HANDLING A SPILL INCIDENT.

*** * * * * * * * * * THINK C-C-C* * * * * * * * * CONTROL-CONTAIN-CALL* * * * * * * ***

#1 CONTROL the source of the spill. STOP the flow.

#2 CONTAIN the spill to the smallest possible area.

#3 CALL your supervisor for further instructions.

4.1.1 Emergency Contacts

SPILL RESPONSE/EMERGENCY CONTACTS
PORT OF PORTLAND TERMINAL 2 FACILITY

The following are the phone numbers of supervisors to contact in the event of a spill:

Regardless of the time of the day.

EMERGENCY NOTIFICATION PHONE LIST		
PRIORITIZED CONTACT LIST	**RESPONSIBLE ROLE**	**PHONE NUMBER**
PORT CONTACTS		
Marine Security 24-hour Contact Number	Incident Notification to Appropriate Parties	(503) 240-2230
On Duty Environmental Contact Number :	Incident Command and Control	503-240-2022
Marine Security	Assist with Incident Management	(503) 240-2235
EMERGENCY RESPONSE CONTRACTORS		
Cowlitz Clean Sweep	Provide Spill Response and Cleanup Resources	(503) 247-9466
NRC Environmental Emergency Spill Response	Provide Spill Response and Cleanup Resources	(800) 337-7455
Terra Hydr, Inc.	Provide Spill Response and Cleanup Resources	(503) 625-4000

IF A SPILL REACHES STATE'S WATER OR HAS THE POTENTIAL TO REACH THE STATE'S WATER, OR IF IN EXCESS OF 42 GALLONS, YOU MUST CALL: (Spill reporting must be made as soon as possible after initial spill response and control)		
GOVERNMENT AGENCIES (Record name of person called and time of call)		
Fire/Police – Portland HAZMAT Team Time:_____ Name:_____	Assist in spill clean-up and fire control	911 and/or (503) 823-3946
National Response Center (NRC) Time:_____ Name:_____	Incident Reporting: If spill exceed CERCLA Federal Response Quantity	(800) 424-8802
Oregon Emergency Response System (OERS) Time:_____ Name:_____	Incident Reporting Provide Spill Response Assistance	(800) 452-0311
Oregon Department of Environmental Quality Time:_____ Name:_____	Incident Reporting Provide Spill Response Assistance	(800) 542-4011
U.S. Coast Guard Time:_____ Name:_____	Incident Reporting	(503) 240-9370
EPA Office Time:_____ Name:_____	Incident Reporting	(503) 326-2715

In addition, record the name of the control officer, time, and details of the conversation on the Spill Response Notification Form in Appendix C.

4.1.2 Notification Procedure

In the event of an oil spill incident, facility personnel on-duty will take immediate action to notify the Port personnel identified on the list of emergency telephone numbers on page v at the front of this plan. The designated person (or coordinator) accountable for oil spill prevention is responsible and required by federal and state laws to notify the applicable federal, state, and local agencies provided on the list.

4.1.3 Spill Contingency Plan

In the event of an oil spill incident, facility personnel will follow the procedures outlined below:

- CONTROL THE SOURCE OF THE SPILL
  - Stop flow of product (secure valves and pumps)
  - Shut off ignition sources, if applicable.
- CONTAIN THE SPILL TO THE SMALLEST POSSIBLE AREA
- CALL YOUR SUPERVISOR FOR FURTHER INSTRUCTIONS
- REPORT THE SPILL TO PROPER SPILL REPORTING AGENCIES AS REQUIRED.

4.1.4 Spill Control Procedures

An oil spill incident could occur at the facility from the following situations:

- Hydraulic reservoir failure
- Transformer failure
- Spill during loading/offloading operations

- Release from stored materials
- Spill during fueling operations.

Should oil or other material spill incident occur, facility personnel will immediately implement the following spill control measures to prevent a spill from entering navigable waters:

  - Ensure that spilled oil is contained (see map of spill kits on Figure 2)
  - Cover catch basins and use pads to absorb spilled material
  - Pump remaining oil into drums or other appropriate containers away from surface water or storm drains.

4.1.5 Countermeasure Procedures

Once the spill control procedures outlined above have been implemented, facility personnel will initiate countermeasure activities to contain, cleanup, and mitigate the effects of an oil spill that could impact navigable waters. Furthermore, incident-specific considerations and precautions must also be implemented during each spill incident to adequately protect human health and the environment.

The facility's countermeasure procedures are outlined below.

- Containment. Containment activities will be initiated as soon as possible to prevent spreading of the spilled material. Containment techniques include, but are not limited to:

  - Trenching and diking
  - Filter fences
  - Booms.

- Removal. Once the spill is contained, the oil will be removed. Removal techniques include, but are not limited to:

  - Pumps
  - Sorbents (pads, pillows, or booms)
  - Skimmers
  - Vacuum trucks.

- Disposal. After the spill is contained, the site will be cleaned up. This includes recycling any recovered oil, disposing of abatement materials used to contain and/or remove the spill, and excavating oil-contaminated soil. Disposal techniques include, but are not limited to:

  - Recycling
  - Disposal at an appropriate facility.

4.1.6 Emergency Response Equipment Location

The following table identifies the type and location of the emergency response equipment available at the facility (Figure 2).

Table 4.1: Emergency Response Equipment Location

Identification	Location	Equipment List
Spill Kit #1	northwest corner of low dock office building	Spill containment kit
Spill Kit #2	northeast corner of Warehouse 203	Spill containment kit
Spill Kit #3	west of Warehouse 205	Spill containment kit
Spill Kit #4	southwest corner of Warehouse 205	Spill containment kit
Spill Kit #5	southwest corner of Warehouse 204	Spill containment kit
Spill Kit #6	northeast corner of Warehouse 205	Spill containment kit
Spill Kit #7	northeast corner of Warehouse 204	Spill containment kit
Spill Kit # 8	fueling area, south of Warehouse 203	Spill containment kit

Additional spill response equipment such as pumps, booms, and additional absorbents are available on a 24-hour basis from the emergency response contractors listed on the Emergency Notification Phone List.

4.1.7 Potential Spill Locations

Table 4.2 lists the areas where potential spills of significant materials can impact stormwater runoff. These areas are shown on Figure 2.

Table 4.2: Potential Spill Locations

Location of Potential Spills (by drainage basin)	Potential Pollutants (common name)	Comments
	Drainage Basin A	
A-1. Exterior Material Storage Areas	Misc. bulk and commodity materials	Loose materials are contained in berms or other containment; areas are inspected regularly for fugitive releases.
A-2. Crane and Transformer Oil Reservoirs	Hydraulic fluid or transformer oil	Equipment is regularly inspected, spill kits are located nearby.
A-3. Designated Fueling Area	Diesel fuel	Fueling is attended, catch basin(s) are covered, and spill kits are available.
	Drainage Basin B	
B-1. Maintenance Service Area	Diesel, oil/grease, hydraulic fluids, coolants	Materials are kept inside shop and in secondary containment. Shop floor drains are plugged. Overflow could reach stormwater if excessive and not cleaned up immediately.
B-2. Fueling Pad	Diesel and Unleaded Gasoline Fuels	Fueling done on pad with oil/water separator and tank is double walled. Potential for spill if fueling not done on pad or tank fails. There is a shutoff valve to contain large spills before the oil/water separator discharges.
B-3. Exterior Material Storage Areas	Misc. bulk and commodity materials	Loose materials are contained in berms or other containment; areas are inspected regularly for fugitive releases.
B-4. Crane and Transformer Oil Reservoirs	Hydraulic fluid or transformer oil	Equipment is regularly inspected, spill kits are located nearby.

4.1.8 Spill Cleanup Training

Appropriate Port personnel are trained in incidental spill cleanup procedures and how to use available Port cleanup equipment including absorbent mats, scoop shovels, brooms, and a highly absorbent sweeping compound. Port spill kits include 55-gallon drums to be used for receiving spilled materials. Personal protective equipment (respirators, safety goggles, boots, and gloves), first aid, and biohazard kits are maintained in the Maintenance Tool Room. Fire extinguishers and ventilation equipment are also available at the facility. Non-Port operators are responsible for training their staff and contractors on their spill plan and for providing spill cleanup equipment appropriate for their industrial activities at Terminal 2.

4.1.9 Monthly Inspections

Inspections will be conducted monthly when there is rainfall and just prior to the onset of the rainfall season. Inspections will be conducted at the locations identified in Section 4.2.2 and on

Figure 2. In addition, the stormwater control structures will also be inspected. Use **Form B** to record the results of the inspection. Upon completion of the inspection, cleaning and repair activities should be conducted and documented as described in Section 4.4.

The Port's Environmental Operations and/or MFM staff will conduct monthly inspections of source areas and stormwater controls within the permitted areas of Terminal 2. The inspections will be documented on the SWPCP Monthly Inspection Form (Appendix B). Inspection forms will be kept on file in the Port of Portland Administration Office.

Non-Port operators are responsible for conducting monthly inspections of their leased areas and areas within their control in compliance with Schedule B of the 1200-Z permit. Inspections of source areas and site controls will be documented, kept onsite for at least three years and made available to the Port, DEQ or local municipality upon request.

Port Environmental Operations and/or Marine Facilities Maintenance staff will conduct inspections of catch basins, inlets and manholes within the non-leased 1200-Z permitted areas. Terminal 2 has approximately 80 catch basins, inlets or manholes within the 1200-Z permitted area. Many of these are located in areas that have very low probability for impacts to stormwater. The catch basins, manholes and inlets within the high-risk area (Materials Storage Area) will be inspected monthly. The inspections will be documented on the SWPCP Monthly Inspection Form. Inspection forms will be kept on file in the Port Administration Office.

4.1.10 Inspection Areas

General inspection areas will include:

- Catch basins
- Roofs and covers (for potential leaks)
- Secondary containment areas
- All storage tanks
- Material handling and storage areas
- Waste storage, handling, and process areas
- All areas of potential spills (for possible contamination).

Industry-specific inspection areas include the following:

- Pressure washing area
- Any blasting, sanding, and painting areas
- Material storage areas
- Engine maintenance and repair areas, material handling areas
- General yard area

There is no dry dock at Terminal 2.

4.1.11 Cleaning and Repair Program

Cleaning, maintenance, and repair of all materials handling and storage areas and stormwater control measures, structures, catch basins and treatment facilities will be performed in such a manner as to prevent the discharge of pollution. Catch basins will be cleaned annually, at a minimum, by the Port's MFM Department. For cargo shipments which have an abnormally high amount of particulate (dusts or debris), the stevedoring company managing the shipment will conduct a post-transfer inspection of the catch basins and replace filters and clean as necessary. The structural condition of the catch basin will be observed and any needed repairs are conducted. Materials removed from catch basins will be disposed of appropriately. Catch basin sediment will be removed as needed by the MFM or a Port contractor. Catch basin cleaning records and water quality laboratory results will be kept on file in the Port of Portland Administration Office.

The schedule for cleaning and repairing stormwater management control structures will be based primarily on the results of the monthly inspections. The following cleaning and repair activities will be conducted:

- Repair and cleaning of catch basins
- Regular replacement of catch basin filters
- Maintenance of all equipment and tanks where spills or leaks are possible
- Maintenance of all container-moving equipment and other vehicles that are used or parked in the facility to help prevent leaks.

As an additional component of this program, proper traditional "housekeeping" practices will be performed by maintenance staff to keep the facility in a clean and orderly condition. These practices include:

- Maintenance of clean, dry floor, and ground surfaces
- Periodic cleanup of debris and recyclable material
- Proper labeling and identification of chemical substances present in the workplace, and maintenance of Material Data Safety Sheets (MSDS) for each substance (Right-to-Know program)
- Facility-wide sweeping of impervious surfaces annually and on an as-needed basis depending on the frequency of facility operations.
- Proper material container storage practices (to prevent stormwater exposure or damage)
- Proper disposal of old equipment and waste products
- Discussion and posting of good housekeeping procedures, tips, and reminders at employee meetings and on bulletin boards.

At a minimum, impervious surfaces should be swept annually ideally before the start of the rainy season to remove particulates that are high in pollutants that have built-up over the summer.

4.2 Employee Education Schedule

The Employee Awareness Program is designed to familiarize all employees with the intent and components of the SWPCP. Training will be provided for all existing employees on an annual basis, and within 30 days of hire for all new employees when they begin work at the Port of Portland Terminal 2 facility.

For all personnel, topics in the training session may include:

- Importance of preventing stormwater pollution
- Contents of the SWPCP
- Spill prevention and internal reporting procedures
- Materials handling and storage procedures
- Proper painting procedures

Sector Q (Water Transportation)-specific training topics will include

- Used oil management
- Spent solvent management
- Disposal of spent abrasives
- Disposal of vessel wastewaters (if occurs)
- Spill prevention and control
- Fueling procedures
- General good housekeeping practices
- Painting and blasting procedures (if used)
- Used battery management.

Selected maintenance personnel will be trained in preventive maintenance procedures and inspection procedures.

All SWPCP training records will be maintained for at least three years.

4.3 Record Keeping and Internal Reporting Procedures

The Port of Portland is required to demonstrate the implementation of various components of the SWPCP. Records of the following events or activities will be maintained with the SWPCP documentation:

- Incidents of spills or leaks
- Surface water discharges
- Sampling/monitoring program (see Monitoring Plan)
- Inspection and maintenance records.

Incidents of spills or leaks may require local, state, or federal agency notification. See the SPCC for the notification details. All records will be dated and signed by the person recording the events or activities. Records of the monthly inspections, preventive maintenance practices,

cleaning and repair activities, and all stormwater monitoring data will be maintained for a period of **three years** with the SWPCP documentation.

Additional information regarding the monitoring data records is found in Section 6.4.

Section 5: Specific Conditions and Limitations

5.1 General

In addition to the specific requirements established for the quality of stormwater runoff, other existing DEQ rules and requirements apply to all types of discharges.

5.2 Authorized Discharges

The permit registrant is authorized to construct, install, modify, or operate stormwater treatment or control facilities, and to discharge stormwater and non-stormwater discharges specifically authorized by the permit to public waters in conformance with all the requirements, limitations, and conditions set forth in the permit schedules. The following non-stormwater discharges are permitted:

- Discharges from fire-fighting activities
- Fire hydrant flushing
- Potable water, including water line flushing
- Uncontaminated condensate from air conditioners, coolers and other compressors, and from outside storage of refrigerated gases and liquids.

5.3 Specific River Basin Requirements

Water quality standards have been established for the Willamette Basin. These standards are listed in the Oregon Administrative Rule (OAR), Chapter 340, Division 41. Standards have been established for the following parameters:

- Dissolved oxygen (DO)
- Temperature
- Turbidity
- pH
- Coliform bacteria
- Other bacterial pollution
- Conditions deleterious to fish and other aquatic life
- Formation of appreciable bottom or sludge deposits
- Objectionable discoloration, scum, oily slick or floating solids
- Offensive aesthetic conditions
- Radioisotope concentrations
- Total dissolved gases
- Total dissolved solids
- Toxic substances above natural background levels.

In addition, DEQ has adopted, and EPA has approved, total maximum daily loads (TMDLs) for the Willamette Basin.

To help meet the above standards, monitoring activities will be implemented in accordance with the conditions established in the new 1200-Z permit.

5.4 Water Quality Standards

The permit registrant must not cause a violation of instream water quality standards as established in OAR 340-041.

Water quality standards have been established for many parameters not specifically limited by the new 1200-Z permit. These water quality standards shall not be violated.

5.5 Stormwater Discharge Benchmarks

Benchmarks are guideline concentrations, not limitations. They are designed to assist The Port of Portland in determining whether the implementation of their SWPCP is reducing pollutant concentrations to below levels of concern. Terminal 2 is subject to State-Wide benchmarks and Sector-Specific Benchmarks.

5.5.1 State-Wide Benchmarks

The following benchmarks apply to each point source discharge of stormwater associated with industrial activity (Table 5.1).

Table 5.1: State Wide Stormwater Discharge Benchmarks

Parameter	Benchmark
Total Copper	0.020 mg/l
Total Lead	0.040 mg/l
Total Zinc	0.12 mg/l
pH	5.5 – 9.0 S.U.
Total Suspended Solids	30 mg/l
Oil and Grease	10 mg/l

Notes:
mg/l – milligrams per liter
ml – milliliter
S.U. – standard unit

5.5.2 Sector-Specific Benchmarks

Sector Q – Water Transportation Facilities have sector-specific monitoring parameters and benchmark concentrations as shown on Table 5.2:

Table 5.2: Sector Q Discharge Parameters and Benchmarks

Parameter	Benchmark
Total Aluminum	0.75 mg/l
Total Iron	1.0 mg/l

Notes:
mg/l – milligrams per liter

In addition, the following impairment pollutants related to the Willamette River apply to The Port of Portland Terminal 2 facility.

Table 5.3: Willamette River Impairment Pollutants

Parameter	Reference Concentration
To be completed upon receipt of Permit Assignment Letter	

5.6 Response to Benchmark Exceedance

The Port of Portland and non-Port operators conducting activities subject to the 1200-Z permit shall comply with provisions reference Section A.10 of the permit for corrective actions.

If stormwater sampling results exceed any of the statewide benchmarks in Schedule A.9 of the permit, sector specific benchmarks in Schedule E of the permit, or reference concentrations for impairment pollutants identified in the permit assignment letter, within 30 calendar days of obtaining the monitoring results, the Port will:

- Investigate the cause of the elevated pollutant levels. If the elevated pollutant levels appear to be caused by a non-Port operator, the Port will require information from the non-Port operator to assist with the investigation.
- Review the SWPCP and the selection, design, installation and implementation of control measures to ensure compliance with the permit. If permit registrant determines that SWPCP revisions are necessary based on corrective action review, submit the revised pages of the SWPCP to DEQ, including a schedule for implementing the control measures.
- Summarize the following information in a Tier I report that is retained on site and submitted to DEQ upon request:
  - The results of the investigation.
  - Corrective actions taken or to be taken by the Port and/or the non-Port operator, including date corrective action completed or expected to be completed. Where the permit registrant determines that corrective action is not necessary, provide the basis for this determination.
  - Document whether SWPCP revisions are necessary.

- Implement the corrective actions before the next storm event if possible or as soon as practicable.

5.7 Second Year Benchmark Compliance Evaluation

The Port of Portland must evaluate the sampling results collected during the 2nd year of permit coverage and determine if the geometric mean of the samples collected at the monitored outfall exceeds any statewide benchmark in Schedule A.9 of the permit. The permit registrant must report this information with Discharge Monitoring Report (DMR) form for that monitoring year.

- Permit registrants are not required to conduct this evaluation for the benchmark parameter(s) where DEQ has granted a monitoring waiver in Schedule B.4 of the permit.

For the pH benchmark Tier II corrective action requirements are triggered if more than three samples collected during the first two years of permit coverage are outside of the pH benchmark range.

If the geometric mean of the sampling results for any outfall monitored exceeds any statewide benchmark (or if more than three samples for any outfall are outside of the pH benchmark range), permit registrant must:

- Revise SWPCP

  1. Revise the SWPCP to include additional stormwater treatment measures, which may include a combination of source control and treatment measures, with the goal of achieving the benchmark(s) in Schedule A.9 of the permit in future discharges. Include in the SWPCP the rationale for the selection of the measures, the projected reduction of pollutant concentration(s) and the schedule for implementing these measures.

  2. Have a licensed PE or (CEG design and stamp the portion of the SWPCP that addresses the stormwater treatment measures.

  3. Submit the revised SWCP to DEQ by December 31st of the third year of permit coverage. If the permit registrant does not receive a response from DEQ or Agent within 30 days of receipt, the proposed revisions are deemed accepted.

- Tier II Deadline - Implement the treatment measures by June 30th of the 4th year of permit coverage.

- After the stormwater treatment measures are implemented, if sampling results continue to exceed the same benchmark parameter(s) that triggered the Tier II corrective action requirements, permit registrant must within 30 days of obtaining the sample results, evaluate whether the treatment measures were properly installed, maintained and implemented and whether modifications to these measures are necessary. Summarize these findings in a Tier II Benchmark Exceedance report that is retained on site and submitted to DEQ annually with the Discharge Monitoring Report form.

Section 6: Monitoring and Reporting Requirements

6.1 Minimum Reporting Requirements

The Port of Portland has prepared a separate monitoring plan for the stormwater monitoring at the Terminal 2 facility. The Port of Portland will monitor stormwater at the designated monitoring points for the following:

Table 6.1: Primary Monitoring Parameters (Grab Samples)

General Grab Samples of Stormwater	
Parameter	**Frequency**
Total Copper Total Lead Total Zinc * pH Total Suspended Solids Oil & Grease	Every year, four times per year (2 on or before December 31; 2 after December 31), unless a monitoring waiver is granted.
Sector Q-Specific Parameters	
Total Aluminum Total Iron	Every year, four times per year (2 on or before December 31; 2 after December 31)
Impairment Pollutants	
To be determined in permit assignment letter	All outfalls every year, twice per year, (one sample on or before December 31, one on or after January 1) Unless a monitoring waiver is granted.

Note:

***** The sampling crew will analyze for pH at each sampling site. The remainder of the analyses will be performed by an outside laboratory in accordance with EPA protocols.

Table 6.2: Visual Monitoring Parameters

Parameter	Frequency
Floating Solids (associated with industrial activities)	Once a month (when discharging).
Oil & Grease Sheen	Once a month (when discharging).

6.2 Monitoring Waiver

6.2.1 Benchmark and Impairment Pollutant Monitoring

A monitoring waiver may be requested in the following circumstances:

- If the geometric mean of four consecutive sampling results is below the statewide benchmarks in Schedule A.9 of the permit, sector specific benchmarks in Schedule E of the permit, or reference concentrations for impairment pollutants identified in the permit assignment letter, the permit registrant is not required to monitor for these pollutant(s) for the remainder of the permit term. The permit registrant must submit to DEQ the analytical laboratory results from the four sampling events.

    1. Results from sampling events cannot be averaged.
    2. Monitoring waivers may be allowed for individual parameters.

- If the exceedance(s) is attributed solely to the presence of the pollutant(s) in natural background and is not associated with industrial activities at the site, DEQ or Agent will consider these samples as being below the benchmark(s) or reference concentrations for impairment pollutant(s). Permit registrant must submit a Natural Background Waiver report to DEQ that describes the investigation and analysis to demonstrate that the exceedances are due to natural background conditions and includes any data collected by the permit registrant or others (including literature studies) that describe the levels of natural background pollutants in the discharge.

- If a facility is inactive and unstaffed and no industrial materials or activities are exposed to stormwater, the permit registrant is not required to conduct monitoring for the remainder of the permit term. (a) Permit registrant must provide documentation with the DMR indicating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to precipitation, in accordance with the substantive requirements in 40 CFR 122.26(g)(4)(iii).

    1. The statement must be signed and certified in accordance with Schedule F of the permit.

- The permit registrant must submit to DEQ or Agent a request to exercise the monitoring waiver based on the conditions above and include the documentation to support the request. If DEQ or Agent does not comment within 30 calendar days, the monitoring waiver is deemed approved.

    1. There is no reduction in monitoring allowed for:
        (a) Visual observations, unless the site is inactive or unstaffed and there are no industrial materials or activities exposed to stormwater and permit registrant meets requirements in Schedule B.4.a.i.3 of the permit.
        (b) Monitoring for federal numeric effluent limit guidelines.
    2. Revocation of Monitoring Waiver

        (a) The permit registrant must reinstate the monitoring of stormwater discharge if:

- Prior monitoring efforts used to establish the monitoring waiver were improper or sampling results were incorrect;
- Changes to site conditions are likely to affect stormwater discharge characteristics;
- Additional monitoring occurs and the sampling results exceed benchmark(s), or
- For inactive or unstaffed sites, the facility becomes active and/or staffed or industrial materials or activities become exposed to stormwater

(b) DEQ will notify the permit registrant in writing if the monitoring waiver is revoked.

6.3 Monitoring Locations

Representative Sample - Samples must be representative of the discharge. Unless approved in writing by DEQ or Agent, all samples must be taken at monitoring points specified in the SWPCP before the stormwater joins or is diluted by stormwater from a different drainage area of the facility or areas outside the facility; wastewater, or any other waste stream, body of water or substance unless:

- Otherwise approved in writing by DEQ; or
- On-site stormwater flows are combined to utilize a common treatment facility (for example, filter or settling pond). In this case, monitor the discharge from the treatment facility.

The Port of Portland has selected the last manhole before outfall A to monitor Basin A and the last manhole before outfall B to monitor Basin B as shown on Figure 2 as the representative sampling locations. These locations represent the runoff from most of the site where industrial activities occur. The designated mobile fueling area has been relocated to Basin A where any stormwater quality impact from fueling would be detected at outfall A.

One small area within Basin B (sub-basin B1 on Figure 2), comprising approximately 3,700 square feet, is not monitored at the designated monitoring point for basin B. This is because the catch basins within sub-basin B1 flow to the discharge line after the last accessible monitoring point. The Basin B outfall is located below the dock and cannot be safely accessed for stormwater monitoring.

However, with the relocation of the designated fueling location, all activities within sub-basin B1 are substantially similar to activities within the rest of Basin B. See the Petition to sample substantially similar outfalls (narrative description/site map) provided in Appendix C.

In addition, the Port has selected one dock scupper at Berth 206 (at the 400 foot mark on the dock) to monitor dock scupper runoff. This location was selected because in addition to representing the dock runoff, a small area of the exterior storage area in Basin B flows to this location. This location also represents discharges from the dock rail drain holes.

6.4 Recordkeeping and Reporting Requirements

Detailed records must be maintained to provide quality assurance/quality control for a stormwater sampling program. Personnel from the Port of Portland Terminal 2 facility will use

the forms provided with this monitoring plan to record the monitoring information. Components of the records management program include the following items:

- Analysis Request Forms (in sampling plan)
- Chain-of-Custody Forms (in sampling plan)
- Specific monitoring information (visual and grab sampling).

Records of monitoring information shall include:

1. The date, exact place, time, and methods of sampling or measurements
2. The individual(s) who performed the sampling or measurements
3. The date(s) analyses were performed
4. The individual(s) who performed the analyses
5. The analytical techniques or method used
6. The results of the analyses.

The Field Data Sheets, Chain-of-Custody Forms, and the analytical results shall be maintained with the SWPCP (current data) and in the corporate environmental files.

Training records are maintained in the Port Learning Management System (LMS).

6.4.1 Reporting Requirements

A monitoring report must be submitted annually to DEQ. The monitoring report must be submitted by July 30. All monitoring data should be tabulated to permit easy review. In addition to the sampling data, a tabulated record of the visual observations is to be included. The monitoring information for the Port of Portland Terminal 2 facility shall be submitted to:

Ian Garner
DEQ Northwest Region
700 NE Multnomah St., Suite #600
Portland, OR 97232

Figure 1 Site Reference Map

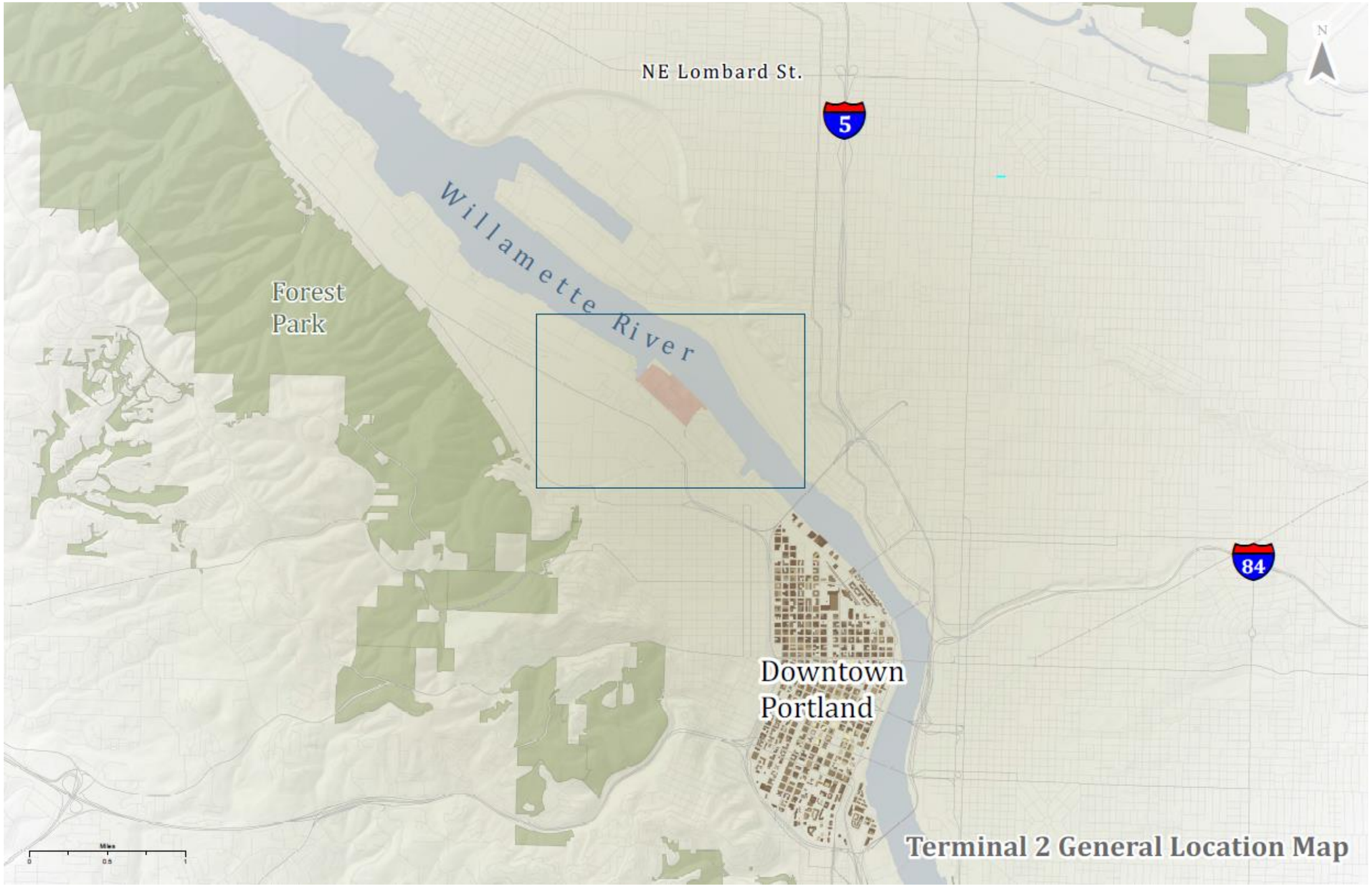
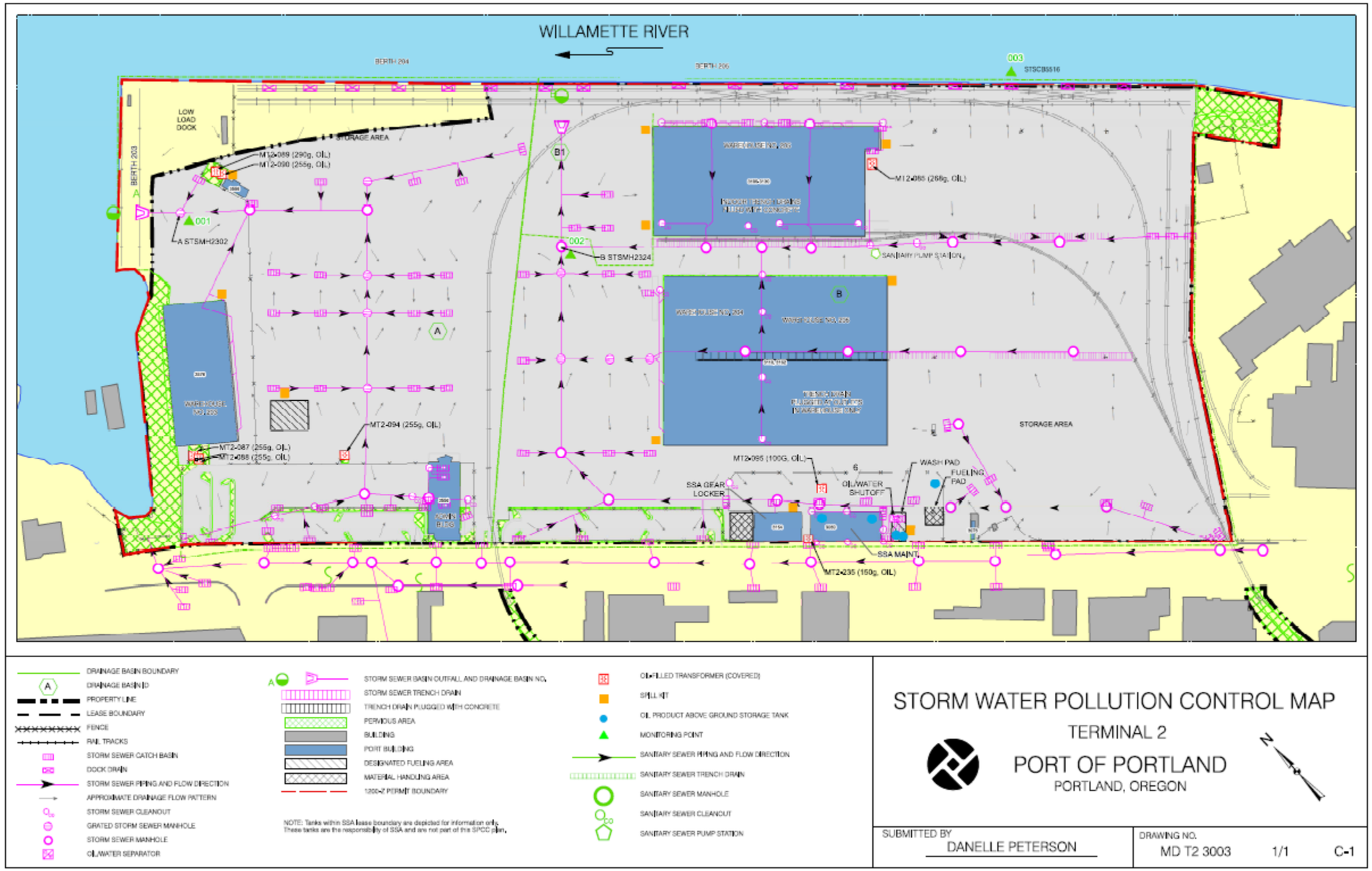


Figure 2 T2 Stormwater Pollution Control Plan Map



Appendix A

Current Copy of 1200-Z Permit

Oregon
Kate Brown, Governor

Department of Environmental Quality
Northwest Region Portland Office/Water Quality
700 NE Multnomah Street, Suite 600
Portland, OR 97232
(503) 229-5263
FAX (503) 229-6957
TTY 711

October 24, 2018

Vince Granato
Port of Portland
PO Box 3529
Portland, OR 97208-3529

RE: Reissuance NPDES Permit Number 1200-Z
File Number: 114024 EPA Number. : ORR807249
Facility: Port of Portland Terminal 2, 3556 NW Front Avenue, Portland
Multnomah County
SIC Code(s): 4491, 4013, 4225, 4231

Dear Permit Registrant:

The Oregon Department of Environmental Quality has reissued the August 1, 2017, 1200-Z industrial stormwater general permit upon reconsideration. You will find a revised monitoring requirements table based on the settlement terms. This change does not impact monitoring waiver approvals or your Tier II evaluation year. The monitoring year still extends from July 1 to June 30, with two distinct sampling time frames: July 1 through December 31 and January 1 through June 30.

It is your responsibility to take all necessary steps to comply with conditions established in the permit to help protect Oregon's waterways. The October 2018 reissued permit and technical assistance materials are posted on DEQ's industrial stormwater website: https://www.oregon.gov/deq/wq/wqpermits/Pages/Stormwater-Industrial.aspx.

Included in this mailing is a summary of changes. Please print the permit from DEQ's website, read all documents carefully and replace these documents with previously received monitoring requirements table. The monitoring frequencies have increased and Discharge Monitoring Reports are now due quarterly.

Please contact Jenni Seven in DEQ's Northwestern Region office at 503-229-5886 if you have any questions about your permit requirements.

Respectfully,

Jenni Seven, WQ Permit Coordinator
Northwestern Region

Enclosure: Summary of Changes

Monitoring Requirements

You must monitor for the pollutants in the table below. If a parameter is listed more than once in the table below, you must sample according to the highest frequency and the laboratory results must meet the lowest concentration. If benchmarks are exceeded, please refer to Schedule A.10 of the permit for appropriate corrective actions.

Region	Pollutant	Statewide Benchmark	Unit	Frequency
Portland Harbor	Total Copper	0.020	mg/L	Four times per year
Portland Harbor	Total Lead	0.040	mg/L	Four times per year
Portland Harbor	Total Zinc	0.12	mg/L	Four times per year
Portland Harbor	pH	5.5-9.0	SU	Four times per year
Portland Harbor	TSS	30	mg/L	Four times per year
Portland Harbor	Total Oil & Grease	10	mg/L	Four times per year
SIC Code of Industrial Activity	**Pollutant**	**Sector Specific Benchmark[1]**	**Units**	**Frequency**
4491	Total Aluminum	0.75	mg/L	Four times per year
4491	Total Iron	1.0	mg/L	Four times per year
LLID: 1227618456580 **River Mile:** 10.1463	**Pollutant**	**Impairment Reference Concentration[2]**	**Units**	**Frequency**
Willamette River	Aldrin	0.003	mg/L	Four times per year
Willamette River	Chlordane	0.0024	mg/L	Four times per year
Willamette River	Dissolved Copper	0.012	mg/L	Four times per year
Willamette River	Cyanide	0.022	mg/L	Four times per year
Willamette River	DDT Metabolite (DDE)	0.00001	mg/L	Four times per year
Willamette River	DDT	0.0011	mg/L	Four times per year
Willamette River	Dieldrin	0.00024	mg/L	Four times per year
Willamette River	Hexachlorobenzene	0.001	mg/L	Four times per year
Willamette River	Total Iron	1.0	mg/L	Four times per year
Willamette River	Dissolved Lead	0.022	mg/L	Four times per year
Willamette River	Mercury	0.0024	mg/L	Four times per year
Willamette River	PCBs[3]	0.002	mg/L	Four times per year
Willamette River	Polynuclear Aromatic Hydrocarbons[4]	See footnote	mg/L	Four times per year
	Acenaphthene	0.095	mg/L	
	Anthracene	2.9	mg/L	
	Benz(a)anthracene	0.001	mg/L	
	Benzo(a)pyrene	0.001	mg/L	
	Benzo(b)fluoranthene 3,4	0.001	mg/L	
	Benzo(k)fluoranthene	0.001	mg/L	
	Chrysene	0.001	mg/L	
	Dibenz(a,h)anthracene	0.001	mg/L	
	Fluoranthene	0.014	mg/L	
	Fluorene	0.39	mg/L	
	Indeno(1,2,3-cd)pyrene	0.001	mg/L	
	Pyrene	0.29	mg/L	

[1] Sector-Specific Benchmarks apply to both your primary industrial activity and any co-located industrial activities.
[2] Impairment Pollutants apply to discharges to impaired waterbodies, based on the EPA-approved 303(d) list as of May 1, 2017.

[3] Total PCB based on the sum of the following aroclors: 1016, 1221, 1232, 1242, 1248, 1254 and 1260
[4] PAH impairments includes sampling for the following parameters: acenaphthene, anthracene, benzo(a) anthracene, benzo(a) pyrene, benzo(b) fluoranthene 3,4, Benzo(k) fluoranthene, chrysene, dibenz(a,h) anthracene ,fluoranthene, fluorene, indeno (1,2,3-cd) pyrene, pyrene

Tier II Evaluation Year
Tier II evaluation year for Port of Portland Terminal 2 is the 2018-2019 monitoring year.

DMR submittal Deadlines

Reporting Quarters	Months	DMR Due Dates
1st	July-September	November 15
2nd	October-December	February 15*
3rd	January-March	May 15
4th	April-June	August 15*

*Variance request may be submitted semi-annually as applicable

All monitoring results received between July 1, 2018, and Dec. 31, 2018, must be reported Feb. 15, 2019.

GENERAL PERMIT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
STORMWATER DISCHARGE GENERAL PERMIT No. 1200-Z

Department of Environmental Quality
700 NE Multnomah St., Suite #600 Portland, OR 97232
Telephone: (503) 229-5630 or 1-800-452-4011 toll free in Oregon

Issued pursuant to ORS 468B.050 and the Federal Clean Water Act

ISSUED TO:

SOURCES COVERED UNDER THIS PERMIT:

A facility that may discharge industrial stormwater to surface waters or to conveyance systems that discharge to surface waters of the state and

1. The stormwater is associated with an industrial activity identified in Table 1: Sources Covered or listed in Table 2: Additional Activities Covered; or
2. The facility is notified in writing by the Director that coverage under this permit is required for its stormwater discharges (see Note 1 below).

Note 1:

1. The Director designates the facility as requiring stormwater permit pursuant to 40 CFR §122.26(a)(9)(i)(D).
2. Facilities may apply for conditional exclusion from the requirement to obtain coverage under this permit if there is no exposure of industrial activities and materials to stormwater pursuant to 40 CFR §122.26(g); see Permit Coverage and Exclusion from Coverage.
3. The following are not eligible to obtain coverage under this permit:
    i. Construction activities; Primary Standard Industrial Classification codes 2951 and 3273, including mobile asphalt and concrete batch plants; and Standard Industrial Classification code 14, Mining and Quarrying of Nonmetallic Minerals, Except Fuels. These activities are covered under a separate general permit.
    ii. Any source that has obtained an individual NPDES permit for the discharge, unless the source is otherwise eligible for coverage under this permit and DEQ has approved the source's application for coverage under this general permit.
    iii. Any source that discharges to a sanitary sewer system and the discharge is approved by the sanitary sewer operator.

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Justin Green, Administrator
Water Quality Division

Issuance Date: August 1, 2017
Reissuance: October 22, 2018

PERMITTED ACTIVITIES

Until this permit expires, is modified or revoked, the permit registrant is authorized to construct, install, modify, or operate stormwater treatment or control facilities, and to discharge stormwater and non-stormwater discharges specifically authorized by the permit to public surface waters in conformance with all the requirements, limitations, and conditions set forth in the following schedules:

Unless specifically authorized by this permit, by regulation issued by EPA, by another NPDES permit, or by Oregon Administrative Rule, any other direct or indirect discharge to waters of the state is prohibited, including non-stormwater discharges to an underground injection control system.

Schedule F contains General Conditions that are included in all general permits issued by DEQ. Schedule E contains sector-specific federal requirements. Should conflicts arise between Schedule F or Schedule E and any other schedule of the permit, the requirements in Schedule F or Schedule E may not apply.

Table 1: Sources Covered

Types of Industrial Sources Covered Under this Permit
Facilities with the following primary Standard Industrial Classification (SIC) codes: 10 Metal Mining 12 Coal Mining 13 Oil and Gas Extraction 20 Food and Kindred Products 21 Tobacco Products 22 Textile Mill Products 23 Apparel and Other Finished Products Made From Fabrics and Similar Material 24 Lumber and Wood Products, Except Furniture (Activities with SIC 2411 Logging that are defined in 40 CFR §122.27 as silvicultural point source discharges are covered by this permit.) 25 Furniture and Fixtures 26 Paper and Allied Products 27 Printing, Publishing and Allied Industries 28 Chemicals and Allied Products Manufacturing and Refining (excluding 2874: Phosphatic Fertilizers) 29 Petroleum Refining and Related Industries (excluding 2951, covered by 1200-A) 30 Rubber and Miscellaneous Plastics Products 31 Leather and Leather Products 32 Glass, Clay, Cement, Concrete and Gypsum Products (excluding 3273, covered by 1200-A) 33 Primary Metal Industries 34 Fabricated Metal Products, Except Machinery and Transportation Equipment 35 Industrial and Commercial Machinery and Computer Equipment 36 Electronic and Other Electrical Equipment and Components, Except Computer Equipment 37 Transportation Equipment 38 Measuring, Analyzing, and Controlling Instruments; Photographic, Medical and Optical Goods; Watches and Clocks 39 Miscellaneous Manufacturing Industries 4221 Farm Product Warehousing and Storage 4222 Refrigerated Warehousing and Storage 4225 General Warehousing and Storage 5015 Motor Vehicle Parts, Used 5093 Scrap and Waste Materials
Facilities with the following primary SIC codes that have vehicle maintenance shops (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, or airport deicing operations: 40 Railroad Transportation 41 Local and Suburban Transit and Interurban Highway Passenger Transportation 42 Trucking and Courier Services, Except Air (excluding 4221, 4222, and 4225) 43 United States Postal Service 44 Water Transportation 45 Transportation by Air 5171 Petroleum Bulk Stations and Terminals, except petroleum sold via retail method.
Steam Electric Power Generation including coal handling sites
Landfills, land application sites and open dumps
Hazardous Waste Treatment, storage and disposal facilities
Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage, recycling, and reclamation of municipal or domestic sewage (including land dedicated to the disposal of sewage sludge that are located within the confines of the facility) with the design flow capacity of 1.0 mgd or more, or required to have a pretreatment program under 40 CFR §403.

In addition to the industrial sources listed in Table 1, facilities that discharge stormwater into the Columbia Slough or Portland Harbor that is exposed to any of the industrial activities listed in Table 2 below, are eligible to obtain permit coverage under the NPDES 1200-Z.

Table 2: Additional Industrial Activities Covered

Discharges to Columbia Slough and Portland Harbor
Maintenance of vehicles, machinery, equipment, and trailers (including repairs, servicing, washing, testing and painting)
Storage of vehicles, machinery, equipment (including disposal/refuse containers stored by a disposal/refuse contractor/vendor), and trailers (including rental, sales, wrecked vehicles, fleet, and general storage)
Materials storage (including raw materials; bulk fuels, chemicals, detergents, and plastic pellets; finished materials; lumber and food products; wholesale gravel, sand, and soil stockpiles; and bulk liquids other than water)
Waste handling (including recycled product storage, composting, tires, and bulk hazardous waste)
Commercial animal operations (such as kennels, race tracks, and veterinarians not covered under a Confined Animal Feeding Operation permit)
Fuel distribution and sales (including bulk stations, fuel oil dealers, manned and unmanned retail stations, fleet fueling, mobile fueling, and truck stops)
Any former activity that resulted in significant materials (as defined in Schedule D) remaining on-site

PERMIT COVERAGE AND EXCLUSION FROM COVERAGE

1. **New Discharger to Impaired Waters** (see Schedule D.3, Definitions)
   a. A new discharger to an impaired water without a Total Maximum Daily Load (TMDL), based on the EPA-approved 303(d) list (Category 5) that is in effect on May 1, 2017, for pollutant(s) must meet one of the following conditions to obtain coverage under this permit:
      i. Prevent all pollutants for which the waterbody is impaired from exposure to stormwater and document in the Stormwater Pollution Control Plan (SWPCP) procedures taken to prevent exposure on-site; or
      ii. Document in SWPCP that the pollutant(s) for which the waterbody is impaired are not present at the site; or
      iii. Provide data and other technical information that demonstrates that the discharge is not expected to cause or contribute to an exceedance of the water quality standard for which the waterbody is impaired at the point of discharge to the waterbody if the pollutant(s) for which the waterbody is impaired are likely to be present at the site and DEQ has not issued a TMDL for the pollutant(s).
   b. Prior to granting permit coverage to a new discharger to impaired waters without a TMDL, DEQ or agent will make a determination and document that one of the conditions in paragraph 1.a. has been satisfied.
   c. A new discharger that is unable to meet one of the conditions in paragraph 1.a. is ineligible for coverage under this permit; either the discharge must cease or the new discharger will be required to obtain coverage under an individual NPDES permit.
   d. A new discharger to an impaired water with a TMDL (based on the EPA-approved TMDLs as of May 1, 2017) may receive permit coverage under this permit under one of the following circumstances:
      i. The TMDL does not establish industrial stormwater wasteload allocations, the compliance with the terms and conditions of the permit is presumed consistent with the TMDL.
      ii. If the TMDL establishes industrial stormwater wasteload allocations, and if DEQ or agent determines that there are sufficient remaining wasteload allocations in the TMDL to allow for the new industrial stormwater discharge, then the new discharge may be authorized by this permit.
   e. If a new discharge to impaired waters is authorized by DEQ under this permit, DEQ or agent will establish any additional monitoring, site controls or compliance schedules as necessary.
   f. Instead of granting permit coverage to a new discharge under paragraph 1.d., DEQ may determine that coverage under an individual NPDES permit is necessary.
   g. Conditions 1.a and 1.f above do not apply if the waterbody is impaired for:
      i. Biological communities and no pollutant, including indicator or surrogate pollutants, is specified as causing the impairment; or
      ii. Temperature, hydrologic modifications, or impaired hydrology.

2. **New Application for Permit Coverage Requirements**
   a. The following conditions apply to:

i. New facility: Submit a complete application to DEQ or agent (see Schedule D.4 for description of agent) at least 60 calendar days before initiating the activity that requires permit coverage, unless DEQ or agent approved a later date.
ii. Existing facility with stormwater discharges associated with industrial activities identified in Table 1 and operating without coverage under any NPDES permit for those discharges: Immediately submit a complete application to DEQ or agent, unless DEQ or agent approved a later date.
iii. Existing facility with stormwater discharges associated with industrial activities identified in Table 2 operating without coverage under any NPDES permit for those discharges: No later than 60 calendar days from written notification by DEQ or agent that permit coverage is required, submit a complete application to DEQ or agent.
iv. Existing facility that is designated by the Director as needing a stormwater permit pursuant to 40 CFR §122.26(a)(9)(i)(D): No later than 60 calendar days of being notified by DEQ that permit coverage is required, submit a complete application to DEQ or agent.
v. Existing facility operating under permit coverage that intends to change industrial processes at the site to a new primary industrial sector: Submit a complete application to DEQ or agent at least 60 calendar days before initiating the planned change, unless DEQ or agent approved a later date.
vi. Existing facility whose stormwater discharges are authorized by an individual NPDES permit and seeks coverage under this permit: Submit a complete application to DEQ or agent and a copy of the individual NPDES permit.
vii. A complete application must include the following:
(1) Applicable permit fees;
(2) DEQ-approved application form;
(3) A determination, on a DEQ-approved form, from the local government agency with land use jurisdiction that states the use is compatible with acknowledged local land use plans and;
(4) One paper copy and one electronic pdf copy of the SWPCP.

b. Permit Coverage
i. Prior to granting the applicant coverage under this permit, DEQ will provide a 30 calendar day public review period on the applicant's SWPCP and the proposed permit assignment letter. DEQ or agent will respond in writing to any applicable public comments.
ii. DEQ will notify the applicant in writing if coverage is granted or denied. When coverage is granted, DEQ or agent will establish monitoring year and outline monitoring requirements in the permit assignment letter (see Schedule D.3, Definitions).

c. If coverage is denied or the applicant does not wish to be regulated by this permit, the applicant must apply for an individual permit in accordance with OAR 340-045-0030 or cease discharge.

3. Existing Facilities Covered Under the 1200-COLS or 1200-Z NPDES General Permits

a. To ensure uninterrupted permit coverage for industrial stormwater discharges, an owner or operator of a facility covered under the 1200-Z permit that expired on June 30, 2017, must have submitted a DEQ-approved renewal application form to DEQ or agent, by January 3, 2017, unless DEQ or agent approved a later date.

b. To ensure uninterrupted permit coverage for industrial stormwater discharges, an owner or operator of a facility covered under the 1200-COLS permit that expired on September 30, 2016, must have submitted a DEQ-approved renewal application form to DEQ or agent, by August 1, 2016, unless DEQ or agent approved a later date.
c. DEQ will notify registrants in writing if coverage is approved or denied. Renewed facilities must submit updated SWPCP to DEQ or agent by December 29, 2017, unless DEQ or agent approved a later date.
d. For Tier II corrective action requirements triggered during the second year of coverage from the 1200-COLS permit that expired on September 30, 2016 or during the second year of coverage under the 1200-Z permit that expired on June 30, 2017, permit registrants must comply with the implementation deadline in the previous permit.
e. Permit registrants for which the Tier II corrective action implementation deadline was after June 30, 2017, under the 1200-COLS permit that expired on September 30, 2016 or under the 1200-Z permit that expired on June 30, 2017, are exempt from Schedule A.11 for the parameter(s) and discharge point(s) that triggered Tier II.

4. Existing Facilities Covered Under the 1200-ZN or 1200-COLSB

a. Permit registrants for which DEQ or agent has received a renewal application, facilities will automatically be re-assigned coverage under this permit in accordance to condition 3.c.

5. Name Change or Transfer of Permit Coverage

a. For a name change or transfer of permit coverage between legal entities, the new owner or operator must submit to DEQ no later than 30 calendar days after the name change or planned transfer. A complete application must include the following:
   i. One paper copy of a DEQ-approved Name Change and/or Permit Transfer form;
   ii. One paper copy and one electronic pdf copy of an updated SWPCP; and
   iii. Applicable fee.
b. DEQ will notify the applicant in writing if the name change or transfer is approved or denied. Transfer of permit will be effective upon DEQ approval.
c. For a name change or transfer of permit coverage between legal entities where there will also be a change in an industrial process at the site to a new primary industrial sector, the owner or operator must submit a new application for coverage under this permit as required in condition 2.a.iv above.

6. "No Exposure" Conditional Exclusion from Permit Coverage

a. An owner or operator that applies for a "no exposure" conditional exclusion under 40 CFR §122.26(g) from coverage under this permit must:
   i. Protect industrial materials and activities from exposure to rain, snow, snowmelt, and runoff by using a storm resistant shelter, except as provided in the Environmental Protection Agency (EPA) Guidance Manual for Conditional Exclusion from Stormwater Permitting Based on "No Exposure" of Industrial Activities to Stormwater (EPA 833-B-00-001, June 2000) and EPA's Fact Sheet on Conditional No Exposure Exclusion for Industrial Activity (EPA 833-F-00-015, revised December 2005). Storm resistant shelters with unsealed zinc or copper roofing materials are not eligible for the "no exposure" conditional exclusion;

ii. Ensure that known significant materials from previous operations are controlled, removed or otherwise not exposed to stormwater.
iii. Complete and sign a DEQ-approved certification, that there is no stormwater exposure to industrial materials and activities from the entire facility.
iv. Submit the signed certification to DEQ or agent once every five years, beginning five years after the date of first submittal. If DEQ or agent does not comment on the "no exposure" certification within 60 calendar days, the "no exposure" conditional exclusion is deemed approved. DEQ or agent may notify the applicant in writing or by email of its approval. The owner or operator must keep a copy of the approved certification on-site.
v. Allow DEQ or agent to inspect the facility to determine compliance with the "no exposure" conditions; and
vi. If facility discharges through a municipal separate storm sewer system (MS4) submit a copy of the "no exposure" certification to the MS4 operator (for example, local municipality or district), upon their request, and allow inspection and public reporting by the MS4 operator.

b. Limitations for obtaining or maintaining the exclusion:
i. This exclusion is available on a facility-wide basis only, not for individual discharge points.
ii. If any industrial materials or activities become exposed to rain, snow, snowmelt, or runoff, the conditions for this exclusion no longer apply. In such cases, the discharge becomes subject to enforcement. Any conditionally exempt discharger who anticipates changes in circumstances must apply for and obtain permit coverage before the change of circumstances.
iii. DEQ or agent retains the authority to make a determination that the "no exposure" conditional exclusion no longer applies and require the owner or operator to obtain permit coverage.

7. Electronic Submissions

a. The applicant for coverage must submit the application and related documents in an electronic format to the initial recipient as specified below or as directed otherwise by DEQ as the National Pollutant Discharge Elimination System (NPDES) regulatory authority in Oregon according to 40 CFR 127.
b. Beginning after December 21, 2020, or when directed by DEQ, the permit registrant must submit application and related documents on DEQ-approved web-based forms including pre-approved attachments.
i. Submit any documents, including the SWPCP, not entered on the NeT format as a separate attachment in the NeT electronic tool. DEQ must pre-approve the attachment forms as an integral part of the DEQ-approved application.
ii. The permit registrant must sign and certify all electronic submissions in accordance with the requirements of Section D8 within Schedule F of this permit.
c. In accordance with 40 CFR 122.41(l)(9), DEQ will identify the initial recipient that is the designated entity for receiving electronic NPDES data. Until further notice from DEQ, EPA is the initial recipient to receive electronic submissions, and the permit registrant will use EPA's NeT for electronic reporting. DEQ will notify the permit registrant in advance of changes to the initial recipient status and use of another electronic reporting system other than NeT.

8. Authorized Non-Stormwater Discharges

a. Subject to the terms and conditions of the permit and Oregon law, the following non-stormwater discharges are authorized:
   i. Discharges from emergency or unplanned fire-fighting activities;
   ii. Fire hydrant flushing and maintenance;
   iii. Potable water, including water line flushing;
   iv. Uncontaminated condensate from air conditioners, coolers, chillers and other compressors, and from outside storage of refrigerated gases and liquids;
   v. Landscape watering and irrigation drainage;
   vi. Exterior vehicle wash water that does not use hot water or detergent; restricted to less than 8 per week;
   vii. Pavement wash water that does not use hot water, detergent or other cleaning products, no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed), and surfaces are swept before washing;
   viii. Routine external building wash down that does not use hot water, detergent or other cleaning products;
   ix. Uncontaminated ground water or spring water;
   x. Foundation or footing drains where flows are not contaminated with process materials; and
   xi. Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but not intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains).

b. Separate any piping of interior floor drains and process wastewater discharge points from the storm drainage system to prevent unpermitted discharge of pollutants to waters of the state. Discharge from floor drains to the stormwater drainage system is a violation of this permit.

c. Any other wastewater discharge or disposal, including stormwater mixed with wastewater, must be permitted in a separate permit, unless the wastewater is reused or recycled without discharge or disposal, or is discharged to the sanitary sewer with approval from the sanitary sewer system operator.

9. Limitations on Coverage

a. Pursuant to OAR 340-045-0033(10), DEQ may deny permit coverage to an applicant or revoke a permit registrant's coverage under this permit and require the owner or operator to apply for and obtain an individual permit.

b. Coverage under this permit is not available under the following circumstances:
   i. If all stormwater discharges are regulated by another NPDES permit, except a MS4 permit.
   ii. If stormwater discharges were included in a permit that has been or is in the process of denial, termination or revoked unless the source is otherwise eligible for coverage under this permit and DEQ approves the source's application to register under it and simultaneously revokes coverage under the other permit.
   iii. For a new discharger to waters designated as Outstanding Resource Waters for antidegradation purposes under 40 CFR 131.12(a)(3) and OAR 340-041-0004.

c. Any operator not seeking coverage under this general permit must apply for an individual NPDES permit in accordance with the procedures in OAR 340-045-0030.

SCHEDULE A

TECHNOLOGY BASED EFFLUENT LIMITATIONS

1. Narrative Technology-Based Effluent Limits

The permit registrant must meet the following narrative technology based effluent limits and additional sector-specific limits in Schedule E of this permit, if applicable.

a. Minimize exposure - Minimize exposure of manufacturing, processing, material storage areas, including loading and unloading, disposal, cleaning, maintenance and fixed fueling areas to rain, snow, snowmelt and runoff. To the extent technologically available and economically practicable and achievable in light of best industry practice, the permit registrant must do the following:

i. Locate materials and activities indoors or protect them with storm resistant covers if stormwater from affected areas may discharge to surface waters. Acceptable covers include, permanent structures such as roofs or buildings and temporary covers such as tarps;

ii. Use grading, berming, or curbing to divert stormwater away from these areas and prevent stormwater contamination;

iii. Store all hazardous substances (see Schedule D.3, Definitions), petroleum/oil liquids, and other chemical solid or chemical liquid materials that have potential to contaminate stormwater within berms or other secondary containment devices to prevent leaks and spills. If the use of berms or secondary containment devices is not practicable, then store such substances in areas that do not drain off-site or into the storm sewer system;

iv. Locate materials, equipment and activities in containment and diversion systems, including the storage of leaking or leak-prone vehicles and equipment awaiting maintenance, to prevent leaks and spills from contaminating stormwater;

v. Use drip pans or absorbents under or around leaking or leak-prone vehicles/equipment or store indoors. Drain fluids from equipment and vehicles prior to on-site storage or disposal;

vi. Perform all cleaning operations indoors, under cover or in bermed areas that prevent runoff and run-on and also captures overspray;

vii. Clean up spills or leaks promptly using absorbents or other effective methods to prevent discharge of pollutants and use spill/overflow protection equipment;

viii. Ensure that all wash water is managed indoors or in bermed areas, disposed into sanitary sewer or drain to a proper collection system such as a closed-loop system or vegetated area and does not discharge into the stormwater drainage system unless allowed under condition 8, authorized non-stormwater discharge.

b. Oil and Grease - Employ oil/water separators, booms, skimmers or other methods to eliminate or minimize oil and grease contamination in stormwater discharges.

c. Waste Chemicals and Material Disposal - Recycle or properly dispose of wastes to eliminate or minimize exposure of pollutants to stormwater. Cover all waste contained in bins or dumpsters where there is a potential for drainage of stormwater through the waste to prevent exposure of stormwater to these pollutants. Acceptable covers include, storage of bins or dumpsters under roofed areas or use of lids or temporary covers such as tarps.

d. Erosion and Sediment Control - Stabilize exposed areas, including areas where industrial activity has taken place in the past and significant materials remain, and contain runoff using structural and nonstructural controls to minimize erosion of soil at the site and sedimentation. Employ

erosion control methods, such as vegetating exposed areas, graveling or paving to minimize erosion of soil at the site. Employ sediment control methods, such as detention facilities, vegetated filter strips, bioswales, flow velocity dissipation devices or other permanent erosion or sediment controls to minimize sediment loads in stormwater discharges. For activities that involve land disturbance, the permit registrant must contact the local municipality to determine if there are other applicable requirements related to stormwater control.

e. Debris Control - Employ screens, booms, settling ponds, or other methods to eliminate or minimize waste, garbage and floatable debris in stormwater discharges and ensure that this debris is not discharged to receiving waters.
f. Dust Generation and Vehicle Tracking of Industrial Materials - Minimize generation of dust, off-site tracking and discharge of soil, particulates and raw, final or waste materials.
g. Housekeeping - Routinely clean all exposed areas that may contribute pollutants to stormwater with measures such as sweeping at regular intervals, litter pick-up, keeping materials orderly and labeled, prompt clean-up of spills and leaks, proper maintenance of vehicles and stowing materials in appropriate containers.
h. Spill Prevention and Response Procedure - Minimize the potential for leaks, spills and other releases that may be exposed to stormwater and develop plans that include methods for spill prevention and clean-up and notification procedures. At a minimum, the permit registrant must use spill prevention and response measures including the following:
    i. Procedures for plainly labeling containers that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur as required by local, state and federal rules;
    ii. Preventative measures, such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling;
    iii. Procedures for expeditiously stopping, containing, and cleaning up leaks, spills and other releases. Make the methods and procedures available to appropriate personnel. Employees who may cause, detect, or respond to a spill or leak must be trained in these procedures. Have the necessary clean-up material on-site and readily available; and
    iv. Procedures for notification of appropriate facility personnel, DEQ or agent, and the Oregon Emergency Response System (1-800-452-0311), when a spill may endanger health or the environment. Contact information must be in locations that are readily accessible and available.
i. Preventative Maintenance - Regularly inspect, clean, maintain, and repair all industrial equipment and systems and materials handling and storage areas that are exposed to stormwater to avoid situations that may result in leaks, spills, and other releases of pollutants discharged to receiving waters. Clean, maintain and repair all control measures, including stormwater structures, catch basins, and treatment facilities to ensure effective operation as designed and in a manner that prevents the discharge of pollution.
j. Employee Education - Develop and maintain an employee orientation and education program to inform personnel on the pertinent components and goals of this permit and the SWPCP.
    i. Training must cover:
        (1) Specific control measures used to achieve the narrative technology based effluent limits, such as spill response procedures and good housekeeping practices, and
        (2) Monitoring, inspection, reporting and documentation requirements.

ii. Permit registrant must ensure that the following personnel are trained and understand the facility's specific requirements and their responsibilities:
   (1) Personnel who are responsible for the design, installation, maintenance, or repair of controls including, pollution prevention and treatment measures;
   (2) Personnel responsible for the storage and handling of chemicals and materials that could contribute pollutants to stormwater;
   (3) Personnel who are responsible for conducting or documenting monitoring or inspections as required in Schedule B; and
   (4) Personnel who are responsible for conducting and documenting corrective actions.

iii. Education and training must be documented and must occur:
   (1) No later than 30 calendar days of hiring an employee who works in areas where stormwater is exposed to industrial activities or conducts duties related to the implementation of the SWPCP;
   (2) No later than 30 calendar days of change in duties for key personnel in Schedule A.1.j.ii; and
   (3) Annually thereafter.

iv. Education and training must be documented and include which specific employees received training. A log of training dates must kept on-site and submitted to DEQ or agent upon request.

k. Non-Stormwater Discharges - Eliminate any non-stormwater discharges not authorized by a NPDES permit (see condition 8; Permit Coverage and Exclusion from Coverage section of this permit for a list of authorized non-stormwater discharges).

2. Numeric Technology-Based Effluent Limits based on Stormwater Specific Effluent Limitations Guidelines - The permit registrant with the following industrial activities must meet the effluent limits referenced in the Table 3 below. An exceedance of the effluent limitation is a permit violation. See Schedule B.9 for corrective action requirements.

Table 3: Numeric Effluent Limit Guidelines

Regulated Activity	40 CFR Part/Subpart	Effluent Limit
Runoff from asphalt emulsion facilities (co-located SIC code only, 2951 covered under the 1200-A)	Part 443, Subpart A	See Schedule E.D.2
Runoff from material storage piles at cement manufacturing facilities	Part 411, Subpart C	See Schedule E.E.5
Runoff from hazardous waste landfills	Part 445, Subpart A	See Schedule E.K.3
Runoff from non-hazardous waste landfills	Part 445, Subpart B	See Schedule E.L.7
Runoff from coal storage piles at steam electric generating facilities	Part 423, Subpart E	See Schedule E.O.5

Regulated Activity	40 CFR Part/Subpart	Effluent Limit
Runoff containing urea from airfield pavement deicing at existing and new primary airports with 1,000 or more annual non-propeller aircraft departures	Part 449, Subpart S	See Schedule E.S.7

3. Control Measures for Technology Based Effluent Limits

a. The permit registrant must select, design, install, implement and maintain control measures, including all best management practices, (BMPs), to meet the narrative technology-based and numeric effluent limits in Schedule A.1, A.2 and Schedule E of this permit and describe these measures, maintenance schedules and frequency of housekeeping measures in the SWPCP.

b. For technology-based effluent limits that require permit registrants to minimize pollutants in the discharge, permit registrants must reduce or eliminate pollutants to the extent achievable using control measures that are technologically available and economically practicable and achievable in light of best industry practice.

c. The term "minimize" means reduce or eliminate, or both, to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practice. The term "feasible" means technologically possible and economically practicable and achievable in light of best industry practice. In selecting the appropriate control measures to meet these limits, permit registrant may consider the age of the equipment and facilities involved, the processes employed, the engineering aspects of the application of various types of control techniques, the pollutant reductions likely to be achieved, any adverse environmental or energy effects of potential measures, and the costs of achieving pollutant reductions.

d. The permit registrant must install, implement and maintain the control measures in accordance with good engineering practices and manufacturers' specifications. Justify any deviation from the manufacturer's specifications in the SWPCP.

e. DEQ or agent may require the permit registrant to take corrective actions to meet the narrative technology-based and numeric effluent limits in Schedule A.1, A.2 and Schedule E of this permit.

   i. If the permit registrant is failing to implement the control measures in the SWPCP, they must take corrective actions and implement the measures before the next storm event if practicable, unless otherwise approved by DEQ or agent.

f. If modifications to the control measures are necessary to meet the technology-based effluent limits in this permit, the permit registrant must revise the SWPCP no later than 30 calendar days from completion of the modifications, unless otherwise approved by DEQ or agent. Permit registrant must implement the corrective actions before the next storm event if practicable or no later than 60 calendar days from discovering the violation, unless DEQ or agent approved a later date.

WATER QUALITY BASED EFFLUENT LIMITATIONS

4. Water Quality Standards

a. The permit registrant must not cause or contribute to a violation of instream water quality standards as established in OAR 340-041.

b. If at any time the permit registrant becomes aware, or DEQ or agent determines, that the discharge causes or contributes to an excursion of water quality standards permit registrant must take the following corrective actions:

i. No later than 24-hours of discovering the violation:

(1) Investigate the conditions that triggered the violation; and

(2) Review the SWPCP and the selection, design, installation and implementation of control measures to ensure compliance with this permit.

ii. No later than 30 calendar days after receiving the monitoring results, submit a Water Quality Standards Corrective Action report to DEQ or agent that documents the following:

(1) The results of the investigation, including the date the violation was discovered and a brief description of the conditions that triggered the violation;

(2) Corrective actions taken or to be taken, including the date the corrective action was completed or is expected to be completed; and

(3) Document whether SWPCP revisions are necessary. If permit registrant determines that SWPCP revisions are necessary based on the corrective action review, submit a revised SWPCP to DEQ or agent with the report.

iii. Permit registrant must implement the corrective action before the next storm event, if possible, or no later than 30 calendar days after discovering the violation, whichever comes first, unless DEQ or agent approved a later date.

c. DEQ or agent may impose additional monitoring, site controls or compliance schedules on a site-specific basis, or require the permit registrant to obtain coverage under an individual permit, if information in the application, required reports, or from other sources indicates that the discharge is causing or contributing to a violation of water quality standards, either in the receiving waterbody or a downstream waterbody. If DEQ or agent determines that additional site specific requirements are necessary, DEQ or agent will require the permit registrant to revise the SWPCP. DEQ will hold a 30 calendar day public review period on the revised SWPCP.

5. Discharges to Impaired Waters

a. Existing Discharger to an Impaired Water without a TMDL for Pollutant(s) - Permit registrant that discharges to an impaired water without a TMDL, based on the EPA-approved 303(d) list (Category 5) that is in effect on May 1, 2017, for the pollutant(s) must meet Schedule A.4 and B.1.b of this permit.

b. Existing Discharger to an Impaired Water with a TMDL for Pollutant(s) - Must comply with all applicable requirements of the EPA-approved TMDL(s). If a TMDL establishes wasteload allocation(s) for industrial stormwater discharges, DEQ will list the permit registrant's requirements to comply with this condition in the permit assignment letter. If DEQ determines that additional monitoring, site controls or compliance schedules are necessary to comply with applicable TMDL wasteload allocations for industrial stormwater discharges, DEQ will include such requirements in the permit assignment letter and require a SWPCP revision. DEQ will hold a

30 calendar day public review period on the revised SWPCP. Permit registrant must meet Schedule A.4 and B.1.b of this permit.

c. New Discharger to an Impaired Water - New discharges to impaired waters authorized to discharge under this permit must implement and maintain any control measures or conditions on the site that enabled the permit registrant to become eligible for permit coverage and modify such measures or conditions as necessary pursuant to corrective action requirements in this permit. Permit registrant must meet Schedule A.4 and B.1.b of this permit.
d. For the purposes of this permit, impaired waters and approved TMDLs will be based on those in effect as of May 1, 2017.

STORMWATER POLLUTION CONTROL PLAN

6. Preparation and Implementation of SWPCP

a. The SWPCP must be prepared by a person knowledgeable in stormwater management and familiar with the facility.
b. The SWPCP must be signed and certified in accordance with 40 CFR §122.22.
c. The SWPCP must include each narrative technology-based effluent limit to eliminate or reduce the potential to contaminate stormwater and prevent any violation of instream water quality standards.
d. Permit registrants must implement the SWPCP and any revisions to the plan. Failure to implement any of the control measures or practices described in the SWPCP is a violation of this permit.
e. The SWPCP must be kept current and revised as necessary to reflect applicable changes to the site.
f. Revisions must be made in accordance with Schedule A.8.

7. Required Elements

The SWPCP, at a minimum, must include the components below and describe how the permit registrants intends to comply with the narrative technology-based effluent limit to eliminate or reduce the potential to contaminate stormwater and prevent any violation of instream water quality standards.

a. Title Page - The title page of the SWPCP must contain the following information:
   i. Plan date.
   ii. Name of the site.
   iii. Name of the site operator or owner.
   iv. The name of the person(s) preparing the SWPCP.
   v. File number and EPA permit number as indicated in permit coverage documents.
   vi. Primary SIC code and any co-located SIC codes.
   vii. Contact person(s) name, telephone number and email.
   viii. Physical address, including county, and mailing address if different.
b. Site Description - The SWPCP must contain the following information, including any applicable information required in Schedule E of the permit:
   i. Site map(s) including the following:
      (1) general location of the site in relation to surrounding properties, transportation routes, surface waters and other relevant features;

(2) drainage patterns;
(3) conveyance and discharge structures, such as piping or ditches;
(4) all discharge points assigned a unique three-digit identifying number starting with 001, 002 used for electronic reporting;
(5) outline of the drainage area for each discharge point;
(6) paved areas and buildings within each drainage area;
(7) areas used for outdoor manufacturing, treatment, storage, or disposal of significant materials;
(8) existing structural control measures for minimizing pollutants in stormwater runoff;
(9) structural features that reduce flow or minimize impervious areas;
(10) material handling and access areas;
(11) hazardous waste treatment, storage and disposal facilities;
(12) location of wells including waste injection wells, seepage pits, drywells;
(13) location of springs, wetlands and other surface waterbodies both on-site and adjacent to the site;
(14) location of groundwater wells;
(15) location and description of authorized non-stormwater discharges;
(16) exact location of monitoring points, indicating if any discharge points are "substantially similar" and not being monitored;
(17) location and description of spill prevention and cleanup materials; and
(18) locations of the following materials and activities if they are exposed to stormwater and applicable:
(A) fueling stations;
(B) vehicle and equipment maintenance cleaning areas;
(C) loading/unloading areas;
(D) locations used for the treatment, storage, or disposal of wastes;
(E) liquid storage tanks;
(F) processing and storage areas;
(G) immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility;
(H) transfer areas for substances in bulk;
(I) machinery; and
(J) locations and sources of run-on to your site from adjacent property.

ii. A description of industrial activities conducted at the site and significant materials stored, used, treated or disposed of in a manner which exposes those activities or materials to stormwater. Include in the description the methods of storage, usage, treatment or disposal.
iii. Location and description, with any available characterization data, of areas of known or discovered significant materials from previous operations.
iv. Regular business hours of operation.
v. For each area of the site where a reasonable potential exists for contributing pollutants to stormwater runoff, a description of the potential pollutant sources that could be present in stormwater discharges and if associated with a co-located SIC code.
vi. A description of control measures installed and implemented to meet the technology and water quality based requirements in Schedule A.1 –A.5 and any applicable sector-specific

requirements in Schedule E of this permit. Include a description of how the stormwater control measures address potential pollutant sources from industrial activities and significant materials on-site, spills and leaks and authorized non-stormwater discharges.

vii. A description of treatment controls or source control, including low impact development, in response to corrective action requirements and operation and maintenance procedures.

viii. An estimate of the amount of impervious surface area (including paved areas and building roofs) and the total area drained by each stormwater discharge point to be reported in area units.

ix. The name(s) of the receiving water(s) for stormwater drainage. If drainage is to a municipal storm sewer system, the name(s) of the ultimate receiving waters and the name of the municipality; and

x. The identification of each discharge point and the location(s) where stormwater monitoring will occur as required by Schedule B.2. The monitoring location must also be labeled in the SWPCP as "monitoring location." Existing discharge points excluded from monitoring must include a description of the discharge point(s) and data or analysis supporting that the discharge point(s) are substantially similar as described in Schedule B.2.c.ii of this permit.

c. Procedures and Schedules -The SWPCP must contain the following information to meet the narrative technology-based effluent limits in Schedule A.1 of this permit:

i. Spill Prevention and Response - Procedures for preventing and responding to spills and clean-up and notification procedures. Indicate who is responsible for on-site management of significant materials and include their contact information. Spills prevention plans required by other regulations may be substituted for this provision if the spill prevention plan addresses stormwater management concerns and the plan is included with the SWPCP.

(1) Indicate how spill response will be coordinated between the permit registrant and otherwise unpermitted tenants. The permit registrant is ultimately responsible for spills of tenant and appropriate response.

ii. Preventative maintenance - Procedures for conducting inspections, maintenance and repairs to prevent leaks, spills, and other releases from drums, tanks and containers exposed to stormwater and the scheduled regular pickup and disposal of waste materials. Include the schedule or frequency for maintaining all control measures and waste collection.

iii. Operation and Maintenance Plans - Include an operation and maintenance plan for active treatment systems, such as electro-coagulation, chemical flocculation, or ion-exchange. The O&M plan must include, as appropriate to the type of treatment system, items such as system schematic, manufacturer's maintenance/operation specifications, chemical use, treatment volumes and a monitoring or inspection plan and frequency. For passive treatment and low impact development control measures, include routine maintenance standards.

iv. Employee Education - The elements of the training program must include the requirements in Schedule A.1.j. Include a description of the training content and the required frequency.

8. SWPCP Revisions

a. Permit registrants must prepare SWPCP revisions in compliance with Schedule A.6; and

b. SWPCP revisions must be submitted if they are made for any of the following reasons:

i. Change in site contact(s);

ii. In response to a corrective action or inspection;

iii. Changes to the site, operations or control measures that may significantly change the nature of pollutants present in stormwater discharge; or significantly increase the pollutant(s) levels, discharge frequency, discharge volume or flow rate; and
iv. Changes to the monitoring locations or discharge points.

c. If submission of SWPCP revisions is required, permit registrant must submit the revised pages of the SWPCP and site map if applicable, to DEQ or agent no later than 30 calendar days after the completion of modification.
d. Review of the revisions by DEQ or agent prior to implementation is not required, except revision to location of monitoring locations. The proposed revisions are deemed accepted after 30 calendar days of receipt unless the permit registrant receives a response from DEQ or agent.
e. DEQ or agent may require the permit registrant to revise the SWPCP at any time. The permit registrant must submit the revisions no later than 30 calendar days from the request date, unless DEQ or agent approved a later date.
f. SWPCP revisions are not subject to public notice and comment unless revisions are in response to water quality based effluent limit requirements in Schedule A.4 and A.5 of this permit.
g. For Tier II SWPCP submittal requirements, refer to Schedule A.11.

STORMWATER DISCHARGE BENCHMARKS

9. Benchmarks

Benchmarks and reference concentrations for impairment pollutants are guideline concentrations, not numeric effluent limits. A benchmark or reference concentration exceedance, therefore, is not a permit violation. Benchmark monitoring assist the permit registrant in determining whether site controls are effectively reducing pollutant concentrations in stormwater discharged from the site.

Permit registrants must monitor for the following applicable benchmarks at all discharge points. See Schedule E of this permit for sector-specific benchmarks that apply to certain industrial sectors and co-located industrial activities.

Table 4: Statewide Benchmarks

Parameter	Units	Columbia River	Columbia Slough	Portland Harbor	Regional
Total Copper	mg/L	0.020	0.020	0.020	0.020
Total Lead	mg/L	0.040	0.060	0.040	0.015
Total Zinc	mg/L	0.12	0.24	0.12	0.12
pH	SU	5.5 – 9.0	5.5 – 8.5	5.5 – 9.0	5.5 – 9.0
TSS	mg/L	100	30	30	100
Total Oil & Grease	mg/L	10	10	10	10
E. coli	counts/100 ml	406*	406	406*	406*
BOD5	mg/L	N/A	33	N/A	N/A
Total Phosphorus	mg/L	N/A	0.16	N/A	N/A

*The benchmark for E. coli applies only to active landfills and sewage treatment plants.
N/A: Not Applicable (no benchmark or required sampling for this parameter)

CORRECTIVE ACTIONS FOR IMPAIRMENT POLLUTANT AND BENCHMARK EXCEEDANCES

10. Tier I Corrective Action Response to Exceedances of Impairment Pollutants and Benchmarks:

a. If stormwater monitoring results exceed any of the applicable statewide benchmarks in Schedule A.9 of this permit, sector-specific benchmarks in Schedule E of this permit, or reference concentrations for impairment pollutants identified in the permit assignment letter, the permit registrant must, no later than 30 calendar days after receiving the monitoring results or visual observations show signs of pollution:

i. Investigate the cause of the elevated pollutant levels, including conducting, commencing or planning for any needed pollutant source tracing activities. Develop a plan to ensure that known or discovered significant materials from previous operations are controlled, removed or otherwise not exposed.

ii. Review the SWPCP and the selection, design, installation and implementation of control measures to ensure compliance with this permit and manufacturers' specifications. Evaluate whether any previous removal or pollutant source isolation actions are complete and whether additional removal or modifications to pollutant source isolation are necessary. Evaluate any treatment measures, including if they were properly installed, maintained and implemented and whether maintenance, corrections, or modifications to treatment measures are necessary.

iii. If permit registrant determines that additional control measures or other changes are necessary based on corrective action review, revise the SWPCP and submit the revised pages of the SWPCP to DEQ or agent, including a schedule for implementing the control measures.

iv. Tier I report - Summarize the following information in a Tier I report:

(1) The results of the investigation referred to in condition 10.a.i, above.

(2) Corrective actions taken or to be taken, including date corrective action completed or expected to be completed. Where the permit registrant determines that corrective action is not necessary, provide the basis for this determination.

(3) Document whether SWPCP revisions are necessary.

v. The Tier I report must be kept on site, and a copy provided to DEQ or agent upon request. In the event of an exceedance of a reference concentration for any impairment pollutant identified in the permit assignment letter, the Tier I report must be submitted to DEQ or agent no later than 60 calendar days after receiving monitoring results.

b. Implement corrective actions before the next storm event, if possible, or no later than 30 calendar days after receiving the monitoring results, whichever comes first. If permit registrant fails to complete the corrective action within this time frame, the reasoning should be documented in the Tier 1 Report, and corrective actions must be completed as soon as practicable.

c. Permit registrants are exempt from the Tier I investigation and reporting requirements for exceedances of benchmark parameter(s) addressed by proposed Tier II corrective action requirements in Schedule A.11. The exemption applies from the end of second monitoring year through the Tier II implementation deadline only. Tier I investigation and reporting must resume once Tier II is implemented.

11. Tier II Corrective Action Response based on second year Geometric Mean Benchmark Evaluation:

a. Permit registrants must evaluate the sampling results collected during the second monitoring year of permit coverage and determine if the geometric mean of the qualifying samples collected at each monitored discharge point exceeds any applicable statewide benchmarks in Schedule A.9 of this permit. DEQ or agent will identify in the permit assignment letter the registrant's Tier II evaluation year. The permit registrant must report the geometric mean of qualifying samples in the 4th quarter Discharge Monitoring Report due on August 15 of the second monitoring year of permit coverage. Permit registrants are not required to conduct this evaluation for the benchmark parameter(s) for which DEQ or agent has granted a monitoring waiver in accordance with Schedule B.4 of this permit.

b. For the pH benchmark, Tier II corrective action requirements are triggered if 50 percent or more of qualifying samples during the first two monitoring years of permit coverage are outside of the pH benchmark range.

c. For permit registrants that received new coverage under a previous industrial stormwater general permit (that is, the 1200-COLS, 1200-COLSB or 1200-Z) on or after July 1, 2016, time spent covered under the previous permit is included in determining the second year of permit coverage and other Tier II deadlines.

d. The permit registrant must use all qualifying samples to calculate the geometric mean.

e. If fewer than four qualifying samples were collected during the second monitoring year of permit coverage, qualifying sample results from the previous monitoring year may be used to obtain four consecutive values for the Tier II calculation.

f. If the geometric mean of the qualifying sampling results for any monitored discharge point exceeds any applicable statewide benchmark in Schedule A.9 of this permit (or if 50 percent or more of any pH sampling results for any monitored discharge point are outside of the pH benchmark range), permit registrant must submit a Tier II report, a Tier II mass reduction waiver request, or a Tier II natural background waiver request, along with associated revisions of the SWPCP, to DEQ or agent no later than December 31 of the third year of permit coverage, unless a later date is approved in writing by DEQ or agent. DEQ or agent will notify permit registrant within 60 calendar days of receipt if the Tier II corrective action response is accepted or denied.

g. Tier II corrective action(s) or mass reduction action(s) must be installed and implemented no later than June 30 of the fourth monitoring year, unless DEQ or agent approved a later date in writing. If the permit registrant changes the specifics of the corrective actions before implementation, revisions must be submitted and accepted by DEQ or agent before implementation. Corrective action revisions do not change the implementation deadline.

h. No later than 30 calendar days from implementing all Tier II corrective actions or mass reduction measures, the permit registrant must submit written confirmation to DEQ or agent with the date Tier II corrective action response was implemented in accordance with the revised approved SWPCP.

i. Properly apply and size approved Tier II corrective action responses and mass reduction measures to all substantially similar discharge points.

j. <u>Tier II Report</u>

   i. The Tier II report must include a proposal for active or passive treatment. This may include a combination of source removal, control and treatment measures, with the goal of achieving

the benchmark(s) in Schedule A.9 of this permit. The report must include the rationale for the selection of the control and treatment measures, the projected reduction of pollutant concentration(s) and the schedule for implementing these measures.

ii. An Oregon registered professional engineer (PE) must design and stamp the portion of the SWPCP that addresses these control measures.

iii. At discharge points where Tier II has been implemented:
   (1) Permit registrants must take Tier I corrective actions in accordance with A.10.
   (2) Monitoring must resume at substantially similar discharge points.
   (3) Permit registrants may request a monitoring waiver if the geometric mean of four consecutive qualifying samples is equal to or below the benchmark.

k. Tier II Mass Reduction Waiver

i. A permit registrant may request a mass reduction waiver from the requirements in Schedule A.11.j above if the permit registrant implements or has implemented volume reduction measures, such as low impact development practices, that will or has resulted in reductions of the mass load of pollutants in the discharge below the mass equivalent of the applicable statewide benchmarks in Schedule A.9 of this permit.

ii. The mass reduction waiver request and the revised SWPCP must include data and analysis to support the rationale for the mass load reduction selection. Include in the waiver request a description of the measure(s), and a mass load analysis, and expected implementation date(s).

iii. An Oregon Professional Engineer (PE) or Oregon certified engineering geologist (CEG) must design and stamp the portion of the SWPCP that addresses the mass reduction measures.

iv. At discharge points at which a Tier II mass reduction waiver has been implemented:
   (1) Permit registrants must take Tier I corrective actions in accordance with A.10.
   (2) Monitoring must resume at substantially similar discharge points.
   (3) Permit registrants may request a monitoring waiver if the geometric mean of four consecutive qualifying samples is equal to or below the benchmark.

l. Tier II Natural Background Waiver

i. A permit registrant may request a natural background waiver from the requirements in Schedule A.11.j above if the benchmark exceedance(s) is attributed solely to the presence of the pollutant(s) in natural background and is not associated with industrial activities at the site (see Schedule D.3, Definitions). The Tier II natural background waiver request must include the investigation and analysis used to demonstrate that the exceedances are due only to natural background conditions and data collected by the permit registrant or others (including peer-reviewed literature studies) that describe the levels of natural background pollutants in the discharge.

12. Permit Compliance

a. Any noncompliance with any of the requirements of this permit constitutes a violation of the Clean Water Act.

b. Any corrective actions and time periods specified for remedying noncompliance with the permit do not absolve permit registrants of the initial underlying violations.

c. Where corrective action is triggered by an event that does not itself constitute a violation, such as a benchmark exceedance, there is no permit violation associated with the trigger event provided that the permit registrant takes the corrective action within the deadlines identified in this permit.

d. A new permit registrant with a new facility (that begins operation after August 1, 2017) or an existing facility (that was in operation before August 1, 2017, without a stormwater discharge permit) must implement stormwater control measures to meet new technology and water quality based requirements in Schedule A.1 – A.5, including applicable sector-specific requirements in Schedule E of this permit, no later than 90 calendar days after receiving permit coverage. Control measures that require capital improvements must be completed no later than two years after receiving permit coverage, unless DEQ or agent approved a later date.

13. Corrective Action Triggers

The permit contains many types of corrective action triggers: statewide benchmarks, sector-specific benchmarks, numeric effluent limits and impairment reference concentrations. The numeric value of the corrective action trigger for a particular pollutant is often different for different types of triggers. For a particular facility, multiple corrective action triggers may apply for a particular pollutant. When exceeding multiple applicable corrective action triggers, the permit registrant must follow the corrective actions for each trigger.

SCHEDULE B

MONITORING REQUIREMENTS

1. Pollutant Parameters

a. Benchmarks - Permit registrants must monitor for the applicable statewide benchmark pollutants identified in Schedule A.9 of this permit. Permit registrants must also monitor for benchmarks specified for applicable industrial sector(s) identified in Schedule E, for both primary industrial activity and any co-located industrial activities.

b. Impairment Pollutants

i. Permit registrants that discharge to impaired waterbodies, based on the EPA-approved 303(d) list (Category 5) that is in effect as of May 1, 2017, (see Schedule D.3, Definitions) for pollutant(s), must monitor for impairment pollutant(s) identified in the permit assignment letter for which a standard analytical method exists (see 40 CFR Part 136).

ii. Before granting coverage under this permit, DEQ or agent will identify in the permit assignment letter the impairment pollutants that the permit registrant is required to monitor and reference concentrations for these pollutants. Reference concentrations reflect the approved acute aquatic life criterion for the pollutant when applicable. If there is not an acute criterion for the pollutant, DEQ or agent will use an applicable chronic criterion. If there is not a chronic criterion for the pollutant, DEQ or agent will use an applicable human health criterion.

(1) If the pollutant for which the waterbody is impaired is suspended solids, turbidity or sediment/sedimentation, permit registrants must monitor for Total Suspended Solids (TSS).

(2) If the pollutant for which the waterbody is impaired is expressed in the form of an indicator or surrogate pollutant, permit registrants must monitor for that indicator or surrogate pollutant.

(3) No monitoring is required when a waterbody's impairment is due to one of the following:

(A) Biological communities and no pollutant, including indicator or surrogate pollutants, is specified as causing the impairment; or
(B) Temperature, hydrologic modifications, or impaired hydrology.

iii. Permit registrants must meet Schedule B.1.b.i. unless the permit registrant:
(1) Prevents all pollutants for which the waterbody is impaired from being exposed to stormwater, and documents in the SWPCP those procedures it has taken to prevent exposure on site; or
(2) Provides monitoring data demonstrating that the pollutant(s) for which the waterbody is impaired are not present in the discharge.

c. Numeric Effluent limits pursuant to Federal Effluent Limit Guidelines - Permit registrants subject to effluent limit guidelines must monitor for the parameters in Schedule A.2 of this permit at each discharge point containing the discharges from industrial activities identified in the guidelines and report the monitoring results in the Discharge Monitoring Report required by Schedule B.8.

d. Multiple Requirements - When more than one type of monitoring for the same pollutant at the same discharge point applies, the permit registrant may use a single sample to satisfy both monitoring requirements. Permit registrant must complete corrective action and reporting requirement for each parameter.

2. Sampling Procedures

a. Grab Sampling
i. For each discharge point monitored, collect a single grab sample of stormwater discharge or a series of composite samples.
ii. Composite samples may be used as an alternative to grab sampling, except when monitoring for pH, oil and grease and E. coli. Composited samples must be collected from same storm event. Registrants may not switch between grab sampling to composite sampling during a monitoring year without DEQ or agent approval.
iii. Permit registrants may use a single grab sample or composite to satisfy multiple pollutant parameter monitoring requirements (for example, required to monitor for zinc as benchmark and impairment pollutant).

b. Representative Sample
i. Samples must be representative of the discharge.
ii. Monitoring locations must be identified in the SWPCP.
iii. Stormwater discharges regulated by this permit include stormwater run-on that commingles with stormwater discharges associated with industrial activity.
iv. If discharges authorized by this permit commingle with discharges authorized under a separate NPDES permit, any required sampling of the authorized discharges must be performed at a point before they mix with other waste streams, to the extent practicable. When combined flows are unavoidable, sampling must include all permitted parameters.
v. Authorized non-stormwater discharges under condition 8 of this permit must be sampled when commingled with stormwater discharges associated with industrial activity.
vi. Stormwater flows may combine into a common on-site treatment facility.
vii. The permit registrant shall, to the extent practicable, sample stormwater associated with industrial activity as it flows off-site before it combines with stormwater, wastewater or other waste streams from another facility or mixes with any surface water.

c. Multiple Discharges - Each discharge point must be monitored unless:

i. Discharge point serves an area without exposure of stormwater to industrial activities; or
ii. Discharge point has effluent that is substantially similar to the effluent(s) of a monitored discharge point and the same BMPs are implemented and maintained at the substantially similar discharge points or drainage areas that lead to the discharge points. Substantially similar effluent(s) are discharges from drainage areas serving comparable activities where the discharges are expected to be similar in composition. The determination of substantial similarity of effluent(s) must be based on past monitoring data or an analysis supporting that the discharge points are substantially similar. The supporting data or analysis must be included in the SWPCP. This provision does not apply to discharge point(s) covered by a numeric effluent limit.

d. Timing - Monitor the discharge during the first 12 hours of the discharge event, which is a storm event or snowmelt resulting in an actual discharge from a site. If it is not practicable to collect the sample within this period, collect the sample as soon as practicable and provide documentation with the Discharge Monitoring Report why it was not practicable to take samples within the period. Permit registrant is not required to sample outside of regular business hours of operation or during unsafe conditions.
e. Sampling for pH - Approved methods for pH sampling require either measuring the pH directly in the flow, or analyzing the sample within 15 minutes of sample collection.
   i. Obtain accurate pH readings with a properly calibrated pH meter.
   ii. Permit registrant must follow manufacturers' specifications and keep meter in good working order.
   iii. pH paper may not be used for determining the precise parameters established in this permit.
f. Monitoring Frequency - Permit registrants must monitor their stormwater discharge according to the frequency described in Table 5 below unless DEQ or agent grant a monitoring waiver in writing or approve a monitoring variance.
   i. Stormwater samples must be collected at least 14 calendar days apart.
   ii. Permit registrant may collect more samples than the minimum frequency described below, but must report this additional data in the Discharge Monitoring Report. All qualifying samples must be included to establish a monitoring waiver in Schedule B.4 or to conduct the geometric mean evaluation in Schedule A.11 of this permit.
   iii. Exceedance of Numeric Effluent Limit in Schedule A.2 of this permit – Permit registrants must conduct follow-up monitoring of any pollutant that exceeds the numeric effluent limit(s) no later than 30 calendar days (or during the next storm event should none occur within 30 calendar days) of receiving the monitoring results. If the follow-up monitoring exceeds the numeric effluent limit, the permit registrant must monitor the discharge four times per year until compliance with the numeric effluent limit is achieved. Once monitoring achieves the effluent limit value, semi-annual frequency may resume.

Table 5: Monitoring Frequency

Pollutant Category	Minimum Frequency
All applicable statewide benchmarks in Schedule A.9, any applicable sector-specific benchmarks in Schedule E and any applicable impairment pollutants	Four times per year, two samples between January 1 and June 30, and two samples between July 1 and December 31
Any applicable numeric effluent limitations based upon Effluent Limitation Guidelines (see Schedule A.2. and Schedule E)	Two times per year, One sample between January 1 and June 30, and one sample between July 1 and December 31

3. Monitoring Variance

a. Permit registrants may request a monitoring variance for missed samples due to no storm events of sufficient magnitude to produce run-off during regular business hours of operation and safe conditions. For each missed sample, variance requests are due on February 15 and August 15. Report no discharge in the Discharge Monitoring Report and include supporting data and analysis demonstrating why the monitoring did not occur at the time of DMR submission. If DEQ or agent has evidence contradicting the permit registrant's no discharge claim, failure to complete the required monitoring may be a permit violation. Supporting data may include:
   i. State or federal authorities declared the year a drought year.
   ii. Demonstration that rainfall in the area where the permit registrant's facility is located was 20 percent or more below the three-year average rainfall for that area.
   iii. Photo documentation, rain gauge data, detention basin storage volumes, storm infiltration rate or retention capacity.

4. Monitoring Waiver for Benchmark and Impairment Pollutant Monitoring

a. A monitoring waiver may be requested from DEQ or agent in the following circumstances:
   i. When the benchmark or impairment reference concentration has been achieved, as demonstrated by:
      (1) The geometric mean of four consecutive qualifying samples is equal to or below the impairment reference concentration, applicable statewide or sector-specific benchmarks.
      (2) pH results are within the range for four consecutive qualifying readings.
      (3) For Tier II parameters and discharge points once the corrective action has been implemented, and the geometric mean of four consecutive qualifying samples is equal to or below the applicable statewide benchmark, or pH results are within the range for four consecutive readings.
   ii. If the exceedance(s) is attributed solely to the presence of the pollutant(s) in natural background and is not associated with industrial activities at the site. Permit registrant may submit a natural background waiver report to DEQ or agent that describes the investigation and analysis to demonstrate that the exceedances are due to natural background conditions and includes any data collected by the permit registrant or others (including peer-review literature studies) that describe the levels of natural background pollutants in the discharge.

iii. If a facility is inactive and unstaffed and no industrial materials or activities are exposed to stormwater, the permit registrant is not required to conduct monitoring for the remainder of the permit term.
(1) Permit registrant must provide documentation with the Discharge Monitoring Report indicating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to stormwater, in accordance with the substantive requirements in 40 CFR 122.26(g)(4)(iii).
(2) Sign and certify the statement in accordance with D8 in Schedule F of this permit.

b. The permit registrant's request must include documentation to support the request. Monitoring waivers may be allowed for individual parameters and separate discharge points.
c. If the facility has triggered Tier II during this permit term, permit registrants are ineligible for monitoring waivers at all discharge points and parameters that exceeded the geometric mean in Schedule A.11. The ineligibility applies to the end of second monitoring year through Tier II implementation date.
d. DEQ or agent will notify the permit registrant in writing if a monitoring waiver is approved or denied. Until written approval of the monitoring waiver is received, the permit registrant must continue monitoring.
e. Monitoring waivers are valid for the remainder of the permit term. Upon renewal into a subsequent permit, permit registrants must reinstate all monitoring, and re-establish the basis for all monitoring waivers.
f. There is no reduction in monitoring allowed for:
i. Visual observations, unless the site is inactive or unstaffed and there are no industrial materials or activities exposed to stormwater and permit registrant meets requirements in Schedule B.4.a.iii of this permit.
ii. Monitoring for federal numeric effluent limit guidelines.
g. Reinstatement of Monitoring
i. It is the responsibility of the permit registrant to reinstate discharge monitoring under the following circumstances or if notified by DEQ or agent:
(1) Prior monitoring used to establish the monitoring waiver was improper or sampling results were incorrect;
(2) Changes to site conditions are likely to affect stormwater discharge characteristics, such as change in SIC code, process change or increased pollutants sources exposed to stormwater;
(3) Additional monitoring occurs and the sampling results exceed benchmark(s) or impairment reference concentration(s); or
(4) For inactive or unstaffed sites, the facility becomes active or staffed, or industrial materials or activities become exposed to stormwater.
h. Revocation of Monitoring Waiver
DEQ or agent may revoke the monitoring waiver based on any of the above conditions or in response to an inspection or corrective action. In this event, DEQ or agent will notify the permit registrant in writing that the monitoring waiver is revoked.

5. Additional Monitoring- DEQ may notify permit registrants in writing of additional discharge monitoring requirements. Any such notice will state the reasons for the monitoring, locations and

pollutants to be monitored, frequency and period of monitoring, sample types and reporting requirements.

6. **For new permit registrants discharging to Clackamas River, McKenzie River above Hayden Bridge (River Mile 15), North Santiam River or North Fork Smith River subbasin** under OAR 340-041-0350 (For potential or existing dischargers that did not have a permit prior to January 28, 1994, and existing dischargers that have a NPDES stormwater discharge permit but request an increased load limitation.)
   a. No later than 180 calendar days after obtaining permit coverage, permit registrant must submit to DEQ a monitoring and water quality evaluation program. This program must be effective in evaluating the in-stream impacts of the discharge as required by OAR 340-041-0350.
   b. No later than 30 calendar days from DEQ approval, the permit registrant must implement the monitoring and water quality evaluation program.

INSPECTIONS

7. **Permit registrant must meet the following monthly inspection requirements:**
   a. Inspect areas where industrial materials or activities are exposed to stormwater and areas where stormwater control measures, structures, catch basins, and treatment facilities are located. Inspections must include all discharge points and the following areas:
      i. Industrial materials, residue, or trash that may have or could come into contact with stormwater;
      ii. Leaks or spills from industrial equipment, drums, tanks, and other containers;
      iii. Offsite and internal tracking of industrial or waste materials, or sediment where vehicles enter or exit the site;
      iv. Tracking or blowing of raw, final, or waste materials that results in exposure of stormwater falling on the site;
      v. Evidence of, or the potential for, pollutants entering the drainage system;
      vi. Evidence of pollutants discharging to receiving waters at all discharge point(s);
      vii. Visual observation for the presence of floating, suspended or settleable solids, color, odor, foam, visible oil sheen, or other obvious indicators of pollution in the stormwater discharge at all discharge point(s), including discharge points that have been authorized to be substantially similar in accordance with Schedule B.2.c.ii; and
      viii. Stormwater control measures, including treatment, to ensure they are functioning properly.
   b. Conduct all inspections by personnel that have completed employee training and are familiar with aspects of the SWPCP.
   c. Conduct and document visual inspections at the site on a monthly basis when the facility is in operation. Visual observations above must be conducted during a discharge event if one occurs during the month, regardless whether the monthly site inspection has already occurred.
   d. For exceptionally large facilities where monthly inspections of all areas or visual observation at all substantially similar discharge points are infeasible, DEQ or agent may approve in writing a modified inspection frequency.
   e. Conduct visual observations during regular business hours of operation and safe conditions.

f. Document the following in an inspection report that is retained on-site and submitted to DEQ or agent upon request:
   i. The inspection date and time;
   ii. The name(s) of inspector(s);
   iii. Control measures and treatment facilities needing cleaning, replacement, maintenance, reconditioning or repair;
   iv. The condition of the drainage and conveyance system and need for maintenance;
   v. Previously unidentified sources of pollutants;
   vi. Stormwater discharge visual observations, a Tier I report is required if visual observation shows evidence of stormwater pollution as indicated condition Schedule B.7.a.vii.;
   vii. Nature of the discharge; whether snow or rain; and
   viii. Any corrective action, source control or maintenance taken or scheduled to remedy problems found.

REPORTING AND RECORDKEEPING REQUIREMENTS

8. Reporting Monitoring Data

a. Paper Submissions
   i. Permit registrant must submit all monitoring results required in this permit via DEQ-approved Discharge Monitoring Report (DMR) forms until directed by DEQ to do otherwise.
      (1) DMRs are due quarterly as outlined in Table 6 for samples taken during the preceding calendar quarter.
      (2) Reports must include laboratory results from the testing laboratory, including minimum detection level, Quality Assurance/Quality Control and analytical methods for the parameters analyzed.
      (3) Submit pH field notes and chain of custody.
      (4) Report non-detections as directed by DEQ. In calculating the geometric mean, use one-half of the detection level for non-detections.
      (5) Report all sample results from discharge points.
      (6) The permit registrant must sign and certify submittals of Discharge Monitoring Reports, any additional reports, and other information in accordance with the requirements of Section D8 within Schedule F of this permit.
   ii. Until directed by DEQ to begin electronic submission, paper DMR forms must be received by the due dates in Table 6, regardless of whether semi-annual monitoring has been satisfied in the 1st or 3rd quarter.
   iii. All monitoring results received between July 1, 2018, and December 31, 2018, must be reported in the 2nd quarter DMR, February 2019.
   iv. Permit registrant must report Tier II geometric mean benchmark evaluation on the 4th quarter DMR after the second monitoring year of permit coverage.

Table 6: DMR Submission Deadlines

Reporting Quarters	Months	DMR Due Dates
1st	July-September	November 15
2nd	October-December	February 15*
3rd	January-March	May 15
4th	April-June	August 15*

*Variance request may be submitted semi-annually as applicable

b. Electronic Submission
   i. Permit registrant must submit the sampling and analysis results and other required information of Schedule B in an electronic format to the initial recipient as specified below or as directed otherwise by DEQ as the NPDES regulatory authority in Oregon according to 40 CFR 127.
   ii. When directed by DEQ, the permit registrant must submit monitoring results and other information required by this permit on DEQ-approved web-based Discharge Monitoring Report forms including pre-approved attachments.
   iii. The permit registrant must report monitoring requirements listed in Schedule B of this permit via NetDMR when directed by DEQ. Submit laboratory results from the testing laboratory and other required reporting not entered on the NetDMR form via NetDMR as a separate attachment.
      (1) The permit registrant must submit a Discharge Monitoring Report to DEQ or agent as outlined in Table 6. Report the sampling results for the previous monitoring year and include the laboratory results from the testing laboratory, including minimum detection level, QA/QC and analytical methods for the parameters analyzed.
      (2) Submit pH field notes and chain of custody.
      (3) Report non-detections as directed by DEQ. In calculating the geometric mean, use one-half of the detection level for non-detections.
      (4) Report all sample results from discharge points.
      (5) The permit registrant must sign and certify submittals of Discharge Monitoring Reports, any additional reports, and other information in accordance with the requirements of Section D8 within Schedule F of this permit.
   iv. In accordance with 40 CFR 122.41(l)(9), DEQ will identify the initial recipient that is the designated entity for receiving electronic NPDES data. Until further notice from DEQ, EPA is the initial recipient to receive electronic submissions, and the permit registrant will use EPA's NetDMR for electronic reporting of Discharge Monitoring Report information. DEQ will notify the permit registrant in advance of changes to the initial recipient status and use of another electronic reporting system other than NetDMR.

9. Exceedance Report for Numeric Effluent Limits - If follow-up monitoring pursuant to Schedule B.2.f.iii of this permit exceeds a numeric effluent limit, permit registrant must submit an Exceedance

Report to DEQ or agent no later than 30 calendar days after receiving the monitoring results. The report must include the monitoring data from this monitoring event and the preceding monitoring event(s), an explanation of the situation, and what the permit registrant has done to correct the violation or intends to do if the corrective actions are not complete.

10. **Record Keeping Procedures -**Permit registrant must record and maintain at the facility the following information. All records must be retained by the permit registrant for at least three years and made available to DEQ, agent or local municipality upon request.
    a. A copy of the SWPCP and any revisions, including revised stamped SWPCP from Tier II corrective action;
    b. A copy of this permit;
    c. Permit assignment letter and coverage documents from DEQ for the current permit term;
    d. Documentation of maintenance and repairs of control measures and treatment systems;
    e. Tier I reports;
    f. All inspection reports;
    g. Documentation of any benchmark exceedance and corrective action taken;
    h. All copies of any reports or corrective action submitted to DEQ or agent;
    i. Spills or leaks of significant materials (See Schedule D.3, Definitions) that impacted or had the potential to impact stormwater or surface waters. Include the corrective actions to clean up the spill or leak as well as measures to prevent future problems of the same nature;
    j. Documentation to support your claim that your facility has changed its status from active to inactive and unstaffed with respect to the requirements to conduct routine facility inspections;
    k. Discharge Monitoring Reports, laboratory reports and field sampling notes; and
    l. Employee education materials and records of training.

11. Summary of Reporting Requirements and Submittal Date.

Table 7: Reporting

Permit Condition	Permit Schedule	Report Required	Due Date
Must not cause or contribute to a violation of instream water quality standard	Schedule A.4	Water Quality Standards Corrective Action Report	No later than 30 calendar days after receiving monitoring results
SWPCP submission	Schedule A.8	SWPCP revision	No later than 30 calendar days after the completion of modification
Sample results exceed applicable statewide or sector-specific benchmarks	Schedule A.10	Tier I Report*	No later than 30 calendar days after receiving monitoring results; Retain on-site and submit upon request
Sample results exceed applicable impairment reference concentrations	Schedule A.10.a.v	Tier I report	No later than 60 calendar days after receiving monitoring results
Second year geometric mean exceeds benchmarks	Schedule A.11	Tier II Report Tier II Mass Reduction Waiver Tier II Natural Background Waiver	No later than December 31 of third monitoring year of coverage
Written confirmation of Tier II implementation	Schedule A.11	Email or letter confirming Tier II proposal installation	No later than 30 calendar days of implementation
Sample results continue to exceed benchmark for Tier II parameters post implementation	Schedule A.11.j.iii	Tier I Report*	No later than 30 calendar days after receiving monitoring results; Retain on-site and submit upon request
Sample results exceed numeric effluent limits	Schedule B.9	Exceedance Report	No later than 30 calendar days after receiving monitoring results
Submission of monitoring results after the preceding calendar quarter	Schedule B.8	Discharge Monitoring Report	No later than February 15, May 15, August 15, and November 15

***Do not submit Tier I report for exceedance of statewide or sector-specific benchmarks unless requested by DEQ or agent**

SCHEDULE D

SPECIAL CONDITIONS

1. **Releases in Excess of Reportable Quantities.** This permit does not relieve the permit registrant of the reporting requirements of 40 CFR §117 Determination of Reportable Quantities for Hazardous Substances and 40 CFR §302 Designation, Reportable Quantities, and Notification.

2. **Availability of SWPCP and Monitoring Data.** The Stormwater Pollution Control Plan and stormwater monitoring data must be made available to government agencies responsible for stormwater management in the permit registrant's area.

3. **Definitions**
   For the purpose of this permit:
   a. Arid areas means portion of the state where annual precipitation averages range from 0 to 10 inches.
   b. Capital Improvements means the following improvements that require capital expenditures:
      i. Removal or permanent isolation from exposure to stormwater of significant materials left from previous activities on the site.
      ii. Treatment best management practices including to settling basins, oil/water separation equipment, grassy swales, detention/retention basins, and media filtration devices.
      iii. Manufacturing modifications that incur capital expenditures, including process changes for reduction of pollutants or wastes at the source.
      iv. Concrete pads, dikes and conveyance or pumping systems utilized for collection and transfer of stormwater to treatment systems.
      v. Roofs and appropriate covers for manufacturing areas.
      vi. Volume reduction measures, including low impact development control measures.
   c. Best management practices ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of "waters of the United States." BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. See 40 CFR 122.2.
   d. Co-located Industrial Activities means any industrial activities, excluding the primary industrial activity(ies), located on-site that are defined by the stormwater regulations at 122.26(b)(14)(i - ix, xi) and identified in Table 1: Sources Covered of the permit. An activity at a facility is not considered co-located if the activity, when considered separately, does not meet the description of a category of industrial activity covered by the stormwater regulations or identified in Table 1.
   e. Columbia Slough means the waterway in northern Multnomah County flowing roughly parallel to the Columbia River between Fairview Lake and the Willamette River. *Confirm discharges to Columbia Slough by contacting the cities of Portland or Gresham.*
   f. Control Measure means any Best Management Practice or other method used to prevent or reduce the discharge of pollutants to waters of the state.

g. Discharge Point means the location where collected and concentrated stormwater flows discharge from the facility such that the first receiving waterbody into which the discharge flows, either directly or through a separate storm sewer system, is a waters of the state.
h. Existing Discharger means an operator applying for coverage under this permit for discharges authorized previously under an NPDES general or individual permit.
i. Feasible means technologically possible and economically practicable and achievable in light of best industry practices.
j. Hazardous Substances is defined in 40 CFR §302 Designation, Reportable Quantities, and Notification.
k. High Quality Waters means those waters that meet or exceed levels that are necessary to support the propagation of fish, shellfish, and wildlife; recreation in and on the water; and other designated beneficial. Waters identified on the 303(d) (Category 5) list as not meeting applicable state water quality standards for a given pollutant are not high quality waters.
l. Impaired Waters means those waters identified by a State or EPA pursuant to Section 303(d) (Category 5) of the Clean Water Act as not meeting applicable State water quality standards for one or more pollutants. This may include both waters with approved TMDLs (Category 4), and those for which a TMDL has not yet been approved.
m. Industrial Activity means the categories of industrial activities included in the definition of "stormwater discharges associated with industrial activity" as defined in 40 CFR 122.26(b)(14)(i)-(ix) and (xi) or activities identified by DEQ as a significant contributor of pollutants, such as Table 2.
n. Industrial Stormwater means stormwater discharge associated with industrial activity (40 CFR 122.26(b)(14)).
o. Material Handling Activities include the storage, loading and unloading, transportation or conveyance of raw material, intermediate product, finished product, by-product or waste product.
p. Minimize means reduce or eliminate, or both, to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practice.
q. Monitoring year is from July 1 of one year to June 30 of the following year (for example, the 2017/2018 monitoring year is from July 1, 2017, through June 30, 2018).
r. Natural background pollutants include substances that are naturally occurring in soils or groundwater. Natural background pollutants do not include legacy pollutants from earlier activity on the site, or pollutants in run-on from neighboring sources that are not naturally occurring.
s. New Discharger means a facility from which there is or may be a discharge, that did not commence the discharge of pollutants at a particular site prior to August 13, 1979, which is not a new source, and which has never received a finally effective NPDES permit for discharges at that site. See 40 CFR 122.2.
t. New Source means any building, structure, facility, or installation from which there is or may be a "discharge of pollutants," the construction of which commenced: after promulgation of standards of performance under section 306 of the CWA which are applicable to such source, or after proposal of standards of performance in accordance with section 306 of the CWA which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal. See 40 CFR 122.2.

u. No Exposure means all industrial materials or activities are protected by a storm-resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. See 40 CFR 122.26(g).
v. Operator means any entity with a stormwater discharge associated with industrial activity that meets either of the following two criteria:
    i. The entity has operational control over industrial activities, including the ability to modify those activities; or
    ii. The entity has day-to-day operational control of activities at a facility necessary to ensure compliance with this permit (e.g., the entity is authorized to direct workers at a facility to carry out activities required by this permit).
w. Outstanding Resource Waters means those waters designated by the Environmental Quality Commission where existing high quality waters constitute an outstanding state or national resource based on their extraordinary water quality or ecological values or where special water quality protection is needed to maintain critical habitat areas.
x. Permit Assignment Letter means a document sent by DEQ when coverage is granted or renewed that establishes registrant's monitoring year, sampling requirements, pollutant concentrations and monitoring frequency based on applicants' site information. Monitoring parameters include applicable statewide benchmarks, sector-specific benchmarks (primary and co-located), impairment reference concentrations and numeric effluent limits. This document may contain additional site-specific requirements.
y. Portland Harbor means the study area of EPA's Portland Harbor Superfund site located in the Lower Willamette River from approximately river mile 1.9 to 11.8.
z. Primary industrial activity means any activities performed on-site that are (1) identified by the facility's primary SIC code; or (2) included in the narrative descriptions of 122.26(b)(14)(i), (iv), (v), or (vii), and (ix). Narrative descriptions in 40 CFR 122.26(b)(14) identified above include: (i) activities subject to stormwater effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards; (iv) hazardous waste treatment storage, or disposal facilities including those that are operating under interim status or a permit under subtitle C of the Resource Conservation and Recovery Act (RCRA); (v) landfills, land application-sites and open dumps that receive or have received industrial wastes; (vii) steam electric power generating facilities; and (ix) sewage treatment works with a design flow of 1.0 mgd or more.
aa. Qualifying samples are samples that are collected at least 14 calendar days apart, are analyzed using approved methods (see Schedule F), and satisfy the Quality Assurance/Quality Control requirements of the method.
bb. Regular business hours of operation means those time frames when the facility is engaged in its primary production process, with personnel that have completed the required SWPCP training.
cc. Run-on sources of stormwater means stormwater that drains from land located upslope or upstream from the regulated facility.
dd. Semi-arid areas means where annual rainfall averages range from 10 to 20 inches.
ee. Significant Materials includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical that a facility is required to report pursuant to section 313 of title III of SARA; fertilizers; pesticides; and waste products such as ash, slag, and sludge that have the potential to be released with stormwater discharges.

ff. Stormwater means stormwater runoff, snow melt runoff and surface runoff drainage. See 40 CFR 122.26(b)(13).

gg. Stormwater associated with industrial activity (40 CFR 122.26(b)(14)), means the discharge from any conveyance that is used for collecting and conveying stormwater and that is directly related to:

i. Industrial plant yards;
ii. Immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility;
iii. Material handling sites (Material handling activities include the storage, loading and unloading, transportation or conveyance of raw material, intermediate product, finished product, by-product or waste product.);
iv. Refuse sites;
v. Sites used for the application or disposal of process waste waters (as defined in 40 CFR part401);
vi. Sites used for storage or maintenance of material handling equipment;
vii. Sites used for residual treatment, storage, or disposal; shipping and receiving areas;
viii. Manufacturing buildings;
ix. Storage areas (including tank farms) for raw materials, and intermediate and finished products;
x. Areas where industrial activity has taken place in the past and significant materials remain and are exposed to stormwater. Significant materials include, but are not limited to: raw materials storage; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical that a facility is required to report pursuant to section 313 of title III of SARA; fertilizers; pesticides; and waste products such as ash, slag, and sludge that have the potential to be released with stormwater discharges; or
xi. Stormwater run-on that commingles with stormwater discharges associated with industrial activity at the facility.
xii. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with stormwater drained from the above described areas.

hh. Stormwater Conveyance means a sewer, ditch, or swale that is designed to carry stormwater; a stormwater conveyance may also be referred to as a storm drain or storm sewer.

ii. Total Maximum Daily Load (TMDL) is the sum of the individual Waste Load Allocations (WLAs) for point sources and Load Allocations (LAs) for nonpoint sources and background. See OAR 340-041-0002(65) and OAR 340-042-0030(15).

jj. Treatment Measures mean Best Management Practices that are intended to remove pollutants from stormwater. These measures include: settling basins, oil/water separation equipment, detention/retention basins, media filtration devices, electrocoagulation, constructed wetlands and bioswales.

kk. Wasteload Allocation (WLA) means the portion of receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution. WLAs constitute a type of water quality-based effluent limitation. See OAR 340-041-0002(67).

4. Local Public Agencies Acting as DEQ's Agent

DEQ has authorized certain local governments and special districts to act as its agent in implementing portions of this permit. The agent conducts the following activities, including: application and SWPCP review, inspections, monitoring data review, stormwater and wastewater monitoring, and verification and approval of no-exposure certifications. Where DEQ has entered into such an agreement, DEQ or agent will notify the permit registrant of where to submit no-exposure certifications, and other notifications or correspondence associated with this permit.

5. Terminating Permit Coverage

a. Registrants must meet one or more of the following conditions:
   i. Cease all industrial operations and stormwater discharge associated with industrial activity as defined in 40 CFR 122.26(b)(14);
   ii. Obtain NPDES coverage under an individual permit;
   iii. A new owner or operator legally acquires responsibility of property or industrial activity;
   iv. Conditions for termination under sector G and H have been met.

b. To terminate permit coverage, registrants must:
   i. Complete and submit a Notice of Termination to DEQ or agent for approval.
   ii. Resolve all outstanding compliance issues.

c. Until termination has been approved by DEQ, permit registrants must comply with all permit conditions.

SCHEDULE E

SECTOR-SPECIFIC REQUIREMENTS

1. Permit registrants must meet the sector-specific requirements in Schedule E associated with their primary industrial activity and any co-located industrial activities, as defined in Schedule D of this permit. The sector-specific requirements apply to the areas of the facility where the sector-specific activities occur.
2. These sector-specific requirements in Schedule E are in addition to the requirements in Schedule A and B of this permit.
3. Samples may qualify for one or more monitoring requirement; however, corrective action is based on each exceedance.
4. Table E-1 below identifies SIC codes and activities descriptions that are required to meet the sector-specific requirements in Schedule E of the permit.

Table E-1. Sectors of Industrial Activity with Description

SIC Code or Activity Code	Activity Represented
SECTOR A: TIMBER PRODUCTS	
2421	General Sawmills and Planing Mills
2411	Logging
2426	Hardwood Dimension and Flooring Mills
2429	Special Product Sawmills, Not Elsewhere Classified
2431-2439 (except 2434, see Sector W)	Millwork, Veneer, Plywood, and Structural Wood
2448	Wood Pallets and Skids
2449	Wood Containers, Not Elsewhere Classified
2451, 2452	Wood Buildings and Mobile Homes
2491	Wood Preserving
2493	Reconstituted Wood Products
2499	Wood Products, Not Elsewhere Classified
2441	Nailed and Lock Corner Wood Boxes and Shook
SECTOR B: PAPER AND ALLIED PRODUCTS	
2631	Paperboard Mills
2611	Pulp Mills
2621	Paper Mills
2652-2657	Paperboard Containers and Boxes
2671-2679	Converted Paper and Paperboard Products, Except Containers and Boxes

Table E-1. Sectors of Industrial Activity with Description

SIC Code or Activity Code	Activity Represented
SECTOR C: CHEMICALS AND ALLIED PRODUCTS MANUFACTURING AND REFINING	
2873-2879 (excluding 2874)	Agricultural Chemicals
2812-2819	Industrial Inorganic Chemicals
2841-2844	Soaps, Detergents, and Cleaning Preparations; Perfumes, Cosmetics, and Other Toilet Preparations
2821-2824	Plastics Materials and Synthetic Resins, Synthetic Rubber, Cellulosic and Other Manmade Fibers Except Glass
2833-2836	Medicinal Chemicals and Botanical Products; Pharmaceutical Preparations; in vitro and in vivo Diagnostic Substances; and Biological Products, Except Diagnostic Substances
2851	Paints, Varnishes, Lacquers, Enamels, and Allied Products
2861-2869	Industrial Organic Chemicals
2891-2899	Miscellaneous Chemical Products
3952 (limited to list of inks and paints)	Inks and Paints, Including China Painting Enamels, India Ink, Drawing Ink, Platinum Paints for Burnt Wood or Leather Work, Paints for China Painting, Artist's Paints and Artist's Watercolors
2911	Petroleum Refining
SECTOR D: PETROLEUM REFINING AND RELATED INDUSTRIES **Asphalt Paving Mixtures and Blocks, Primary SIC code 2951, Covered by 1200-A General Permit**	
2951 (co-located SIC code only), 2952	Asphalt Paving and Roofing Materials
2992, 2999	Miscellaneous Products of Petroleum and Coal
SECTOR E: GLASS, CLAY, CEMENT, CONCRETE, AND GYPSUM PRODUCTS **Ready-Mixed Concrete, Primary SIC code 3273, Covered by 1200-A General Permit**	
3251-3259	Structural Clay Products
3261-3269	Pottery and Related Products
3271-3275 (3273 co-located SIC code only)	Concrete, Gypsum and Plaster Products
3211	Flat Glass
3221, 3229	Glass and Glassware, Pressed or Blown
3231	Glass Products Made of Purchased Glass
3241	Hydraulic Cement
3281	Cut Stone and Stone Products
3291-3299	Abrasive, Asbestos, and Miscellaneous Nonmetallic Mineral Products
SECTOR F: PRIMARY METALS	
3312-3317	Steel Works, Blast Furnaces, and Rolling and Finishing Mills
3321-3325	Iron and Steel Foundries

Table E-1. Sectors of Industrial Activity with Description

SIC Code or Activity Code	Activity Represented
3351-3357	Rolling, Drawing, and Extruding of Nonferrous Metals
3363-3369	Nonferrous Foundries (Castings)
3331-3339	Primary Smelting and Refining of Nonferrous Metals
3341	Secondary Smelting and Refining of Nonferrous Metals
3398, 3399	Miscellaneous Primary Metal Products
SECTOR G: METAL MINING (ORE MINING AND DRESSING)	
1021	Copper Ore and Mining Dressing Facilities
1011	Iron Ores
1021	Copper Ores
1031	Lead and Zinc Ores
1041, 1044	Gold and Silver Ores
1061	Ferroalloy Ores, Except Vanadium
1081	Metal Mining Services
1094, 1099	Miscellaneous Metal Ores
SECTOR H: COAL MINES AND COAL MINING-RELATED FACILITIES	
1221-1241	Coal Mines and Coal Mining-Related Facilities
SECTOR I: OIL AND GAS EXTRACTION AND REFINING	
1311	Crude Petroleum and Natural Gas
1321	Natural Gas Liquids
1381-1389	Oil and Gas Field Services
SECTOR J: MINERAL MINING AND DRESSING- Discharges Covered by 1200-A General Permit	
SECTOR K: HAZARDOUS WASTE TREATMENT, STORAGE, OR DISPOSAL FACILITIES	
HZ	Hazardous Waste Treatment, Storage, or Disposal Facilities: • Hazardous waste storage • Hazardous waste disposal • Hazardous waste facilities operating under interim status • Hazardous waste facilities operating under a permit under Subtitle C of RCRA HZ is the Activity Code for this Sector. It potentially applies to any facility regardless of SIC, in addition to these specifically related to hazardous waste: • SIC 4953 Refuse Systems (hazardous waste treatment and disposal)
SECTOR L: LANDFILLS, LAND APPLICATION SITES, AND OPEN DUMPS	

Table E-1. Sectors of Industrial Activity with Description

SIC Code or Activity Code	Activity Represented
LF	All Landfill, Land Application Sites and Open Dumps
LF	All Landfill, Land Application Sites and Open Dumps, except Municipal Solid Waste Landfill (MSWLF) Areas Closed in Accordance with 40 CFR 258.60
SECTOR M: MOTOR VEHICLE PARTS, USED	
5015	Automobile Salvage Yards
SECTOR N: SCRAP AND WASTE MATERIALS	
5093	Scrap Recycling and Waste Recycling Facilities except Source-Separated Recycling
5093	Source-separated Recycling Facility
SECTOR O: STEAM ELECTRIC GENERATING FACILITIES	
SE	Steam Electric Generating Facilities, including coal handling sites: • steam electric power generation using coal, including coal handling areas • steam electric power generation using natural gas • steam electric power generation using oil • steam electric power generation using nuclear energy • steam electric power generation using any other fuel to produce a steam source • coal pile runoff (includes effluent limitations established by 40 CFR 423) • dual fuel co-generation (i.e., steam generation using fossil fuel to augment a heat-capture generation system) SE is the Activity Code for this Sector. It may apply to any facility SIC Code, in addition to these specifically related to steam electric generation: • SIC 4911 Electric Services (fossil fuel power generation, nuclear electric power generation & other electric power generation)
SECTOR P: LAND TRANSPORTATION AND WAREHOUSING	
4011, 4013	Railroad Transportation
4111-4173	Local and Highway Passenger Transportation
4212-4215	Trucking and Courier Services, Except Air
4226, 4231	Special Warehousing and Storage, Not Otherwise Classified, Terminal and Joint Terminal Maintenance Facilities for Motor Freight Transportation
4311	United States Postal Service
5171	Petroleum Bulk Stations and Terminals

Table E-1. Sectors of Industrial Activity with Description

SIC Code or Activity Code	Activity Represented
SECTOR Q: WATER TRANSPORTATION	
4412-4499	Water Transportation Facilities
SECTOR R: SHIP AND BOAT BUILDING AND REPAIRING YARDS	
3731, 3732	Ship and Boat Building or Repairing Yards
SECTOR S: AIR TRANSPORTATION FACILITIES	
4512-4581	Air Transportation Facilities
SECTOR T: TREATMENT WORKS	
TW	Treatment Works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program under 40 CFR Part 403.
SECTOR U: FOOD AND KINDRED PRODUCTS	
2041-2048	Grain Mill Products
2074-2079	Fats and Oils Products
2011-2015	Meat Products
2021-2026	Dairy Products
2032-2038	Canned, Frozen, and Preserved Fruits, Vegetables, and Food Specialties
2051-2053	Bakery Products
2061-2068	Sugar and Confectionery Products
2082-2087	Beverages
2091-2099	Miscellaneous Food Preparations and Kindred Products
2111-2141	Tobacco Products
SECTOR V: TEXTILE MILLS, APPAREL, AND OTHER FABRIC PRODUCT MANUFACTURING; LEATHER AND LEATHER PRODUCTS	
2211-2299	Textile Mill Products
2311-2399	Apparel and Other Finished Products Made from Fabrics and Similar Materials
3131-3199	Leather and Leather Products (note: see Sector Z1 for Leather Tanning and Finishing)
SECTOR W: FURNITURE AND FIXTURES	

Table E-1. Sectors of Industrial Activity with Description

SIC Code or Activity Code	Activity Represented
2434	Wood Kitchen Cabinet and countertop Manufacturing
2511-2519	Household Furniture
2521, 2522	Office Furniture
2531	Public Building and Related Furniture
2541, 2542	Partitions, Shelving, Lockers, and Office and Store Fixtures
2591, 2599	Miscellaneous Furniture and Fixtures
SECTOR X: PRINTING AND PUBLISHING	
2711-2796	Printing, Publishing, and Allied Industries
SECTOR Y: RUBBER, MISCELLANEOUS PLASTIC PRODUCTS, AND MISCELLANEOUS MANUFACTURING INDUSTRIES	
3011	Tires and Inner Tubes
3021	Rubber and Plastics Footwear
3052, 3053	Gaskets, Packing and Sealing Devices, and Rubber and Plastic Hoses and Belting
3061, 3069	Fabricated Rubber Products, Not Elsewhere Classified
3081-3089	Miscellaneous Plastics Products
3931	Musical Instruments
3942-3949	Dolls, Toys, Games, and Sporting and Athletic Goods
3951-3955 (except 3952 – see Sector C)	Pens, Pencils, and Other Artists' Materials
3961, 3965	Costume Jewelry, Costume Novelties, Buttons, and Miscellaneous Notions, Except Precious Metal
3991-3999	Miscellaneous Manufacturing Industries
SECTOR Z: LEATHER TANNING AND FINISHING	
3111	Leather Tanning and Finishing
SECTOR AA: FABRICATED METAL PRODUCTS	
3411-3499 (except 3479)	Fabricated Metal Products, Except Machinery and Transportation Equipment, and Coating, Engraving, and Allied Services.
3911-3915	Jewelry, Silverware, and Plated Ware
3479	Fabricated Metal Coating and Engraving
SECTOR AB: TRANSPORTATION EQUIPMENT, INDUSTRIAL OR COMMERCIAL MACHINERY	
3511-3537	Engines and Turbines, Farm and Garden Machinery and Equipment, Construction, Mining and Materials Handling Machinery and Equipment
3541-3549	Metalworking Machinery and Equipment

Table E-1. Sectors of Industrial Activity with Description

SIC Code or Activity Code	Activity Represented
3552-3559	Special Industry Machinery, Except Metalworking Machinery
3561-3569	General Industrial Machinery and Equipment
3581-3599	Refrigeration and Service Industry Machinery, Miscellaneous Industrial and Commercial Machinery and Equipment
3711-3716	Motor Vehicles and Motor Vehicle Equipment
3721-3751	Aircraft and Parts, Ship and Boat Building and Repairing, Railroad Equipment, Motorcycles, Bicycles and Parts
3761-3799	Guided Missiles and Space Vehicles and Parts, Miscellaneous Transportation Equipment
SECTOR AC: ELECTRONIC, ELECTRICAL, PHOTOGRAPHIC AND OPTICAL GOODS ***No Sector-specific requirements***	
3571-3579	Computer and Office Equipment
3612-3699	Electronic and Other Electrical Equipment and Components, Except Computer Equipment
3812-3829	Measuring, Analyzing, Optical and Controlling Instruments
3841-3861	Photographic, Medical and Optical Goods
3873	Watches and Clocks

Sector A – Timber Products.
Additional Technology-Based Effluent Limits

E.A.1 *Good Housekeeping*. In areas where storage, loading and unloading, and material handling occur, perform good housekeeping to limit the discharge of wood debris, minimize the leachate generated from decaying wood materials, and minimize the generation of dust.

E.A.2 Additional SWPCP Requirements

E.A.2.1 *Drainage Area Site Map*. Document in your SWPCP where any of the following may be exposed to precipitation or surface runoff: processing areas, treatment chemical storage areas, treated wood and residue storage areas, wet decking areas, dry decking areas, untreated wood and residue storage areas, and treatment equipment storage areas.

E.A.2.2 *Inventory of Exposed Materials*. Where such information exists, if your facility has used chlorophenolic, creosote, or chromium-copper-arsenic formulations for wood surface protection or preserving, document in your SWPCP the following: areas where contaminated soils, treatment equipment, and stored materials still remain and the management practices employed to minimize the contact of these materials with stormwater runoff.

E.A.2.3 *Description of Stormwater Management Controls*. Document measures implemented to address the following activities and sources: log, lumber, and wood product storage areas; residue storage areas; loading and unloading areas; material handling areas; chemical storage areas; and equipment and vehicle maintenance, storage, and repair areas. If your facility performs wood surface protection and preservation activities, address the specific control measures, including any BMPs, for these activities.

E.A.3 Additional Inspection Requirements.

E.A.3.1. If your facility is a wood preserving facility under SIC 2491, inspect processing areas, transport areas, and treated wood storage areas monthly to assess the usefulness of practices to minimize the deposit of treatment chemicals on unprotected soils and in areas that will come in contact with stormwater discharges.

E.A.4 Sector-Specific Benchmarks

Table E.A-1 identifies benchmarks that apply to the specific subsectors of Sector A. These benchmarks apply to both your primary industrial activity and any co-located industrial activities, which describe your site activities.

Table E.A-1

Subsector (You may be subject to requirements for more than one sector/subsector)	**Parameter**	**Benchmark Monitoring Concentration**
General Sawmills and Planing Mills (SIC 2421)	Chemical Oxygen Demand (COD)	120.0 mg/L
Hardwood Dimension and Flooring Mills; Special Products Sawmills, not elsewhere classified; Millwork, Veneer, Plywood, and Structural Wood; Wood Pallets and Skids; Wood Containers, not elsewhere classified; Wood Buildings and Mobile Homes; Reconstituted Wood Products; and Wood Products Facilities not elsewhere classified (SIC 2426, 2429, 2431-2439 (except 2434), 2441, 2448, 2449, 2451, 2452, 2493, and 2499)	Chemical Oxygen Demand (COD)	120.0 mg/L
Wood Preserving (SIC 2491)	Total Arsenic	0.15 mg/L

Schedule E – Sector-Specific Requirements for Industrial Activity
Sector B – Paper and Allied Products

E.B.1 Sector-Specific Benchmarks

Table E.B-1 identifies benchmarks that apply to the specific subsectors of Sector B. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

Table E.B-1.

Subsector (You may be subject to requirements for more than one sector/subsector)	**Parameter**	**Benchmark Monitoring Concentration**
Paperboard Mills (SIC Code 2631)	Chemical Oxygen Demand (COD)	120 mg/L

Schedule E – Sector-Specific Requirements for Industrial Activity
Sector C – Chemical and Allied Products Manufacturing, and Refining

E.C.1 Sector-Specific Benchmarks

Table E.C-1 identifies benchmarks that apply to the specific subsectors of Sector C. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

Table E.C-1.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Agricultural Chemicals (SIC 2873-2879, excluding 2874)	Nitrate plus Nitrite Nitrogen	0.68 mg/L
	Total Iron	1.0 mg/L
	Phosphorus	2.0 mg/L
Industrial Inorganic Chemicals (SIC 2812-2819)	Total Aluminum	0.75 mg/ L
	Total Iron	1.0 mg/L
	Nitrate plus Nitrite Nitrogen	0.68 mg/L
Soaps, Detergents, Cosmetics, and Perfumes (SIC 2841-2844)	Nitrate plus Nitrite Nitrogen	0.68 mg/L

Schedule E – Sector-Specific Requirements for Industrial Activity
Sector D – Petroleum Refining and Related Industries

E.D.1 Limitation of Coverage

Asphalt Paving Mixtures and Blocks, Primary SIC code 2951, must apply for coverage under the 1200-A General Permit.

E.D.2 Effluent Limitations Based on Effluent Limitations Guidelines

Table E.D-1 identifies effluent limits that apply to the industrial activities described below. Compliance with these effluent limits is to be determined based on discharges from these industrial activities independent of commingling with any other wastestreams that may be covered under this permit.

Table E.D-1[1]

Industrial Activity	Parameter	Effluent Limit
Discharges from asphalt emulsion facilities. **Co-located SIC code only.**	Total Suspended Solids (TSS)	23.0 mg/L, daily maximum
		15.0 mg/L, 30-day avg.
	pH	6.0 - 9.0 s.u.
	Oil and Grease	15.0 mg/L, daily maximum
		10 mg/L, 30-day avg.

[1]Monitor semi-annually.

Schedule E – Sector-Specific Requirements for Industrial Activity
Sector E – Glass, Clay, Cement, Concrete, and Gypsum Products

E.E.1 Limitations of coverage

Ready-Mixed Concrete, primary SIC code 3273, must apply for coverage under the 1200-A General Permit.

E.E.2 Additional Technology-Based Effluent Limits

E.E.2.1 *Good Housekeeping Measures*. With good housekeeping, prevent or minimize the discharge of spilled cement, aggregate (including sand or gravel), kiln dust, fly ash, settled dust, or other significant material in stormwater from paved portions of the site that are exposed to stormwater. Consider sweeping regularly or using other equivalent measures to minimize the presence of these materials. Indicate in your SWPCP the frequency of sweeping or equivalent measures. Determine the frequency based on the amount of industrial activity occurring in the area and the frequency of precipitation, but it must be performed at least once a week if cement, aggregate, kiln dust, fly ash, or settled dust are being handled or processed. You must also prevent the exposure of fine granular solids (cement, fly ash, kiln dust, etc.) to stormwater, where practicable, by storing these materials in enclosed silos, hoppers, or buildings, or under other covering.

E.E.3 Additional SWPCP Requirements

E.E.3.1 *Drainage Area Site Map*. Document in the SWPCP the locations of the following, as applicable: bag house or other dust control device; recycle/sedimentation pond, clarifier, or other device used for the treatment of process wastewater; and the areas that drain to the treatment device.

E.E.3.1 *Discharge Testing*. For facilities producing ready-mix concrete, concrete block, brick, or similar products, include in the non-stormwater discharge testing a description of measures that ensure that process wastewaters resulting from washing trucks, mixers, transport buckets, forms, or other equipment are discharged in accordance with NPDES wastewater permit requirements or are recycled.

E.E.4 Sector-Specific Benchmarks

Table E.E-1 identifies benchmarks that apply to the specific subsectors of Sector E. These benchmarks apply to both your primary industrial activity and any co-located industrial activities, which describe your site activities.

Table E.E-1.

Subsector (You may be subject to requirements for more than one sector/subsector)	**Parameter**	**Benchmark Monitoring Concentration**
Clay Product Manufacturers (SIC 3251-3259, 3261-3269)	Total Aluminum	0.75 mg/L
Concrete and Gypsum Manufacturers (SIC 3271-3275) **3273: co-located SIC code only.**	Total Iron	1.0 mg/L

E.E.5 Effluent Limitations Based on Effluent Limitations Guidelines

Table E.E-2 identifies effluent limits that apply to the industrial activities described below. Compliance with these limits is to be determined based on discharges from these industrial activities independent of commingling with any other wastestreams that may be covered under this permit.

Table E.E-2[1]

Industrial Activity	Parameter	Effluent Limit
Discharges from material storage piles at cement manufacturing facilities(3241)	Total Suspended Solids (TSS)	50 mg/L, daily maximum
	pH	6.0 - 9.0 s.u.
[1]Monitor semi-annually.		

Schedule E – Sector-Specific Requirements for Industrial Activity
Sector F – Primary Metal

E.F.1 Additional Technology-Based Effluent Limits

E.F.1.1 *Good Housekeeping Measures*. As part of your good housekeeping program, include a cleaning and maintenance program for all impervious areas of the facility where particulate matter, dust, or debris may accumulate, especially areas where material loading and unloading, storage, handling, and processing occur; and, where practicable, the paving of areas where vehicle traffic or material storage occur but where vegetative or other stabilization methods are not practicable (institute a sweeping program in these areas too). For unstabilized areas where sweeping is not practicable, consider using stormwater management devices such as sediment traps, vegetative buffer strips, filter fabric fence, sediment filtering boom, gravel outlet protection, or other equivalent measures that effectively trap or remove sediment.

E.F.2 Additional SWPCP Requirements

E.F.2.1 *Drainage Area Site Map*. Identify in the SWPCP where any of the following activities may be exposed to precipitation or surface runoff: storage or disposal of wastes such as spent solvents and baths, sand, slag and dross; liquid storage tanks and drums; processing areas including pollution control equipment (e.g., baghouses); and storage areas of raw material such as coal, coke, scrap, sand, fluxes, refractories, or metal in any form. In addition, indicate where an accumulation of significant amounts of particulate matter could occur from such sources as furnace or oven emissions, losses from coal and coke handling operations, etc., and could result in a discharge of pollutants to waters of the United States.

E.F.2.2 *Inventory of Exposed Material*. Include in the inventory of materials handled at the site that potentially may be exposed to precipitation or runoff, areas where deposition of particulate matter from process air emissions or losses during material-handling activities are possible.

E.F.3 Additional Inspection Requirements

As part of conducting your monthly inspections address all potential sources of pollutants, including (if applicable) air pollution control equipment (e.g., baghouses, electrostatic precipitators, scrubbers, and cyclones), for any signs of degradation (e.g., leaks, corrosion, or improper operation) that could limit their efficiency and lead to excessive emissions. Consider monitoring air flow at inlets and outlets (or use equivalent measures) to check for leaks (e.g., particulate deposition) or blockage in ducts. Also inspect all process and material handling equipment (e.g., conveyors, cranes, and vehicles) for leaks, drips, or the potential loss of material; and material storage areas (e.g., piles, bins, or hoppers for storing coke, coal, scrap, or slag, as well as chemicals stored in tanks and drums) for signs of material losses due to wind or stormwater runoff.

E.F.4 Sector-Specific Benchmarks

Table E.F-1 identifies benchmarks that apply to the specific subsectors of Sector F. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

Table E.F-1.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Cutoff Concentration
Steel Works, Blast Furnaces, and Rolling and Finishing Mills (SIC 3312-3317)	Total Aluminum	0.75 mg/L
Iron and Steel Foundries (SIC 3321-3325)	Total Aluminum	0.75 mg/L
	Total Iron	1.0 mg/L

Schedule E – Sector-Specific Requirements for Industrial Activity
Sector G – Metal Mining

E.G.1 Covered Stormwater Discharges

The requirements in Sector G apply to stormwater discharges associated with industrial activity from Metal Mining facilities, including mines abandoned on Federal lands, as identified by the SIC Codes specified under types of industrial sources required to obtain coverage, Table 1. Coverage is required for metal mining facilities that discharge stormwater contaminated by contact with, or that has come into contact with, any overburden, raw material, intermediate product, finished product, byproduct, or waste product located on the site of the operation.

E.G.1.1 *Covered Discharges from Inactive Facilities.* All stormwater discharges.

E.G.1.2 *Covered Discharges from Active and Temporarily Inactive Facilities*. Only the stormwater discharges from the following areas are covered:

- Waste rock and overburden piles if composed entirely of stormwater and not combined with mine drainage;
- Topsoil piles;
- Offsite haul and access roads;
- Onsite haul and access roads constructed of waste rock, overburden or spent ore if composed entirely of stormwater and not combining with mine drainage;
- Onsite haul and access roads not constructed of waste rock, overburden or spent ore except if mine drainage is used for dust control;
- Runoff from tailings dams or dikes when not constructed of waste rock or tailings and no process fluids are present;
- Runoff from tailings dams or dikes when constructed of waste rock or tailings and no process fluids are present, if composed entirely of stormwater and not combining with mine drainage;
- Concentration building if no contact with material piles;
- Mill site if no contact with material piles;
- Office or administrative building and housing if mixed with stormwater from industrial area;
- Chemical storage area;
- Docking facility if no excessive contact with waste product that would otherwise constitute mine drainage;
- Explosive storage;
- Fuel storage;
- Vehicle and equipment maintenance area and building;
- Parking areas (if necessary);
- Power plant;
- Truck wash areas if no excessive contact with waste product that would otherwise constitute mine drainage;
- Unreclaimed, disturbed areas outside of active mining area;
- Reclaimed areas released from reclamation requirements prior to December 17, 1990;
- Partially or inadequately reclaimed areas or areas not released from reclamation requirements.

E.G.1.3 *Covered Discharges from Earth-Disturbing Activities Conducted Prior to Active Mining Activities*. All stormwater discharges.

E.G.1.4 *Covered Discharges from Facilities Undergoing Reclamation*. All stormwater discharges.

E.G.2 Limitations on Coverage

E.G.2.1 *Prohibition of Stormwater Discharges.* Stormwater discharges not authorized by this permit: discharges from active metal mining facilities that are subject to effluent limitation guidelines for the Ore Mining and Dressing Point Source Category (40 CFR Part 440).
Note: Stormwater runoff from these sources are subject to 40 CFR Part 440 if they are mixed with other discharges subject to Part 440. In this case, they are not eligible for coverage under this permit. Discharges from overburden/waste rock and overburden/waste rock-related areas are not subject to 40 CFR Part 440 unless they: (1) drain naturally (or are intentionally diverted) to a point source; and (2) combine with "mine drainage" that is otherwise regulated under the Part 440 regulations. For such sources, coverage under this permit would be available if the discharge composed entirely of stormwater does not combine with other sources of mine drainage that are not subject to 40 CFR Part 440. Operators bear the initial responsibility for determining if they are eligible for coverage under this permit, or must seek coverage under another NPDES permit.

E.G.2.2 *Prohibition of Non-Stormwater Discharges*. Not authorized by this permit: adit drainage, and contaminated springs or seeps discharging from waste rock dumps that do not directly result from precipitation events.

E.G.3 Definitions

The following definitions are not intended to supersede the definitions of active and inactive mining facilities established by 40 CFR 122.26(b)(14)(iii).

E.G.3.1 *Mining operation* – For this permit, mining operations are grouped into two distinct categories, with distinct technology based effluent limits and requirements applicable to each: a) earth-disturbing activities conducted prior to active mining activities); and b) active mining activities, which includes reclamation. "Mining operations" can occur at both inactive mining facilities and temporarily inactive mining facilities.

E.G.3.2 *Earth-disturbing activities conducted prior to active mining activities* – Consists of two classes of earth-disturbing (i.e., clearing, grading and excavation) activities:
a. activities performed for purposes of mine site preparation, including: cutting new rights of way (except when related to access road construction); providing access to a mine site for vehicles and equipment (except when related to access road construction); other earth disturbances associated with site preparation activities on any areas where active mining activities have not yet commenced (e.g., for heap leach pads, waste rock facilities, tailings impoundments, wastewater treatment plants); and
b. construction of staging areas to prepare for erecting structures such as to house project personnel and equipment, mill buildings, etc., and construction of access roads. Earth-disturbing activities associated with the construction of staging areas and the construction of access roads conducted prior to active mining are considered to be "construction" and have additional technology based effluent limits in E.G.4.2.

E.G.3.3 *Active mining activities* – Activities related to the extraction, removal or recovery, and benefication of metal ore from the earth; removal of overburden and waste rock to expose mineable minerals; and site reclamation and closure activities. All such activities occur within

the "active mining area." Reclamation involves activities undertaken, in compliance with applicable mined land reclamation requirements, to return the land to an appropriate post-mining contour and land use in order to meet applicable federal and state reclamation requirements. In addition, once earth-disturbing activities conducted prior to active mining activities have ceased and all related requirements in E.G.4 have been met, and a well-delineated "active mining area" has been established, all activities (including any clearing, grading, and excavation) that occur within the active mining area are "active mining activities."

E.G.3.4 *Active mining area* – A place where work or other activity related to the extraction, removal or recovery of metal ore is being conducted, except, with respect to surface mines, any area of land on or in which grading has been completed to return the earth to desired contour and reclamation work has begun.
Note: Earth-disturbing activities described in the definition in E.G.3.2 that occur on areas outside the active mining area (e.g., for expansion of the mine into undeveloped territory) are considered "earth-disturbing conducted prior to active mining activities", and must comply with the requirements in E.G.4

E.G.3.5 *Inactive metal mining facility* – A site or portion of a site where metal mining and/or milling occurred in the past but there are no active mining activities occurring as defined above, and where the inactive portion is not covered by an active mining permit issued by the applicable state or federal agency. An inactive metal mining facility has an identifiable owner / operator. Sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined materials and sites where minimal activities are undertaken for the sole purpose of maintaining a mining claim are not considered either active or inactive mining facilities and do not require an NPDES industrial stormwater permit.

E.G.3.6 *Temporarily inactive metal mining facility* – A site or portion of a site where metal mining and/or milling occurred in the past but currently are not being actively undertaken, and the facility is covered by an active mining permit issued by the applicable State or Federal agency.

E.G.4 Requirements Applicable to Earth-Disturbing Activities Conducted Prior to Active Mining Activities

Stormwater discharges from earth-disturbing activities conducted prior to active mining activities (defined in E.G.3.3) are covered under this permit. For such earth-disturbing activities, permit registrants do not need to comply the technology-based effluent limits or Schedule B, monitoring or inspection frequency in Schedule B or E.G.5, E.G.7 or E.G.8.

Authorized discharges from areas where earth-disturbing activities have ceased and stabilization as specified in E.G.4.1.9 or E.G.4.2.11, where appropriate, has been completed (stabilization is not required for areas where active mining activities will occur), are no longer subject to E.G.4 requirements. At such time, authorized discharges become subject to all other applicable requirements in the permit, including not need to comply the technology-based effluent limits or Schedule B, monitoring or inspection frequency in Schedule B and Sector E.G.5, E.G.7 and E.G.8.

E.G.4.1 *Technology-Based Effluent Limits Applicable to All Earth-Disturbing Activities Conducted Prior to Active Mining Activities*. The following technology-based effluent limits apply to authorized discharges from all earth-disturbing activities conducted prior to active mining activities defined in E.G.3. These limits supersede the technology-based limits listed in Schedule A.

E.G.4.1.1 *Erosion and sediment control installation requirements*.

- By the time construction activities commence, install and make operational downgradient sediment controls, unless this timeframe is infeasible. If infeasible

you must install and make such controls operational as soon as practicable or as soon as site conditions permit.

- All other stormwater controls described in the SWPCP must be installed and made operational as soon as conditions on each portion of the site allows.

E.G.4.1.2 *Erosion and sediment control maintenance requirements*. You must:

- Ensure that all erosion and sediment controls remain in effective operating condition.
- Wherever you determine that a stormwater control needs maintenance to continue operating effectively, initiate efforts to fix the problem immediately after its discovery, and complete such work by the end of the next work day.
- When a stormwater control must be replaced or significantly repaired, complete the work within 7 days, unless infeasible. If 7 days is infeasible, you must complete the installation or repair as soon practicable.

E.G.4.1.3 *Perimeter controls*. You must:

- Install sediment controls along those perimeter areas of your disturbed area that will receive stormwater, except where site conditions prevent the use of such controls (in which case, maximize their installation to the extent practicable).
- Remove sediment before it accumulates to one-half of the above-ground height of any perimeter control.

E.G.4.1.4 *Sediment track-out*. For construction vehicles and equipment exiting the site directly onto paved roads, you must:

- Install sediment controls along those perimeter areas of your disturbed area that will receive stormwater, except where site conditions prevent the use of such controls (in which case, maximize their installation to the extent practicable).
- Remove sediment before it accumulates to one-half of the above-ground height of any perimeter control.
- Note: DEQ recognizes that some fine grains may remain visible on the surfaces of off-site streets, other paved areas, and sidewalks even after you have implemented sediment removal practices. Such "staining" is not a violation of E.G.4.1.4.

E.G.4.1.5 *Soil or sediment stockpiles*. You must:

- Minimize erosion of stockpiles from stormwater and wind via temporary cover, if feasible.
- Prevent up-slope stormwater flows from causing erosion of stockpiles (e.g., by diverting flows around the stockpile).
- Minimize sediment from stormwater that runs off of stockpiles, using sediment controls (e.g., a sediment barrier or downslope sediment control).

E.G.4.1.6 *Sediment basins*. If you intend to install a sediment basin to treat stormwater from your earth-disturbing activities, you must:

- Provide storage for either (1) the 2-year, 24-hour storm, or (2) 3,600 cubic feet per acre drained.
- Prevent erosion of (1) basin embankments using stabilization controls (e.g., erosion control blankets), and (2) the inlet and outlet points of the basin using erosion controls and velocity dissipation devices.

E.G.4.1.7 *Minimize dust*. You must minimize the generation of dust through the appropriate application of water or other dust suppression techniques that minimize pollutants being discharged into surface waters.

E.G.4.1.8 *Restrictions on use of treatment chemicals*. If you intend to use sediment treatment chemicals at your site, you are subject to the following minimum requirements:

- Use conventional erosion and sediment controls prior to and after application of chemicals;
- Select chemicals suited to soil type, and expected turbidity, pH, flow rate;
- Minimize the discharge risk from stored chemicals;
- Comply with state/local requirements;
- Use chemicals in accordance with good engineering practices and specifications of chemical supplier;
- Ensure proper training;
- Provide proper SWPCP documentation.

If you plan to use cationic treatment chemicals, you are ineligible for coverage under this permit, unless you notify your applicable DEQ regional office or agent in advance and receive authorization under this permit after you have included appropriate controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards.

E.G.4.1.9 *Site stabilization requirements for earth-disturbing activities performed for purposes of mine site preparation as defined in E.G.3.2(a) (i.e., not applicable to construction of staging areas for structures and access roads as defined in E.G.3.2(b)).* You must comply with the following stabilization requirements except where the intended function of the site accounts for such disturbed earth (e.g., the earth disturbances will become actively mined, or the controls implemented at the active mining area effectively control the disturbance) (although you are encouraged to do so within the active mining area, where appropriate):

- *Temporary stabilization of disturbed areas*. Stabilization measures must be initiated immediately in portions of the site where earth-disturbing activities performed for purposes of mine site preparation (as defined in E.G.3.2(a)) have temporarily ceased, but in no case more than 14 days after such activities have temporarily ceased. In arid, semi-arid, and drought-stricken areas, or in areas subject to snow or freezing conditions, where initiating perennial vegetative stabilization measures is not possible within 14 days after earth-disturbing activities performed for purposes of mine site preparation has temporarily ceased, temporary vegetative stabilization measures must be initiated as soon as practicable. Until temporary vegetative stabilization is achieved, interim measures such as erosion control blankets with an appropriate seed base and tackifiers must be employed. In areas of the site where earth-disturbing activities performed for purposes of mine site preparation have permanently ceased prior to active mining, temporary stabilization measures must be implemented to minimize mobilization of sediment or other pollutants until active mining activities commence.
- *Final stabilization of disturbed areas*. Stabilization measures must be initiated immediately where earth-disturbing activities performed for purposes of mine site preparation (as defined in E.G.3.2(a)) have permanently ceased, but in no case more than 14 days after the earth-disturbing activities have permanently ceased. In arid, semi-arid, and drought-stricken areas, or in areas subject to snow or freezing conditions, where initiating perennial vegetative stabilization measures is not possible within 14 days after earth-disturbing activities have permanently ceased, final vegetative stabilization measures must be initiated as soon as possible. Until

final stabilization is achieved, temporary stabilization measures, such as erosion control blankets with an appropriate seed base and tackifiers, must be used.

E.G.4.2 *Additional Technology-Based Effluent Limits Applicable Only to the Construction of Staging Areas for Structures and Access Roads*. The following technology-based effluent limits apply to authorized discharges from earth-disturbing activities associated with the construction of staging areas and the construction of access roads, as defined in E.G.3.2(b). These limits supersede the technology-based limits listed in Schedule B and E.G.5 of this sector. These limits do not apply to earth-disturbing activities performed for purposes of mine site preparation (as defined in E.G.3.2(a)).

E.G.4.2.1 *Area of disturbance*. You must minimize the amount of soil exposed during construction activities.

E.G.4.2.2 *Erosion and sediment control design requirements*. You must:

- Design, install and maintain effective erosion and sediment controls to minimize the discharge of pollutants from earth-disturbing activities. Account for the following factors in designing your erosion and sediment controls:
  - The expected amount, frequency, intensity and duration of precipitation;
  - The nature of stormwater runoff and run-on at the site, including factors such as impervious surfaces, slopes and site drainage features;
  - The range of soil particle sizes expected to be present on the site.
- Direct discharges from your stormwater controls to vegetated areas of your site to increase sediment removal and maximize stormwater infiltration, including any natural buffers, unless infeasible. Use velocity dissipation devices if necessary to prevent erosion when directing stormwater to vegetated areas.
- If any stormwater flow becomes or will be channelized at your site, you must design erosion and sediment controls to control both peak flowrates and total stormwater volume to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points.
- If you install stormwater conveyance channels, they must be designed to avoid unstabilized areas on the site and to reduce erosion, unless infeasible. In addition, you must minimize erosion of channels and their embankments, outlets, adjacent streambanks, slopes, and downstream waters during discharge conditions through the use of erosion controls and velocity dissipation devices within and along the length of any constructed stormwater conveyance channel, and at any outlet to provide a non-erosive flow velocity.

E.G.4.2.3 *Natural Buffers*. For any stormwater discharges from earth-disturbing activities within 50 feet of a water of the U.S., you must comply with one of the following compliance alternatives:

1. Maintain a 50-foot undisturbed natural buffer between earth-disturbing activities and the water of the U.S.; or
2. Provide an undisturbed natural buffer that is less than 50 feet, permit registrant must implement one or more of the BMPs listed below to control and treat sediment and turbidity:
   - Compost berms, compost blankets, or compost socks;
   - Erosion control mats;
   - Takifiers used in combination with perimeter sediment controls;

- Approved water treatment by electro-coagulation, flocculation, or filtration; and/or
- Other substantially equivalent sediment or turbidity control measures approved by DEQ or agent.

3. Ensure all discharges are treated by control measures prior to entering the natural buffer.
4. Delineate and clearly mark off all natural buffers.

There are exceptions when buffer requirements do not apply:

- The natural buffer has already been eliminated by preexisting development disturbances;
- The disturbance is for a water-dependent structure or earth-disturbing approved under a CWA section 404 permit.

E.G.4.2.4 *Soil or sediment stockpiles*. In addition to the requirements in E.G.4.1.5, you must locate any piles outside of any natural buffers established under E.G.4.2.3.

E.G.4.2.5 *Sediment basins*. In addition to the requirements in E.G.4.1.6, you must locate sediment basins outside of any surface waters and any natural buffers established under E.G.4.2.3, and you must utilize outlet structures that withdraw water from the surface, unless infeasible.

E.G.4.2.6 *Native topsoil preservation*. You must preserve native topsoil removed during clearing, grading, or excavation, unless infeasible. Store topsoil in a manner that will maximize its use in reclamation or final vegetative stabilization (e.g., by keeping the topsoil stabilized with seed or similar measures). This requirement does not apply if the intended function of the disturbed area dictates that topsoil be disturbed or removed.

E.G.4.2.7 *Steep slopes*. You must minimize the disturbance of steep slopes. The permit does not prevent or prohibit disturbance on steep slopes.

Depending on site conditions and needs, disturbance on steep slopes may be necessary (e.g., a road cut in mountainous terrain; for grading steep slopes prior to erecting the mine office). Where steep slope disturbances are necessary, you can minimize the disturbances to steep slopes through the implementation of a number of standard erosion and sediment control practices, such as by phasing disturbances in these areas and using stabilization practices specifically for steep grades.

E.G.4.2.8 *Soil compaction*. Where final vegetative stabilization will occur or where infiltration practices will be installed, you must either restrict vehicle/ equipment use in these areas to avoid soil compaction or use soil conditioning techniques to support vegetative growth. Minimizing soil compaction is not required where compacted soil is integral to the functionality of the site.

E.G.4.2.9 *Dewatering Practices*. You are prohibited from discharging ground water or accumulated stormwater that is removed from excavations, trenches, foundations, vaults or other similar points of accumulation, unless such waters are first effectively managed by appropriate controls (e.g., sediment basins or sediment traps, sediment socks, dewatering tanks, tube settlers, weir tanks, or filtration systems).

Uncontaminated, non-turbid dewatering water can be discharged without being routed to a control.

You must also meet the following requirements for dewatering activities:

- Discharge requirements:
  - No discharging visible floating solids or foam;

- Remove oil, grease and other pollutants from dewatering water via an oil-water separator or suitable filtration device (such as a cartridge filter);
- Utilize vegetated upland areas of the site, to the extent feasible, to infiltrate dewatering water before discharge. In no case shall waters of the U.S. be considered part of the treatment area;
- Implement velocity dissipation devices at all points where dewatering water is discharged;
- Haul backwash water away for disposal or return it to the beginning of the treatment process; and
- Clean or replace the filter media used in dewatering devices when the pressure differential equals or exceeds the manufacturers' specifications.

- Treatment chemical restrictions: If you use polymers, flocculants or other chemicals to treat dewatering water, you must comply with the requirements in E.G.4.1.8.

E.G.4.2.10 *Pollution prevention requirements*.

- Prohibited discharges:
  - Wastewater from washout of concrete;
  - Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds, and other materials;
  - Fuels, oils, or other pollutants used for operation and maintenance of vehicles or equipment;
  - Soaps, solvents, or detergents used in vehicle or equipment washing;
  - Toxic or hazardous substances from a spill or other release.
  - Design and location requirements: Minimize the discharge of pollutants from pollutant sources by:
- *Minimizing exposure*;
  - Using secondary containment, spill kits, or other equivalent measures;
  - Locating pollution sources away from surface waters, storm sewer inlets, and drainageways;
  - Cleaning up spills immediately (do not clean by hosing area down).
- *Pollution prevention requirements for wash waters*: Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
- *Pollution prevention requirements for the storage, handling, and disposal of construction products, materials, and wastes*: Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials present on the site to stormwater. Minimization of exposure is not required in cases where the exposure to stormwater will not result in a discharge of pollutants, or where exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use).

E.G.4.2.11 *Site Stabilization requirements for the construction of staging areas for structures and access roads as defined in E.G.3.2(b) (i.e., not applicable to earth-disturbing activities performed for purposes of mine site preparation as defined in E.G.3.2(a)).* You must comply with the following stabilization requirements, except where the intended function of the site accounts for such disturbed earth (e.g., the area of

construction will become actively mined, or the controls implemented at the active mining area effectively control the disturbance):

- By no later than the end of the next work day after construction work in an area has stopped permanently or temporarily ("temporarily" means the land will be idle for a period of 14 days or more but earth-disturbing activities will resume in the future), immediately initiate stabilization measures;
- If using vegetative measures, by no later than 14 days after initiating stabilization:
  - Seed or plant the area, and provide temporary cover to protect the planted area;
  - Once established, vegetation must be uniform (evenly distributed without large bare areas) perennial vegetation, which provides 70 percent or more coverage based on density of native vegetation.
- If using non-vegetative stabilization, by no later than 14 days after initiating stabilization:
  - Install or apply all non-vegetative measures;
  - Cover all areas of exposed soil.

  Note: For the purposes of this permit, DEQ will consider any of the following types of activities to constitute the initiation of stabilization: 1. Prepping the soil for vegetative or non-vegetative stabilization; 2. Applying mulch or other non-vegetative product to the exposed area; 3. Seeding or planting the exposed area; 4. Starting any of the activities in #1 – 3 on a portion of the area to be stabilized, but not on the entire area; and 5. Finalizing arrangements to have stabilization product fully installed in compliance with the applicable deadline for completing stabilization.

Exceptions:

- Arid, semi-arid or drought-stricken areas:
  - Within 14 days of stopping construction work in an area, install any necessary non-vegetative stabilization measures;
  - Initiate vegetative stabilization as soon as conditions on the site allow;
  - Document the schedule that will be followed for initiating and completing vegetative stabilization;
  - Cover planted or seeded area with bio or photo degradable erosion controls designed to prevent erosion without active maintenance.
- Sites affected by severe storm events or other unforeseen circumstances:
  - Initiate vegetative stabilization as soon conditions on the site allow;
  - Document the schedule that will be followed for initiating and completing vegetative stabilization;
  - Add a suitable interim measures (such as mulch or bark) are in place if 70 percent coverage of vegetation is expected to expand.

E.G.4.3 *Water Quality-Based Requirements Applicable to Earth-Disturbing Activities Conducted Prior to Active Mining Activities.* The following water quality-based limits apply to earth-disturbing activities conducted prior to active mining activities defined in E.G.3.2(a) and E.G.3.2(b), in addition to the water quality-based limits in Schedule A.4 and Schedule A.5.

Stricter requirements apply if your site will discharge to an impaired waters that are listed for turbidity or sedimentation or have an EPA-approved TMDL for sedimentation or turbidity:

- More rapid stabilization of exposed areas: Complete initial stabilization activities within 7 days of stopping earth-disturbing work.

- More frequent site inspections: Once every 7 days and within 24 hours of a storm event of 0.25 inches or greater.

E.G.4.4 *Inspection Requirements Applicable to Earth-Disturbing Activities Conducted Prior to Active Mining Activities.* The following requirements supersede the inspection requirements in Schedule B and E.G.7 for earth-disturbing activities conducted prior to active mining activities defined in E.G.3.2(a) and E.G.3.2(b).

E.G.4.4.1 *Inspection frequency*

- At least once every 7 calendar days, or
- Once every 14 calendar days and within 24 hours of a storm event of 0.25 inches or greater.

Note:

- Inspections only required during working hours;
- Inspections not required during unsafe conditions; and
- If you choose to inspect once every 14 days, you must have a method for measuring rainfall amount on site (either rain gauge or representative weather station)

Note: To determine if a storm event of 0.25 inches or greater has occurred on your site, you must either keep a properly maintained rain gauge on your site, or obtain the storm event information from a weather station that is representative of your location. For any day of rainfall during normal business hours that measures 0.25 inches or greater, you must record the total rainfall measured for that day.
Note: You are required to specify in your SWPCP which schedule you will be following.
Note: "Within 24 hours of the occurrence of a storm event" means that you are required to conduct an inspection within 24 hours once a storm event has produced 0.25 inches, even if the storm event is still continuing. Thus, if you have elected to inspect bi-weekly and there is a storm event at your site that continues for multiple days, and each day of the storm produces 0.25 inches or more of rain, you are required to conduct an inspection within 24 hours of the first day of the storm and within 24 hours after the end of the storm.

E.G.4.4.2 *Reductions in inspection frequency*.

- Stabilized areas: You may reduce the frequency of inspections to once per month in any area of your site where stabilization has occurred pursuant to E.G.4.1.9 or E.G.4.2.11.
- Arid, semi-arid, and drought stricken areas: If earth-disturbing activities are occurring during the seasonally dry period or during a period in which drought is predicted to occur, you may reduce inspections to once per month and within 24 hours of a 0.25 inch storm event.
- Frozen conditions: You may temporarily suspend or reduce inspections to once per month until thawing conditions occur if frozen conditions are continuous and disturbed areas have been stabilized. For extreme conditions in remote areas, e.g., where transit to the site is perilous/restricted or temperatures are routinely below freezing, you may suspend inspections until the conditions are conducive to safe access, and more frequent inspections can resume.

E.G.4.4.3 *Areas to be inspected*. You must at a minimum inspect the all of the following areas:

- Disturbed areas;
- Stormwater controls and pollution prevention measures;

- Locations where stabilization measures have been implemented;
- Material, waste, borrow, or equipment storage and maintenance areas;
- Areas where stormwater flows;
- Points of discharge.

E.G.4.4.4 *What to check for during inspections*. At a minimum you must check:

- Whether all stormwater controls are installed, operational and working as intended;
- Whether any new or modified stormwater controls are needed;
- For conditions that could lead to a spill or leak;
- For visual signs of erosion/sedimentation at points of discharge.
- If a discharge is occurring, check:
- The quality and characteristics of the discharge;
- Whether controls are operating effectively.

E.G.4.4.5 *Inspection report*. Within 24 hours of an inspection, complete a report that includes:

- Inspection date;
- Name and title of inspector(s);
- Summary of inspection findings;
- Rainfall amount that triggered the inspection (if applicable);
- If it was unsafe to inspect a portion of the site, include documentation of the reason and the location(s);
- Each inspection report must be signed;
- Keep a current copy of all reports at the site or at an easily accessible location.

E.G.5 Technology-Based Effluent Limits for Active Mining Activities

Note: These requirements do not apply for any discharges from earth-disturbing activities conducted prior to active mining as defined in E.G.3.2(a) or E.G.3.2(b).

E.G.5.1 *Employee training*. (See also Schedule A.1.j) Conduct employee training at least annually at active and temporarily inactive facilities.

E.G.5.2 *Stormwater controls.* Apart from the control measures you implement to meet Schedule A technology-based effluent limits, where necessary to minimize pollutant discharges in stormwater, implement the following control measures at your site. The potential pollutants identified in E.G.6.3 shall determine the priority and appropriateness of the control measures selected. For mines subject to dust control requirements under DEQ or county air quality permits, provided the requirements are equivalent, compliance with such air permit dust requirements shall constitute compliance with the dust control effluent limit in Schedule A.1.f.

Stormwater diversions: Divert stormwater away from potential pollutant sources through implementation of control measures such as the following, where determined to be feasible including: interceptor or diversion controls (e.g., dikes, swales, curbs, berms); pipe slope drains; subsurface drains; conveyance systems (e.g., channels or gutters, open-top box culverts, and waterbars; rolling dips and road sloping; roadway surface water deflector and culverts); or their equivalents.

Capping: When capping is necessary to minimize pollutant discharges in stormwater, identify the source being capped and the material used to construct the cap.

Treatment: If treatment of stormwater (e.g., chemical or physical systems, oil - water separators, artificial wetlands) is necessary to protect water quality, describe the type and location of treatment used. Passive and/or active treatment of stormwater runoff is encouraged, where feasible. Treated runoff may be discharged as a stormwater source regulated under this permit

provided the discharge is not combined with discharges subject to effluent limitation guidelines for the Ore Mining and Dressing Point Source Category (40 CFR Part 440).

E.G.5.3 *Discharge testing.* Test or evaluate all off-site discharge points covered under this permit for the presence of specific mining-related but unauthorized non-stormwater discharges such as seeps or adit discharges, or discharges subject to effluent limitations guidelines (40 CFR Part 440), mine drainage or process water. Alternatively (if applicable), you may keep a certification with your SWPCP consistent with E.G.6.6.

E.G.6 Additional SWPCP Requirements for Mining Operations

Note: The requirements in E.G.6 are not applicable to inactive metal mining facilities. Some requirements may be already a requirement under Schedule A.7.

E.G.6.1 *Nature of industrial activities.* Briefly document in your SWPCP the mining and associated activities that can potentially affect the stormwater discharges covered by this permit, including a general description of the location of the site relative to major transportation routes and communities.

E.G.6.2 *Site map.* Document in your SWPCP the locations of the following (as appropriate): mining or milling site boundaries; access and haul roads; outline of the drainage areas of each stormwater outfall within the facility with indications of the types of discharges from the drainage areas; location(s) of all permitted discharges covered under an individual NPDES permit; outdoor equipment storage, fueling, and maintenance areas; materials handling areas; outdoor manufacturing, outdoor storage, and material disposal areas; outdoor chemicals and explosives storage areas; overburden, materials, soils, or waste storage areas; location of mine drainage (where water leaves mine) or other process water; tailings piles and ponds (including proposed ones); heap leach pads; off-site points of discharge for mine drainage and process water; surface waters; boundary of tributary areas that are subject to effluent limitations guidelines; and location(s) of reclaimed areas.

E.G.6.3 *Potential pollutant sources*. For each area of the mine or mill site where stormwater discharges associated with industrial activities occur, identify the types of pollutants (e.g., heavy metals, sediment) likely to be present in significant amounts. Consider these factors: the mineralogy of the ore and waste rock (e.g., acid forming); toxicity and quantity of chemicals used, produced, or discharged; the likelihood of contact with stormwater; vegetation of site (if any); and history of significant leaks or spills of toxic or hazardous pollutants. Also include a summary of any existing ore or waste rock or overburden characterization data and test results for potential generation of acid rock. If any new data is acquired due to changes in ore type being mined, update your SWPCP with this information.

E.G.6.4 *Documentation of control measures.* Document all control measures that you implement consistent with E.G.5.2. If control measures are implemented or planned but are not listed in E.G.5.2 (e.g., substituting a less toxic chemical for a more toxic one), include descriptions of them in your SWPCP. If you are in compliance with dust control requirements under state or county air quality permits, you must include (or summarize, as necessary) what the state or county air quality permit dust control requirements are and how you've achieved compliance with them.

E.G.6.5 *Employee training.* All employee training(s) must be documented in the SWPCP.

E.G.6.6 *Certification of permit coverage for commingled non-stormwater discharges*. If you are able, consistent with E.G.5.3 above, to certify that a particular discharge composed of commingled stormwater and non-stormwater is covered under a separate NPDES permit, and that permit subjects the non-stormwater portion to effluent limitations prior to any commingling, retain such certification with your SWPCP. This certification must identify the non-stormwater

discharges, the applicable NPDES permit(s), the effluent limitations placed on the non-stormwater discharge by the permit(s), and the points at which the limitations are applied.

E.G.7 Additional Inspection Requirements

Except for earth-disturbing activities conducted prior to active mining activities as defined in E.G.3.2(a) and E.G.3.2(b), which are subject to E.G.4.4, inspect sites at least monthly unless adverse weather conditions make the site inaccessible. See E.G.8.4 for inspection requirements for inactive and unstaffed sites.

E.G.8 Monitoring and Reporting Requirements. (See also Schedule B)

Note: There are no monitoring and reporting or impaired waters monitoring requirements for inactive and unstaffed sites.

E.G.8.1 Benchmark Monitoring for Active Copper Ore Mining and Dressing Facilities. Table E.G-1 identifies benchmarks that apply to active copper ore mining and dressing facilities. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

Table E.G-1

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Active Copper Ore Mining and Dressing Facilities (SIC 1021)	Nitrate plus Nitrite Nitrogen	0.68 mg/L
	Chemical Oxygen Demand (COD)	120 mg/L

E.G.8.2 *Benchmark Monitoring Requirements for Discharges From Waste Rock and Overburden Piles at Active Metal Mining Facilities*. For discharges from waste rock and overburden piles, perform benchmark monitoring once in the first year for the parameters listed in Table E.G-2, and twice annually in all subsequent years of coverage under this permit for any parameters for which the benchmark has been exceeded. You are also required to conduct analytic monitoring for the parameters listed in Table E.G-3 in accordance with the requirements in E.G.8.3. DEQ may also notify you that you must perform additional monitoring to accurately characterize the quality and quantity of pollutants discharged from your waste rock and overburden piles.

Table E.G-2

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Iron Ores; Copper Ores; Lead and Zinc Ores; Gold and Silver Ores; Ferroalloy Ores, Except Vanadium; and Miscellaneous Metal Ores (SIC Codes 1011, 1021, 1031, 1041, 1044, 1061, 1081, 1094, 1099)	Turbidity	50 NTU
	pH	6.0-9.0 s.u.
	Total Antimony	0.64 mg/L
	Total Arsenic	0.15 mg/L
	Total Beryllium	0.13 mg/L
	Total Iron	1.0 mg/L
	Total Mercury	0.0014 mg/L
	Total Nickel	0.5 mg/L
	Total Selenium	0.005 mg/L
	Total Silver	0.0005 mg/L

E.G.8.3 *Additional Analytic Monitoring Requirements for Discharges From Waste Rock and Overburden Piles at Active Metal Mining Facilities*. In addition to the monitoring required in E.G.8.2 for discharges from waste rock and overburden piles, you must also conduct monitoring for additional parameters based on the type of ore you mine at your site. Where a parameter in Table E.G-3 is the same as a pollutant you are required to monitor for in Table E.G-2 (i.e., for all of the metals), you must use the corresponding benchmark in Table E.G-2 and you may use any monitoring results conducted for E.G.8.2 to satisfy the monitoring requirement for that parameter for E.G.8.3. For radium and uranium, which do not have corresponding benchmarks in Table E.G-2, there are no applicable benchmarks. The frequency and schedule for monitoring for these additional parameters is the same as that specified in Table 5.

Table E.G-3. Additional Monitoring Requirements for Discharges from Waste Rock and Overburden Piles

Supplemental Requirements			
Type of Ore Mined	**Pollutants of Concern**		
	Total Suspended Solids (TSS)	**pH**	**Metals, Total**
Tungsten Ore	X	X	Arsenic, Cadmium (H), Copper (H), Lead (H), Zinc (H)
Nickel Ore	X	X	Arsenic, Cadmium (H), Copper (H), Lead (H), Zinc (H)
Aluminum Ore	X	X	Iron
Mercury Ore	X	X	Nickel (H)
Iron Ore	X	X	Iron (Dissolved)
Platinum Ore			Cadmium (H), Copper (H), Mercury, Lead (H), Zinc (H)
Titanium Ore	X	X	Iron, Nickel (H), Zinc (H)
Vanadium Ore	X	X	Arsenic, Cadmium (H), Copper (H), Lead (H), Zinc (H)
Molybdenum	X	X	Arsenic, Cadmium (H), Copper (H), Lead (H), Mercury, Zinc (H)
Uranium, Radium, and Vanadium Ore	X	X	Chemical Oxygen Demand, Arsenic, Radium (Dissolved and Total), Uranium, Zinc (H)

Note: An "X" indicated for TSS and/or pH means that you are required to monitor for those parameters. (H) indicates that hardness must also be measured when this pollutant is measured.

E.G.8.4 *Inactive and Unstaffed Sites – Conditional Exemption from No Exposure Requirements for Monthly Visual Assessments and Routine Facility Inspections*. As a Sector G facility, if you are seeking to exercise a monitoring or inspection waiver, you are conditionally exempt from the requirement to certify that "there are no industrial materials or activities exposed to stormwater" in Schedule B.4.iii of the permit. This exemption is conditioned on the following:

- If circumstances change and your facility becomes active and/or staffed, this exception no longer applies and you must immediately begin complying with the monitoring and inspection requirements; and
- DEQ retains the authority to revoke this exemption and/or the monitoring waiver where it is determined that the discharge causes, has a reasonable potential to cause, or contributes to an instream excursion above an applicable water quality standard, including designated uses.

Table E.G-4. Applicability of the Permit to Stormwater Runoff From Active Mining and Dressing Sites, Temporarily Inactive Sites, and Sites Undergoing Reclamation

Discharge/Source of Discharge	Note/Comment
Piles	
Waste rock/overburden	If composed entirely of stormwater and not combining with mine drainage. See note below.
Topsoil	--
Roads constructed of waste rock or spent ore	
Onsite haul roads	If composed entirely of stormwater and not combining with mine drainage. See note below.
Offsite haul and access roads	--
Roads not constructed of waste rock or spent ore	
Onsite haul roads	Except if mine drainage is used for dust control
Offsite haul and access roads	--
Milling/concentrating	
Runoff from tailings dams and dikes when constructed of waste rock/tailings	Except if process fluids are present and only if composed entirely of stormwater and not combining with mine drainage. See Note below.
Runoff from tailings dams/dikes when not constructed of waste rock and tailings	Except if process fluids are present
Concentration building	If stormwater only and no contact with piles
Mill site	If stormwater only and no contact with piles
Ancillary areas	
Office and administrative building and housing	If mixed with stormwater from the industrial area
Chemical storage area	--
Docking facility	Except if excessive contact with waste product that would otherwise constitute mine drainage
Explosive storage	--
Fuel storage (oil tanks/coal piles)	--
Vehicle and equipment maintenance area/building	--
Parking areas	But coverage unnecessary if only employee and visitor-type parking
Power plant	
Truck wash area	Except when excessive contact with waste product that would otherwise constitute mine drainage
Reclamation-related areas	
Any disturbed area (unreclaimed)	Only if not in active mining area
Reclaimed areas released from reclamation requirements prior to Dec. 17, 1990	--
Partially/inadequately reclaimed areas or areas not released from reclamation requirements	--

Note: Stormwater runoff from these sources are subject to the NPDES program for stormwater unless mixed with discharges subject to 40 CFR Part 440 that are regulated by another permit prior to mixing. Non-stormwater discharges from these sources are subject to NPDES permitting and may be subject to the effluent limitation guidelines under 40 CFR Part 440. Discharges from overburden/waste rock and overburden/waste rock-related areas are not subject to 40 CFR Part 440 unless: (1) it drains naturally (or is intentionally diverted) to a point source; and (2) combines with "mine drainage" that is otherwise regulated under the Part 440 regulations. For such sources, coverage under this permit would be available if the discharge composed entirely of stormwater does not combine with other sources of mine drainage that are not subject to 40 CFR Part 440, as well as meeting other eligibility criteria contained in Part 1.1 of the permit. Operators bear the initial responsibility for determining the applicable technology-based standard for such discharges.

E.G.9. Termination of Permit Coverage

E.G.9.1 *Termination of Permit Coverage for Sites Reclaimed After December 17, 1990.* A site or a portion of a site that has been released from applicable state or federal reclamation requirements after December 17, 1990, is no longer required to maintain coverage under this permit. If the site or portion of a site reclaimed after December 17, 1990, was not subject to reclamation requirements, the site or portion of the site is no longer required to maintain coverage under this permit if the site or portion of the site has been reclaimed as defined in E.G.3.3.

E.G.9.2 *Termination of Permit Coverage for Sites Reclaimed Before December 17, 1990.* A site or portion of a site that was released from applicable state or federal reclamation requirements before December 17, 1990, or that was otherwise reclaimed before December 17, 1990, is no longer required to maintain coverage under this permit if the site or portion of the site has been reclaimed. A site or portion of a site is considered to have been reclaimed if: (1) stormwater runoff that comes into contact with raw materials, intermediate byproducts, finished products, and waste products does not have the potential to cause or contribute to violations of state water quality standards, (2) soil disturbing activities related to mining at the sites or portion of the site have been completed, (3) the site or portion of the site has been stabilized to minimize soil erosion, and (4) as appropriate depending on location, size, and the potential to contribute pollutants to stormwater discharges, the site or portion of the site has been revegetated, will be amenable to natural revegetation, or will be left in a condition consistent with the post-mining land use.

Schedule E – Sector-Specific Requirements for Industrial Activity
Sector H – Coal Mines and Coal Mining-Related Facilities

E.H.1 Definitions

The following definitions are not intended to supersede the definitions of active and inactive mining facilities established by 40 CFR 122.26(b)(14)(iii).

E.H.1.1 *Mining operations* - For this permit, mining operations are grouped into two distinct categories, with distinct effluent limits and requirements applicable to each: a) earth-disturbing activities conducted prior to active mining activities); and b) active mining activities, which includes reclamation. "Mining operations" can occur at both inactive mining facilities and temporarily inactive mining facilities.

E.H.1.2 *Earth-disturbing activities conducted prior to active mining activities* – Consists of two classes of earth-disturbing (i.e., clearing, grading and excavation) activities:

a. activities performed for purposes of mine site preparation, including: cutting new rights of way (except when related to access road construction); providing access to a mine site for vehicles and equipment (except when related to access road construction); other earth disturbances associated with site preparation activities on any areas where active mining activities have not yet commenced (e.g., for heap leach pads, waste rock facilities, tailings impoundments, wastewater treatment plants); and

b. construction of staging areas to prepare for erecting structures such as to house project personnel and equipment, mill buildings, etc., and construction of access roads. Earth-disturbing activities associated with the construction of staging areas and the construction of access roads conducted prior to active mining are considered to be "construction" and have additional technology based effluent limits in E.H.2.2.

E.H.1.3 *Active mining activities* – Activities related to the extraction, removal or recovery, and preparation of coal; removal of overburden and waste rock to expose mineable minerals; and site reclamation and closure activities. All such activities occur within the "active mining area." Reclamation involves activities undertaken, in compliance with applicable mined land reclamation requirements, to return the land to an appropriate post-mining contour and land use in order to meet applicable federal and state reclamation requirements. In addition, once earth-disturbing activities conducted prior to active mining activities have ceased and all related requirements in E.H.2 have been met, and a well-delineated "active mining area" has been established, all activities (including any clearing, grading, and excavation) that occur within the active mining area are "active mining activities."

E.H.1.4 *Active mining area* – A place where work or other activity related to the extraction, removal or recovery of coal is being conducted, except, with respect to surface mines, any area of land on or in which grading has been completed to return the earth to desired contour and reclamation work has begun.

Note: Earth-disturbing activities described in the definition in E.H.1.2 that occur on areas outside the active mining area (e.g., for expansion of the mine into undeveloped territory) are considered "earth-disturbing conducted prior to active mining activities", and must comply with the requirements in E.H.2.

E.H.1.5 *Inactive coal mining facility* – A site or portion of a site where coal mining and/or milling occurred in the past but there are no active mining operations occurring as defined above, and where the inactive portion is not covered by an active mining permit issued by the applicable state or federal agency. An inactive coal mining facility has an identifiable owner / operator. Sites where mining claims are being maintained prior to disturbances associated with the

extraction, beneficiation, or processing of mined materials and sites where minimal activities are undertaken for the sole purpose of maintaining a mining claim are not considered either active or inactive mining facilities and do not require an NPDES industrial stormwater permit.

E.H.1.6 *Temporarily inactive coal mining facility* – A site or portion of a site where coal mining and/or milling occurred in the past but currently are not being actively undertaken, and the facility is covered by an active mining permit issued by the applicable state or federal agency.

E.H.2 Requirements Applicable to Earth-Disturbing Activities Conducted Prior to Active Mining Activities

Stormwater discharges from earth-disturbing activities conducted prior to active mining activities (defined in E.H.1.2) are covered under this permit. For such earth-disturbing activities, you must comply with all applicable requirements in technology-based effluent limits in E.H.3 and Schedule A, the inspection and monitoring requirements in Schedule B and in E.H.5 and E.H.6

Authorized discharges from areas where earth-disturbing activities have ceased and stabilization as specified in E.H.2.1.9 or E.H.2.2.11, where appropriate, has been completed (stabilization is not required for areas where active mining activities will occur), are no longer subject to the E.H.2 requirements. At such time, authorized discharges become subject to all other applicable requirements in the permit, including the technology based effluent limits in limits in E.H.3 and Schedule A, the inspection and monitoring requirements in Schedule B and in E.H.5 and E.H.6.

E.H.2.1 *Technology-Based Effluent Limits Applicable to All Earth-Disturbing Activities Conducted Prior to Active Mining Activities*. The following technology-based effluent limits apply to authorized discharges from all earth-disturbing activities conducted prior to active mining activities defined in E.H.1.2(a) and E.H.1.2(b). These limits supersede the technology-based effluent limits listed in Schedule A.

E.H.2.1.1 *Erosion and sediment control installation requirements*.

- By the time construction activities commence, install and make operational downgradient sediment controls, unless this timeframe is infeasible. If infeasible you must install and make such controls operational as soon as practicable or as soon as site conditions permit.
- All other stormwater controls described in the SWPCP must be installed and made operational as soon as conditions on each portion of the site allows.

E.H.2.1.2 *Erosion and sediment control maintenance requirements*. You must:

- Ensure that all erosion and sediment controls remain in effective operating condition.
- Wherever you determine that a stormwater control needs maintenance to continue operating effectively, initiate efforts to fix the problem immediately after its discovery, and complete such work by the end of the next work day.
- When a stormwater control must be replaced or significantly repaired, complete the work within 7 days, unless infeasible. If 7 days is infeasible, you must complete the installation or repair as soon practicable.

E.H.2.1.3 *Perimeter controls*. You must:

- Install sediment controls along those perimeter areas of your disturbed area that will receive stormwater, except where site conditions prevent the use of such controls (in which case, maximize their installation to the extent practicable).
- Remove sediment before it accumulates to one-half of the above-ground height of any perimeter control.

E.H.2.1.4 *Sediment track-out*. For construction vehicles and equipment exiting the site directly onto paved roads, you must:

- Use appropriate stabilization techniques to minimize sediment track-out from vehicles and equipment prior to exit;
- Use additional controls to remove sediment from vehicle and equipment tires prior to exit, where necessary;
- Remove sediment that is tracked out onto paved roads by end of the work day.

Note: DEQ recognizes that some fine grains may remain visible on the surfaces of off-site streets, other paved areas, and sidewalks even after you have implemented sediment removal practices. Such "staining" is not a violation of E.H.2.1.4.

E.H.2.1.5 *Soil or sediment stockpiles*. You must:

- Minimize erosion of stockpiles from stormwater and wind via temporary cover, if feasible.
- Prevent up-slope stormwater flows from causing erosion of stockpiles (e.g., by diverting flows around the stockpile).
- Minimize sediment from stormwater that runs off of stockpiles, using sediment controls (e.g., a sediment barrier or downslope sediment control).

E.H.2.1.6 *Sediment basins*. If you intend to install a sediment basin to treat stormwater from your earth-disturbing activities, you must:

- Provide storage for either (1) the 2-year, 24-hour storm, or (2) 3,600 cubic feet per acre drained.
- Prevent erosion of (1) basin embankments using stabilization controls (e.g., erosion control blankets), and (2) the inlet and outlet points of the basin using erosion controls and velocity dissipation devices.

E.H.2.1.7 *Minimize dust*. You must minimize the generation of dust through the appropriate application of water or other dust suppression techniques that minimize pollutants being discharged into surface waters.

E.H.2.1.8 *Restrictions on use of treatment chemicals*. If you intend to use sediment treatment chemicals at your site, you are subject to the following minimum requirements:

- Use conventional erosion and sediment controls prior to and after application of chemicals;
- Select chemicals suited to soil type, and expected turbidity, pH, flow rate;
- Minimize the discharge risk from stored chemicals;
- Comply with state/local requirements;
- Use chemicals in accordance with good engineering practices and specifications of chemical supplier;
- Ensure proper training;
- Provide proper SWPCP documentation.

If you plan to use cationic treatment chemicals (as defined in Appendix A), you are ineligible for coverage under this permit, unless you notify your applicable DEQ regional office or agent in advance and the DEQ regional office or agent authorizes coverage under this permit after you have included appropriate controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards.

E.H.2.1.9 *Site stabilization requirements for earth-disturbing activities performed for purposes of mine site preparation as defined in E.H.1.2(a) (i.e., not applicable to construction*

of staging areas for structures and access roads as defined in E.H.1.2(b)). You must comply with the following stabilization requirements except where the intended function of the site accounts for such disturbed earth (e.g., the earth disturbances will become actively mined, or the controls implemented at the active mining area effectively control the disturbance):

- *Temporary stabilization of disturbed areas*. Stabilization measures must be initiated immediately in portions of the site where earth-disturbing activities performed for purposes of mine site preparation (as defined in E.H.1.2(a)) have temporarily ceased, but in no case more than 14 days after such activities have temporarily ceased. In arid, semi-arid, and drought-stricken areas, or in areas subject to snow or freezing conditions, where initiating perennial vegetative stabilization measures is not possible within 14 days after earth-disturbing activities performed for purposes of mine site preparation has temporarily ceased, temporary vegetative stabilization measures must be initiated as soon as practicable. Until temporary vegetative stabilization is achieved, interim measures such as erosion control blankets with an appropriate seed base and tackifiers must be employed. In areas of the site where earth-disturbing activities performed for purposes of mine site preparation have permanently ceased prior to active mining, temporary stabilization measures must be implemented to minimize mobilization of sediment or other pollutants until active mining activities commence.

- *Final stabilization of disturbed areas.* Stabilization measures must be initiated immediately where earth-disturbing activities performed for purposes of mine site preparation (as defined in E.H.1.2(a)) have permanently ceased, but in no case more than 14 days after the earth-disturbing activities have permanently ceased. In arid, semi-arid, and drought-stricken areas, or in areas subject to snow or freezing conditions, where initiating perennial vegetative stabilization measures is not possible within 14 days after earth-disturbing activities have permanently ceased, final vegetative stabilization measures must be initiated as soon as possible. Until final stabilization is achieved, temporary stabilization measures, such as erosion control blankets with an appropriate seed base and tackifiers, must be used.

E.H.2.2 *Additional Technology-Based Effluent Limits Applicable Only to the Construction of Staging Areas for Structures and Access Roads*. The following technology-based effluent limits apply to authorized discharges from earth-disturbing activities associated with the construction of staging areas and the construction of access roads, as defined in E.H.1.2(b). These limits supersede the technology-based limits listed in Schedule A and E.H.3. These limits do not apply to earth-disturbing activities performed for purposes of mine site preparation (as defined in E.H.1.2(a)).

E.H.2.2.1 *Area of disturbance*. You must minimize the amount of soil exposed during construction activities.

E.H.2.2.2 *Erosion and sediment control design requirements*. You must:

- Design, install and maintain effective erosion and sediment controls to minimize the discharge of pollutants from construction activities. Account for the following factors in designing your erosion and sediment controls:
  - The expected amount, frequency, intensity and duration of precipitation;

- The nature of stormwater runoff and run-on at the site, including factors such as impervious surfaces, slopes and site drainage features;
- The range of soil particle sizes expected to be present on the site.

- Direct discharges from your stormwater controls to vegetated areas of your site to increase sediment removal and maximize stormwater infiltration, including any natural buffers, unless infeasible. Use velocity dissipation devices if necessary to prevent erosion when directing stormwater to vegetated areas.
- If any stormwater flow becomes or will be channelized at your site, you must design erosion and sediment controls to control both peak flowrates and total stormwater volume to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points.
- If you install stormwater conveyance channels, they must be designed to avoid unstabilized areas on the site and to reduce erosion, unless infeasible. In addition, you must minimize erosion of channels and their embankments, outlets, adjacent streambanks, slopes, and downstream waters during discharge conditions through the use of erosion controls and velocity dissipation devices within and along the length of any constructed stormwater conveyance channel, and at any outlet to provide a non-erosive flow velocity.

E.H.2.2.3 *Natural Buffers*. For any stormwater discharges from earth-disturbing activities within 50 feet of a water of the U.S., you must comply with one of the following compliance alternatives:

1. Maintain a 50-foot undisturbed natural buffer between earth-disturbing activities and the water of the U.S.; or
2. Provide an undisturbed natural buffer that is less than 50 feet, permit registrant must implement one or more of the BMPs listed below to control and treat sediment and turbidity:
   - Compost berms, compost blankets, or compost socks;
   - Erosion control mats;
   - Takifiers used in combination with perimeter sediment controls;
   - Approved water treatment by electro-coagulation, flocculation, or filtration; and/or
   - Other substantially equivalent sediment or turbidity control measures approved by DEQ or agent.
3. Ensure all discharges are treated by control measures prior to entering the natural buffer.
4. Delineate and clearly mark off all natural buffers.

There are exceptions when buffer requirements do not apply:

- The natural buffer has already been eliminated by preexisting development disturbances;
- The disturbance is for a water-dependent structure or earth-disturbing approved under a CWA section 404 permit.

E.H.2.2.4 *Soil or sediment stockpiles*. In addition to the requirements in E.H.2.1.5, you must locate any piles outside of any natural buffers established under E.H.2.2.3.

E.H.2.2.5 *Sediment basins*. In addition to the requirements in E.H.2.1.6, you must locate sediment basins outside of any surface waters and any natural buffers established

under E.H.2.2.3, and you must utilize outlet structures that withdraw water from the surface, unless infeasible.

E.H.2.2.6 *Native topsoil preservation*. You must preserve native topsoil removed during clearing, grading, or excavation, unless infeasible. Store topsoil in a manner that will maximize its use in reclamation or final vegetative stabilization (e.g., by keeping the topsoil stabilized with seed or similar measures). This requirement does not apply if the intended function of the disturbed area dictates that topsoil be disturbed or removed.

E.H.2.2.7 *Steep slopes*. You must minimize the disturbance of steep slopes. The permit does not prevent or prohibit disturbance on steep slopes.

Depending on site conditions and needs, disturbance on steep slopes may be necessary (e.g., a road cut in mountainous terrain; for grading steep slopes prior to erecting the mine office). Where steep slope disturbances are necessary, you can minimize the disturbances to steep slopes through the implementation of a number of standard erosion and sediment control practices, such as by phasing disturbances in these areas and using stabilization practices specifically for steep grades.

E.H.2.2.8 *Soil compaction*. Where final vegetative stabilization will occur or where infiltration practices will be installed, you must either restrict vehicle/ equipment use in these areas to avoid soil compaction or use soil conditioning techniques to support vegetative growth. Minimizing soil compaction is not required where compacted soil is integral to the functionality of the site.

E.H.2.2.9 *Dewatering Practices*. You are prohibited from discharging ground water or accumulated stormwater that is removed from excavations, trenches, foundations, vaults or other similar points of accumulation, unless such waters are first effectively managed by appropriate controls (e.g., sediment basins or sediment traps, sediment socks, dewatering tanks, tube settlers, weir tanks, or filtration systems). Uncontaminated, non-turbid dewatering water can be discharged without being routed to a control.

You must also meet the following requirements for dewatering activities:

- Discharge requirements:
  - No discharging visible floating solids or foam;
  - Remove oil, grease and other pollutants from dewatering water via an oil-water separator or suitable filtration device (such as a cartridge filter);
  - Utilize vegetated upland areas of the site, to the extent feasible, to infiltrate dewatering water before discharge. In no case shall waters of the U.S. be considered part of the treatment area;
  - Implement velocity dissipation devices at all points where dewatering water is discharged;
  - Haul backwash water away for disposal or return it to the beginning of the treatment process; and
  - Clean or replace the filter media used in dewatering devices when the pressure differential equals or exceeds the manufacturers' specifications.
- Treatment chemical restrictions: If you use polymers, flocculants or other chemicals to treat dewatering water, you must comply with the requirements in E.H.2.1.8.

E.H.2.2.10 *Pollution prevention requirements*.

- Prohibited discharges:
  - Wastewater from washout of concrete;
  - Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds, and other materials;
  - Fuels, oils, or other pollutants used for operation and maintenance of vehicles or equipment;
  - Soaps, solvents, or detergents used in vehicle or equipment washing;
  - Toxic or hazardous substances from a spill or other release.
- Design and location requirements: Minimize the discharge of pollutants from pollutant sources by:
  - Minimizing exposure;
  - Using secondary containment, spill kits, or other equivalent measures;
  - Locating pollution sources away from surface waters, storm sewer inlets, and drainageways;
  - Cleaning up spills immediately (do not clean by hosing area down).
- Pollution prevention requirements for wash waters: Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
- Pollution prevention requirements for the storage, handling, and disposal of construction products, materials, and wastes: Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials present on the site to stormwater. Minimization of exposure is not required in cases where the exposure to stormwater will not result in a discharge of pollutants, or where exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use).

E.H.2.2.11 *Site Stabilization requirements for the construction of staging areas for structures and access roads as defined in E.H.1.2(b) (i.e., not applicable to earth-disturbing activities performed for purposes of mine site preparation as defined in E.H.1.2(a)).* You must comply with the following stabilization requirements, except where the intended function of the site accounts for such disturbed earth (e.g., the area of construction will become actively mined, or the controls implemented at the active mining area effectively control the disturbance):

- By no later than the end of the next work day after construction work in an area has stopped permanently or temporarily ("temporarily" means the land will be idle for a period of 14 days or more but earth-disturbing activities will resume in the future), immediately initiate stabilization measures;
- If using vegetative measures, by no later than 14 days after initiating stabilization:
  - Seed or plant the area, and provide temporary cover to protect the planted area;
  - Once established, vegetation must be uniform (evenly distributed without large bare areas) perennial vegetation, which provides 70 percent or more coverage based on density of native vegetation.

- If using non-vegetative stabilization, by no later than 14 days after initiating stabilization:
  - Install or apply all non-vegetative measures;
  - Cover all areas of exposed soil.

Note: For the purposes of this permit, DEQ will consider any of the following types of activities to constitute the initiation of stabilization: 1. Prepping the soil for vegetative or non-vegetative stabilization; 2. Applying mulch or other non-vegetative product to the exposed area; 3. Seeding or planting the exposed area; 4. Starting any of the activities in #1 – 3 on a portion of the area to be stabilized, but not on the entire area; and 5. Finalizing arrangements to have stabilization product fully installed in compliance with the applicable deadline for completing stabilization.

Exceptions:

- Arid, semi-arid or drought-stricken areas:
  - Within 14 days of stopping construction work in an area, install any necessary non-vegetative stabilization measures;
  - Initiate vegetative stabilization as soon as conditions on the site allow;
  - Document the schedule that will be followed for initiating and completing vegetative stabilization;
  - Cover planted or seeded area with bio or photo degradable erosion controls designed to prevent erosion without active maintenance.
- Sites affected by severe storm events or other unforeseen circumstances:
  - Initiate vegetative stabilization as soon conditions on the site allow;
  - Document the schedule that will be followed for initiating and completing vegetative stabilization;
  - Add a suitable interim measures (such as mulch or bark) are in place if 70 percent coverage of vegetation is expected to expand.

E.H.2.3 *Water Quality-Based Requirements Applicable to Earth-Disturbing Activities Conducted Prior to Active Mining Activities.*

The following water quality-based limits apply to earth-disturbing activities conducted prior to active mining activities defined in E.H.1.2(a) and E.H.1.2(b), in addition to the water quality-based limits Schedule A.4 and A.5.

Stricter requirements apply if your site will discharge to an impaired waters that are listed for turbidity or sedimentation or have an EPA-approved TMDL for sedimentation or turbidity:

- More rapid stabilization of exposed areas: Complete initial stabilization activities within 7 days of stopping earth-disturbing work.
- More frequent site inspections: Once every 7 days and within 24 hours of a storm event of 0.25 inches or greater.

E.H.2.4 *Inspection Requirements Applicable to Earth-Disturbing Activities Conducted Prior to Active Mining Activities.*

The following requirements supersede the inspections requirements in Schedule B and E.H.7 of the permit for earth-disturbing activities conducted prior to active mining activities defined in E.H.1.2(a) and E.H.1.2(b).

E.H.2.4.1 *Inspection Frequency*

- At least once every 7 calendar days, or

- Once every 14 calendar days and within 24 hours of a storm event of 0.25 inches or greater.

Note:

- Inspections only required during working hours;
- Inspections not required during unsafe conditions; and
- If you choose to inspect once every 14 days, you must have a method for measuring rainfall amount on site (either rain gauge or representative weather station)

Note: To determine if a storm event of 0.25 inches or greater has occurred on your site, you must either keep a properly maintained rain gauge on your site, or obtain the storm event information from a weather station that is representative of your location. For any day of rainfall during normal business hours that measures 0.25 inches or greater, you must record the total rainfall measured for that.

Note: You are required to specify in your SWPCP which schedule you will be following.

Note: "Within 24 hours of the occurrence of a storm event" means that you are required to conduct an inspection within 24 hours once a storm event has produced 0.25 inches, even if the storm event is still continuing. Thus, if you have elected to inspect bi-weekly in and there is a storm event at your site that continues for multiple days, and each day of the storm produces 0.25 inches or more of rain, you are required to conduct an inspection within 24 hours of the first day of the storm and within 24 hours after the end of the storm.

E.H.2.4.2 *Reductions in Inspection Frequency*

- Stabilized areas: You may reduce the frequency of inspections to once per month in any area of your site where stabilization has occurred pursuant to E.H.2.1.9 or E.H.2.2.11.
- Arid, semi-arid, and drought stricken areas: If earth-disturbing activities are occurring during the seasonally dry period or during a period in which drought is predicted to occur, you may reduce inspections to once per month and within 24 hours of a 0.25 inch storm event.
- Frozen conditions: You may temporarily suspend or reduce inspections to once per month until thawing conditions occur if frozen conditions are continuous and disturbed areas have been stabilized. For extreme conditions in remote areas, e.g., where transit to the site is perilous/restricted or temperatures are routinely below freezing, you may suspend inspections until the conditions are conducive to safe access, and more frequent inspections can resume.

E.H.2.4.3 *Areas to be Inspected*. You must at a minimum inspect the following areas:

- Disturbed areas;
- Stormwater controls and pollution prevention measures;
- Locations where stabilization measures have been implemented;
- Material, waste, borrow, or equipment storage and maintenance areas;
- Areas where stormwater flows;
- Points of discharge.

E.H.2.4.4 *What to Check for During Inspections*. At a minimum you must check:

- Whether all stormwater controls are installed, operational, and working as intended;
- Whether any new or modified stormwater controls are needed;

- For conditions that could lead to a spill or leak;
- For visual signs of erosion/sedimentation at points of discharge.

If a discharge is occurring:

- The quality and characteristics of the discharge;
- Whether controls are operating effectively.

E.H.2.4.5 *Inspection Report*. Within 24 hours of an inspection, complete a report that includes:

- Inspection date;
- Name and title of inspector(s);
- Summary of inspection findings;
- Rainfall amount that triggered the inspection (if applicable);
- If it was unsafe to inspect a portion of the site, include documentation of the reason and the location(s);
- Each inspection report must be signed;
- Keep a current copy of all reports at the site or at an easily accessible location.

E.H.2.5 *Cessation of Requirements Applicable to Earth-Disturbing Activities Conducted Prior to Active Mining Activities.* The requirements in E.H.2 no longer apply for any earth-disturbing activities conducted prior to active mining activities as defined in E.H.1.2(a) or E.H.1.2(b) where:

1. Earth-disturbing activities have ceased; and
2. Stabilization has been met consistent with E.H.2.1.9 or E.H.2.2.11 (not required for areas where active mining activities will occur).

E.H.3 Technology-Based Effluent Limits for Active Mining Activities

Note: These requirements do not apply for any discharges from earth-disturbing activities conducted prior to active mining as defined in E.H.1.2(a) or E.H.1.2(b).

E.H.3.1 *Good Housekeeping Measures.* As part of your good housekeeping program, in order to minimize discharges of pollutants in stormwater, implement control measures such as the following, where determined to be feasible including: using sweepers and covered storage; watering haul roads to minimize dust generation; and conserving vegetation to minimize erosion. For mines subject to dust control requirements under state or county air quality permits, provided the requirements are equivalent, compliance with such air permit dust requirements shall constitute compliance with the dust control effluent limit in Schedule A.1.f.

E.H.3.2 *Preventive Maintenance.* Perform inspections or other equivalent measures of storage tanks and pressure lines of fuels, lubricants, hydraulic fluid, and slurry to prevent leaks due to deterioration or faulty connections.

E.H.4 Additional SWPCP Requirements for Mining Operations

Note: The requirements in E.H.6 are not applicable to inactive coal mining facilities. Some requirements may be already a requirement under Schedule A.7.

E.H.4.1 *Other Applicable Regulations.* Most active coal mining-related areas (SIC Codes 1221-1241) are subject to sediment and erosion control regulations of the U.S. Office of Surface Mining (OSM) that enforces the Surface Mining Control and Reclamation Act (SMCRA). OSM has granted authority to most coal-producing states to implement SMCRA through State SMCRA regulations. All SMCRA requirements regarding control of stormwater-related pollutant discharges must be addressed and then documented with the SWPCP (directly or by reference).

E.H.4.2 *Site Map.* Document in your SWPCP where any of the following may be exposed to precipitation or surface runoff: haul and access roads; railroad spurs, sliding, and internal hauling lines; conveyor belts, chutes, and aerial tramways; equipment storage and maintenance yards; coal handling buildings and structures; inactive mines and related areas; acidic spoil, refuse, or unreclaimed disturbed areas; and liquid storage tanks containing pollutants such as caustics, hydraulic fluids, and lubricants.

E.H.4.3 *Potential Pollutant Sources.* Document in your SWPCP the following sources and activities that have potential pollutants associated with them: truck traffic on haul roads and resulting generation of sediment subject to runoff and dust generation; fuel or other liquid storage; pressure lines containing slurry, hydraulic fluid, or other potential harmful liquids; and loading or temporary storage of acidic refuse or spoil.

E.H.4.4 If you are in compliance with dust control requirements under state or county air quality permits, you must include (or summarize, as necessary) what the state or county air quality permit dust control requirements are and how you've achieved compliance with them.

E.H.5 Additional Inspection Requirements

E.H.5.1 *Inspections of Active Mining-Related Areas.* Except for earth-disturbing activities conducted prior to active mining activities as defined in E.H.1.2(a) and E.H.1.2(b), which are subject to E.H.2.4, perform routine inspections of active mining areas covered by this permit, corresponding with the inspections as performed by SMCRA inspectors, of all mining-related areas required by SMCRA. Also maintain the records of the SMCRA authority representative. See E.H.8.1 for inspection requirements for inactive and unstaffed sties.

E.H.5.2 *Sediment and Erosion Control.* As indicated in E.H.4.1, SMCRA requirements regarding sediment and erosion control measures must be complied with for those areas subject to SMCRA authority, including inspection requirements.

E.H.5.3 *Routine Site Inspections.* Your inspection program must include inspections for pollutants entering the drainage system from activities located on or near coal mining-related areas. Among the areas to be inspected are haul and access roads; railroad spurs, sliding, and internal hauling lines; conveyor belts, chutes, and aerial tramways; equipment storage and maintenance yards; coal handling buildings and structures; and inactive mines and related areas.

E.H.6 Sector-Specific Benchmarks

Table E.H-1 identifies benchmarks that apply to the specific subsectors of Sector H. These benchmarks apply to both your primary industrial activity and any co-located industrial activities. Note: There are no monitoring and reporting or impaired waters monitoring requirements for inactive and unstaffed sites.

Table E.H-1.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Coal Mines and Related Areas (SIC 1221-1241)	Total Aluminum	0.75 mg/L
	Total Iron	1.0 mg/L

E.H.6.1 *Inactive and Unstaffed Sites – Conditional Exemption from No Exposure Requirements for Monthly Visual Assessments and Routine Facility Inspections*. As a Sector H facility, if you are seeking to exercise a monitoring or inspection waiver, you are conditionally exempt from the

requirement to certify that "there are no industrial materials or activities exposed to stormwater" in Schedule B.4.iii of the permit. This exemption is conditioned on the following:

- If circumstances change and your facility becomes active and/or staffed, this exception no longer applies and you must immediately begin complying with the monitoring and inspection requirements; and
- DEQ retains the authority to revoke this exemption and/or the monitoring waiver where it is determined that the discharge causes, has a reasonable potential to cause, or contributes to an instream excursion above an applicable water quality standard, including designated uses.

Subject to the two conditions above, if your facility is inactive and unstaffed, you are waived from the requirement to conduct routine facility inspections, monthly visual assessments, and benchmark and impaired waters monitoring. You are encouraged to inspect your site more frequently where you have reason to believe that severe weather or natural disasters may have damaged control measures or increased discharges.

E.H.7 Termination of Permit Coverage

E.H.7.1 *Termination of Permit Coverage for Sites Reclaimed After December 17, 1990.* A site or a portion of a site that has been released from applicable state or federal reclamation requirements after December 17, 1990, is no longer required to maintain coverage under this permit. If the site or portion of a site reclaimed after December 17, 1990, was not subject to reclamation requirements, the site or portion of the site is no longer required to maintain coverage under this permit if the site or portion of the site has been reclaimed.

E.H.7.2 *Termination of Permit Coverage for Sites Reclaimed Before December 17, 1990.* A site or portion of a site that was released from applicable state or federal reclamation requirements before December 17, 1990, or that was otherwise reclaimed before December 17, 1990, is no longer required to maintain coverage under this permit if the site or portion of the site has been reclaimed. A site or portion of a site is considered to have been reclaimed if: (1) stormwater runoff that comes into contact with raw materials, intermediate byproducts, finished products, and waste products does not have the potential to cause or contribute to violations of state water quality standards, (2) soil disturbing activities related to mining at the sites or portion of the site have been completed, (3) the site or portion of the site has been stabilized to minimize soil erosion, and (4) as appropriate depending on location, size, and the potential to contribute pollutants to stormwater discharges, the site or portion of the site has been revegetated, will be amenable to natural revegetation, or will be left in a condition consistent with the post-mining land use.

Schedule E – Sector-Specific Requirements for Industrial Activity
Sector I – Oil and Gas Extraction

E.I.1 Additional Technology-Based Effluent Limits

E.I.1.1 *Vegetative Controls.* Implement vegetative practices designed to preserve existing vegetation, where attainable, and revegetate open areas as soon as practicable after grade drilling. Consider the following (or equivalent measures): temporary or permanent seeding, mulching, sod stabilization, vegetative buffer strips, and tree protection practices. Begin implementing appropriate vegetative practices on all disturbed areas within 14 days following the last activity in that area.

E.I.2 Additional SWPCP Requirement

E.I.2.1 *Drainage Area Site Map.* Document in your SWPCP where any of the following may be exposed to precipitation or surface runoff: Reportable Quantity (RQ) releases; locations used for the treatment, storage, or disposal of wastes; processing areas and storage areas; chemical mixing areas; construction and drilling areas; all areas subject to the effluent guidelines requirements for "No Discharge" in accordance with 40 CFR 435.32; and the structural controls to achieve compliance with the "No Discharge" requirements.

E.I.2.2 *Potential Pollutant Sources.* Also document in your SWPCP the following sources and activities that have potential pollutants associated with them: chemical, cement, mud, or gel mixing activities; drilling or mining activities; and equipment cleaning and rehabilitation activities. In addition, include information about the reportable quantity (RQ) release that triggered the permit application requirements: the nature of the release (e.g., spill of oil from a drum storage area), amount of oil or hazardous substance released, amount of substance recovered, date of the release, cause of the release (e.g., poor handling techniques and lack of containment in the area), areas affected by the release (i.e., land and water), procedure to clean up release, actions or procedures implemented to prevent or improve response to a release, and remaining potential contamination of stormwater from release (taking into account human health risks, the control of drinking water intakes, and the designated uses of the receiving water).

E.I.2.3 *Erosion and Sedimentation Control.* Unless covered by the NPDES Construction Stormwater 1200-C General Permit, the additional documentation requirements for sediment and erosion controls for well drillings and sand/shale mining areas include the following:

E.I.2.3.1 *Site Description.* Also include a description in your SWPCP of the nature of the exploration activity, estimates of the total area of site and area disturbed due to exploration activity, an estimate of runoff coefficient of the site, a site drainage map, including approximate slopes, and the names of all receiving waters.

E.I.2.3.2 *Vegetative Controls.* Document vegetative practices used in the SWPCP.

E.I.3 Additional Inspection Requirements.

All erosion and sediment controls must be inspected either: 1) every 7 days; or 2) once every 14 calendar days and within 24 hours of a storm event of 0.25 inches or greater.

Schedule E – Sector-Specific Requirements for Industrial Activity
Sector K – Hazardous Waste Treatment, Storage, or Disposal Facilities

E.K.1 Definitions

K.1.1 *Contaminated stormwater* - stormwater that comes into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater as defined in E.K.1.4. Some specific areas of a landfill that may produce contaminated stormwater include (but are not limited to) the open face of an active landfill with exposed waste (no cover added); the areas around wastewater treatment operations; trucks, equipment, or machinery that has been in direct contact with the waste; and waste dumping areas.

K.1.2 *Drained free liquids* - aqueous wastes drained from waste containers (e.g., drums) prior to landfilling.

K.1.3 *Landfill* - an area of land or an excavation in which wastes are placed for permanent disposal, but that is not a land application or land treatment unit, surface impoundment, underground injection well, waste pile, salt dome formation, salt bed formation, underground mine, or cave as these terms are defined in 40 CFR 257.2, 258.2, and 260.10.

K1.4 *Landfill wastewater* - as defined in 40 CFR Part 445 (Landfills Point Source Category), all wastewater associated with, or produced by, landfilling activities except for sanitary wastewater, non-contaminated stormwater, contaminated groundwater, and wastewater from recovery pumping wells. Landfill wastewater includes, but is not limited to, leachate, gas collection condensate, drained free liquids, laboratory derived wastewater, contaminated stormwater, and contact wash water from washing truck, equipment, and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill facility.

K.1.5 *Leachate* - liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from such waste.

K.1.6 *Non-contaminated stormwater* - stormwater that does not come into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater as defined in E.K.1.4. Non-contaminated stormwater includes stormwater that flows off the cap, cover, intermediate cover, daily cover, and/or final cover of the landfill.

E.K.2 Sector-Specific Benchmarks

Table E.K-1 identifies benchmarks that apply to the specific subsectors of Sector K. These benchmarks apply to both your primary industrial activity and any co-located industrial activities, which describe your site activities.

Table E.K-1.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
ALL - Industrial Activity Code "HZ". Benchmarks only applicable to discharges not subject to effluent limitations in 40 CFR Part 445 Subpart A.	Ammonia	2.14 mg/L
	Total Magnesium	0.064 mg/L
	Chemical Oxygen Demand (COD)	120 mg/L
	Total Arsenic	0.15 mg/L
	Total Cadmium	0.001 mg/L
	Total Cyanide	0.022 mg/ L
	Total Mercury	0.0014 mg/ L
	Total Selenium	0.005 mg/L
	Total Silver	0.0005 mg/L

E.K.3 Effluent Limitations Based on Effluent Limitations Guidelines

Table E.K-2 identifies effluent limits that apply to the industrial activities described below. Compliance with these effluent limits is to be determined based on discharges from these industrial activities independent of commingling with any other wastestreams that may be covered under this permit.

Table E.K-2[1]

Industrial Activity	Parameter	Effluent Limit
Discharges from hazardous waste landfills subject to effluent limitations in 40 CFR Part 445 Subpart A.	Biochemical Oxygen Demand (BOD_5)	220 mg/L, daily maximum
		56 mg/L, monthly avg. maximum
	Total Suspended Solids (TSS)	88 mg/L, daily maximum
		27 mg/L, monthly avg. maximum
	Ammonia	10 mg/L, daily maximum
		4.9 mg/L, monthly avg. maximum
	Alpha Terpineol	0.042 mg/L, daily maximum
		0.019 mg/L, monthly avg. maximum
	Aniline	0.024 mg/L, daily maximum
		0.015 mg/L, monthly avg. maximum
	Benzoic Acid	0.119 mg/L, daily maximum
		0.073 mg/L, monthly avg. maximum
	Naphthalene	0.059 mg/L, daily maximum
		0.022 mg/L, monthly avg. maximum
	p-Cresol	0.024 mg/L, daily maximum
		0.015 mg/L, monthly avg. maximum
	Phenol	0.048 mg/L, daily maximum
		0.029 mg/L, monthly avg. maximum
	Pyridine	0.072 mg/L, daily maximum
		0.025 mg/L, monthly avg. maximum
	Total Arsenic	1.1 mg/L, daily maximum
		0.54 mg/L, monthly avg. maximum

Table E.K-2[1]		
Industrial Activity	**Parameter**	**Effluent Limit**
	Total Chromium	1.1 mg/L, daily maximum
		0.46 mg/L, monthly avg. maximum
	Total Zinc	0.535 mg/L, daily maximum
		0.296 mg/L, monthly avg. maximum
	pH	Within the range of 6-9 standard pH units (s.u.)

[1] Monitor semi-annually. As set forth at 40 CFR Part 445 Subpart A, these numeric limitations apply to contaminated stormwater discharges from hazardous waste landfills subject to the provisions of RCRA Subtitle C at 40 CFR Parts 264 (Subpart N) and 265 (Subpart N) except for any of the following facilities:

(a) landfills operated in conjunction with other industrial or commercial operations when the landfill receives only wastes generated by the industrial or commercial operation directly associated with the landfill;

(b) landfills operated in conjunction with other industrial or commercial operations when the landfill receives wastes generated by the industrial or commercial operation directly associated with the landfill and also receives other wastes, provided that the other wastes received for disposal are generated by a facility that is subject to the same provisions in 40 CFR Subchapter N as the industrial or commercial operation or that the other wastes received are of similar nature to the wastes generated by the industrial or commercial operation;

(c) landfills operated in conjunction with Centralized Waste Treatment (CWT) facilities subject to 40 CFR Part 437, so long as the CWT facility commingles the landfill wastewater with other non-landfill wastewater for discharge. A landfill directly associated with a CWT facility is subject to this part if the CWT facility discharges landfill wastewater separately from other CWT wastewater or commingles the wastewater from its landfill only with wastewater from other landfills; or

(d) landfills operated in conjunction with other industrial or commercial operations when the landfill receives wastes from public service activities, so long as the company owning the landfill does not receive a fee or other remuneration for the disposal service.

Schedule E – Sector-Specific Requirements for Industrial Activity
Sector L – Landfills, Land Application Sites, and Open Dumps

E.L.1 Definitions

E.L.1.1 *Contaminated stormwater* - stormwater that comes into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater. Some areas of a landfill that may produce contaminated stormwater include (but are not limited to) the open face of an active landfill with exposed waste (no cover added); the areas around wastewater treatment operations; trucks, equipment, or machinery that has been in direct contact with the waste; and waste dumping areas.

E.L.1.2 *Drained free liquids* - aqueous wastes drained from waste containers (e.g., drums) prior to landfilling.

E.L.1.3 *Landfill wastewater* - as defined in 40 CFR Part 445 (Landfills Point Source Category) all wastewater associated with, or produced by, landfilling activities except for sanitary wastewater, non-contaminated stormwater, contaminated groundwater, and wastewater from recovery pumping wells. Landfill process wastewater includes, but is not limited to, leachate; gas collection condensate; drained free liquids; laboratory-derived wastewater; contaminated stormwater; and contact washwater from washing truck, equipment, and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill facility.

E.L.1.4 *Leachate* - liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from such waste.

E.L.1.5 *Non-contaminated stormwater* - stormwater that does not come into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater. Non-contaminated stormwater includes stormwater that flows off the cap, cover, intermediate cover, daily cover, and/or final cover of the landfill.

E.L.2 Additional Technology-Based Effluent Limits

E.L.2.1 *Preventive Maintenance Program.* As part of your preventive maintenance program, maintain the following: all elements of leachate collection and treatment systems, to prevent commingling of leachate with stormwater; the integrity and effectiveness of any intermediate or final cover (including repairing the cover as necessary), to minimize the effects of settlement, sinking, and erosion.

E.L.2.2 *Erosion and Sedimentation Control*. Provide temporary stabilization (e.g., temporary seeding, mulching, and placing geotextiles on the inactive portions of stockpiles) for the following: materials stockpiled for daily, intermediate, and final cover; inactive areas of the landfill or open dump; landfills or open dump areas that have gotten final covers but where vegetation has yet to establish itself; and land application sites where waste application has been completed but final vegetation has not yet been established.

E.L.2.3 *Unauthorized Discharge Test Certification*. The discharge test and certification must also be conducted for the presence of leachate and vehicle washwater.

E.L.3 Additional SWPCP Requirements

E.L.3.1 *Drainage Area Site Map.* Document in your SWPCP where any of the following may be exposed to precipitation or surface runoff: active and closed landfill cells or trenches, active and closed land application areas, locations where open dumping is occurring or has occurred,

locations of any known leachate springs or other areas where uncontrolled leachate may commingle with runoff, and leachate collection and handling systems.

E.L.3.2 *Summary of Potential Pollutant Sources.* Document in your SWPCP the following sources and activities that have potential pollutants associated with them: fertilizer, herbicide, and pesticide application; earth and soil moving; waste hauling and loading or unloading; outdoor storage of significant materials, including daily, interim, and final cover material stockpiles as well as temporary waste storage areas; exposure of active and inactive landfill and land application areas; uncontrolled leachate flows; and failure or leaks from leachate collection and treatment systems.

E.L.4 Additional Inspection Requirements

E.L.4.1 *Inspections of Active Sites.* Except in arid and semi-arid climates, inspect operating landfills, open dumps, and land application sites at least once every 7 days. Focus on areas of landfills that have not yet been finally stabilized; active land application areas, areas used for storage of material and wastes that are exposed to precipitation, stabilization, and structural control measures; leachate collection and treatment systems; and locations where equipment and waste trucks enter and exit the site. Ensure that sediment and erosion control measures are operating properly. For stabilized sites and areas where land application has been completed, or where the climate is arid or semi-arid, conduct inspections at least once every month.

E.L.4.2 *Inspections of Inactive Sites.* Inspect inactive landfills, open dumps, and land application sites at least monthly. Qualified personnel must inspect landfill (or open dump) stabilization and structural erosion control measures, leachate collection and treatment systems, and all closed land application areas.

E.L.5 Additional Post-Authorization Documentation Requirements

E.L.5.1 *Recordkeeping and Internal Reporting*. Keep records with your SWPCP of the types of wastes disposed of in each cell or trench of a landfill or open dump. For land application sites, track the types and quantities of wastes applied in specific areas.

E.L.6 Sector-Specific Benchmarks

Table E.L-1 identifies benchmarks that apply to the specific subsectors of Sector L. These benchmarks apply to both your primary industrial activity and any co-located industrial activities, which describe your site activities.

Table E.L-1.

Subsector (You may be subject to requirements for more than one sector/subsector)	**Parameter**	**Benchmark Monitoring Concentration[1]**
All Landfill, Land Application Sites and Open Dumps, except Municipal Solid Waste Landfill (MSWLF) Areas Closed in Accordance with 40 CFR 258.60 (Industrial Activity Code "LF")	Total Iron	1.0 mg/L
[1]Benchmark monitoring required only for discharges not subject to effluent limitations in 40 CFR Part 445 Subpart B (see Table L-2 below).		

E.L.7. Effluent Limitations Based on Effluent Limitations Guidelines

Table E.L-2 identifies effluent limits that apply to the industrial activities described below. Compliance with these effluent limits is to be determined based on discharges from these industrial activities independent of commingling with any other wastestreams that may be covered under this permit.

Table E.L-2[1]

Industrial Activity	Parameter	Effluent Limit
Discharges from non-hazardous waste landfills subject to effluent limitations in 40 CFR Part 445 Subpart B.	Biochemical Oxygen Demand (BOD_5)	140 mg/L, daily maximum
		37 mg/L, monthly avg. maximum
	Total Suspended Solids (TSS)	88 mg/L, daily maximum
		27 mg/L, monthly avg. maximum
	Ammonia	10 mg/L, daily maximum
		4.9 mg/L, monthly avg. maximum
	Alpha Terpineol	0.033 mg/L, daily maximum
		0.016 mg/L monthly avg. maximum
	Benzoic Acid	0.12 mg/L, daily maximum
		0.071 mg/L, monthly avg. maximum
	p-Cresol	0.025 mg/L, daily maximum
		0.014 mg/L, monthly avg. maximum
	Phenol	0.026 mg/L, daily maximum
		0.015 mg/L, monthly avg. maximum
	Total Zinc	0.20 mg/L, daily maximum
		0.11 mg/L, monthly avg. maximum
	pH	Within the range of 6-9 standard pH units (s.u.)

[1] Monitor semi-annually. As set forth at 40 CFR Part 445 Subpart B, these numeric limitations apply to contaminated stormwater discharges from MSWLFs that have not been closed in accordance with 40 CFR 258.60, and to contaminated stormwater discharges from those landfills that are subject to the provisions of 40 CFR Part 257 except for discharges from any of the following facilities:

(a) landfills operated in conjunction with other industrial or commercial operations, when the landfill receives only wastes generated by the industrial or commercial operation directly associated with the landfill;

(b) landfills operated in conjunction with other industrial or commercial operations, when the landfill receives wastes generated by the industrial or commercial operation directly associated with the landfill and also receives other wastes, provided that the other wastes received for disposal are generated by a facility that is subject to the same provisions in 40 CFR Subchapter N as the industrial or commercial operation, or that the other wastes received are of similar nature to the wastes generated by the industrial or commercial operation;

(c) landfills operated in conjunction with CWT facilities subject to 40 CFR Part 437, so long as the CWT facility commingles the landfill wastewater with other non-landfill wastewater for discharge. A landfill directly associated with a CWT facility is subject to this part if the CWT facility discharges landfill wastewater separately from other CWT wastewater or commingles the wastewater from its landfill only with wastewater from other landfills; or

(d) landfills operated in conjunction with other industrial or commercial operations when the landfill receives wastes from public service activities, so long as the company owning the landfill does not receive a fee or other remuneration for the disposal service.

Schedule E – Sector-Specific Requirements for Industrial Activity
Sector M – Automobile Salvage Yards

E.M.1 Additional Technology-Based Effluent Limits

E.M.1.1 *Spill and Leak Prevention Procedures.* Drain vehicles intended to be dismantled of all fluids upon arrival at the site (or as soon thereafter as feasible), or employ some other equivalent means to prevent spills and leaks.

E.M.1.2 *Employee Training.* If applicable to your facility, address the following areas (at a minimum) in your employee training program: proper handling (collection, storage, and disposal) of oil, used mineral spirits, anti-freeze, mercury switches, and solvents.

E.M.1.3 *Management of Runoff.* Consider the following management practices: berms or drainage ditches on the property line (to help prevent run-on from neighboring properties); berms for uncovered outdoor storage of oily parts, engine blocks, and above-ground liquid storage; installation of detention ponds; and installation of filtering devices and oil and water separators.

E.M.2 Additional SWPCP Requirements

E.M.2.1 *Drainage Area Site Map.* Identify locations used for dismantling, storage, and maintenance of used motor vehicle parts. Also identify where any of the following may be exposed to precipitation or surface runoff: dismantling areas, parts (e.g., engine blocks, tires, hub caps, batteries, hoods, mufflers) storage areas, and liquid storage tanks and drums for fuel and other fluids.

E.M.2.2 *Potential Pollutant Sources.* Assess the potential for the following to contribute pollutants to stormwater discharges: vehicle storage areas, dismantling areas, parts storage areas (e.g., engine blocks, tires, hub caps, batteries, hoods, mufflers), and fueling stations.

E.M.3 Additional Inspection Requirements

Immediately (or as soon thereafter as feasible) inspect vehicles arriving at the site for leaks. Inspect monthly for signs of leakage all equipment containing oily parts, hydraulic fluids, any other types of fluids, or mercury switches. Also, inspect monthly for signs of leakage all vessels and areas where hazardous materials and general automotive fluids are stored, including, but not limited to, mercury switches, brake fluid, transmission fluid, radiator water, and antifreeze.

E.M.4 Sector-Specific Benchmarks

Table E.M-1 identifies benchmarks that apply to the specific subsectors of Sector M. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

Table E.M-1.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Automobile Salvage Yards (SIC 5015)	Total Aluminum	0.75 mg/L
	Total Iron	1.0 mg/L

Schedule E – Sector-Specific Requirements for Industrial Activity
Sector N – Scrap and Waste Materials

E.N.1 Additional Technology-Based Effluent Limits

E.N.1.1 *Scrap and Waste Recycling Facilities (Non-Source Separated, Nonliquid Recyclable Materials).* Requirements for facilities that receive, process, and do wholesale distribution of nonliquid recyclable wastes (e.g., ferrous and nonferrous metals, plastics, glass, cardboard, and paper). These facilities may receive both nonrecyclable and recyclable materials. This section is not intended for those facilities that accept recyclables only from primarily non-industrial and residential sources.

E.N.1.1.1 *Inbound Recyclable 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. Following are some control measure options: (a) 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 your facility; (b) establish procedures to minimize the potential of any residual fluids from coming into contact with precipitation or runoff; (c) 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 E.N.3.1.6); (d) provide training targeted for those personnel engaged in the inspection and acceptance of inbound recyclable materials; and (e) 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).

E.N.1.1.2 *Scrap and Waste Material Stockpiles and Storage (Outdoor).* Minimize contact of stormwater runoff with stockpiled materials, processed materials, and nonrecyclable wastes. Following are some control measure options: (a) permanent or semi-permanent covers; (b) sediment traps, vegetated swales and strips, catch basin filters, and sand filters to facilitate settling or filtering of pollutants; (c) dikes, berms, containment trenches, culverts, and surface grading to divert runoff from storage areas; (d) silt fencing; and (e) oil and water separators, sumps, and dry absorbents for areas where potential sources of residual fluids are stockpiled (e.g., automobile engine storage areas).

E.N.1.1.3 *Stockpiling of Turnings Exposed to Cutting Fluids (Outdoor Storage).* Minimize contact of surface runoff with residual cutting fluids by: (a) storing all turnings exposed to cutting fluids under some form of permanent or semi-permanent cover, or (b) establishing 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 and water separator or its equivalent. You must regularly maintain the oil and water separator (or its equivalent) and properly dispose of or recycle collected residual fluids.

E.N.1.1.4 *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. Following are some control measure options: (a) good housekeeping measures, including the use of dry absorbents or wet vacuuming to contain, dispose of, or recycle residual liquids originating from recyclable containers, or mercury spill kits for spills from storage of mercury switches; (b) not allowing washwater from tipping floors or other processing areas to discharge to the storm sewer system; and (c) disconnecting or sealing off all floor drains connected to the storm sewer system.

E.N.1.1.5 *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 (i.e., through good housekeeping, preventive maintenance, etc.). Following are some control measure options: (a) regularly inspect equipment for spills or leaks and malfunctioning, worn, or corroded parts or equipment; (b) establish a preventive maintenance program for processing equipment; (c) use dry-absorbents or other cleanup practices to collect and dispose of or recycle spilled or leaking fluids or use mercury spill kits for spills from storage of mercury switches; (d) on unattended hydraulic reservoirs over 150 gallons in capacity, install protection devices such as low-level alarms or equivalent devices, or secondary containment that can hold the entire volume of the reservoir; (e) 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; (f) oil and water separators or sumps; (g) permanent or semi-permanent covers in processing areas where there are residual fluids and grease; (h) retention or detention ponds or basins; sediment traps, and vegetated swales or strips (for pollutant settling and filtration); (i) catch basin filters or sand filters.

E.N.1.1.6 *Scrap Lead-Acid Battery Program.* Properly handle, store, and dispose of scrap lead-acid batteries. Following are some control measure options (a) segregate scrap lead-acid batteries from other scrap materials; (b) properly handle, store, and dispose of cracked or broken batteries; (c) collect and dispose of leaking lead-acid battery fluid; (d) minimize or eliminate (if possible) exposure of scrap lead-acid batteries to precipitation or runoff; and (e) provide employee training for the management of scrap batteries.

E.N.1.1.7 *Spill Prevention and Response Procedures*. (See also Schedule A.1.h) Install alarms and/or pump shutoff 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.

E.N.1.1.8 *Supplier Notification Program.* As appropriate, notify major suppliers which scrap materials will not be accepted at the facility or will be accepted only under certain conditions.

E.N.1.2 *Waste Recycling Facilities* (Liquid Recyclable Materials).

E.N.1.2.1 *Waste Material Storage (Indoor).* Minimize or eliminate contact between residual liquids from waste materials stored indoors and from surface runoff. The plan may refer to applicable portions of other existing plans, such as Spill Prevention, Control,

and Countermeasure (SPCC) plans required under 40 CFR Part 112. Following are some control measure options (a) procedures for material handling (including labeling and marking); (b) clean up spills and leaks with dry absorbent materials, a wet vacuum system; (c) appropriate containment structures (trenching, curbing, gutters, etc.); and (d) a drainage system, including appurtenances (e.g., pumps or ejectors, manually operated valves), to handle discharges from diked or bermed areas. Drainage should be discharged to an appropriate treatment facility or sanitary sewer system, or otherwise disposed of properly. These discharges may require coverage under a separate NPDES wastewater permit or industrial user permit under the pretreatment program.

E.N.1.2.2 *Waste Material Storage (Outdoor).* Minimize contact between stored residual liquids and precipitation or runoff. The plan may refer to applicable portions of other existing plans, such as SPCC plans required under 40 CFR Part 112. Discharges of precipitation from containment areas containing used oil must also be in accordance with applicable sections of 40 CFR Part 112. Following are some control measure options (a) appropriate containment structures (e.g., dikes, berms, curbing, pits) to store the volume of the largest tank, with sufficient extra capacity for precipitation; (b) drainage control and other diversionary structures; (c) corrosion protection and/or leak detection systems for storage tanks; and (d) dry-absorbent materials or a wet vacuum system to collect spills.

E.N.1.2.3 *Trucks and Rail Car Waste Transfer Areas.* Minimize pollutants in discharges from truck and rail car loading and unloading areas. Include measures to clean up minor spills and leaks resulting from the transfer of liquid wastes. Following are two control measure options: (a) containment and diversionary structures to minimize contact with precipitation or runoff, and (b) dry clean-up methods, wet vacuuming, roof coverings, or runoff controls.

E.N.1.3 *Recycling Facilities (Source-Separated Materials).* The following identifies considerations for facilities that receive only source-separated recyclables, primarily from non-industrial and residential sources.

E.N.1.3.1 *Inbound Recyclable Material Control.* Minimize the chance of accepting nonrecyclables (e.g., hazardous materials) that could be a significant source of pollutants by conducting inspections of inbound materials. Following are some control measure options: (a) providing information and education measures to inform suppliers of recyclables about acceptable and non-acceptable materials, (b) training drivers responsible for pickup of recycled material, (c) clearly marking public drop-off containers regarding which materials can be accepted, (d) rejecting nonrecyclable wastes or household hazardous wastes at the source, and (e) establishing procedures for handling and disposal of nonrecyclable material.

E.N.1.3.2 *Outdoor Storage.* Minimize exposure of recyclables to precipitation and runoff. Use good housekeeping measures to prevent accumulation of particulate matter and fluids, particularly in high traffic areas. Following are some control measure options (a) provide totally enclosed drop-off containers for the public; (b) install a sump and pump with each container pit and treat or discharge collected fluids to a sanitary sewer system; (c) provide dikes and curbs for secondary containment (e.g., around bales of recyclable waste paper); (d) divert surface water runoff away from outside material storage areas; (e) provide covers over containment bins, dumpsters, and roll-off boxes; and (f) store the equivalent of one day’s volume of recyclable material indoors.

E.N.1.3.3 *Indoor Storage and Material Processing.* Minimize the release of pollutants from indoor storage and processing areas. Following are some control measure options (a) schedule routine good housekeeping measures for all storage and processing areas, (b) prohibit tipping floor washwater from draining to the storm sewer system, and (c) provide employee training on pollution prevention practices.

E.N.1.3.4 *Vehicle and Equipment Maintenance.* Following are some control measure options for areas where vehicle and equipment maintenance occur outdoors (a) prohibit vehicle and equipment washwater from discharging to the storm sewer system, (b) minimize or eliminate outdoor maintenance areas whenever possible, (c) establish spill prevention and clean-up procedures in fueling areas, (d) avoid topping off fuel tanks, (e) divert runoff from fueling areas, (f) store lubricants and hydraulic fluids indoors, and (g) provide employee training on proper handling and storage of hydraulic fluids and lubricants.

E.N.2 Additional SWPCP Requirements

E.N.2.1 *Drainage Area Site Map.* Document in your SWPCP the locations of any of the following activities or sources that may be exposed to precipitation or surface runoff: scrap and waste material storage, outdoor scrap and waste processing equipment; and containment areas for turnings exposed to cutting fluids.

E.N.2.2 *Maintenance Schedules/Procedures for Collection, Handling, and Disposal or Recycling of Residual Fluids at Scrap and Waste Recycling Facilities.* If you are subject to E.N.1.1.3, your SWPCP must identify any applicable maintenance schedule and the procedures to collect, handle, and dispose of or recycle residual fluids.

E.N.3 Sector-Specific Benchmarks

Table E.N-1 identifies benchmarks that apply to the specific subsectors of Sector N. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

Table E.N-1.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Scrap Recycling and Waste Recycling Facilities except Source-Separated Recycling (SIC 5093)	Chemical Oxygen Demand (COD)	120 mg/L
	Total Recoverable Aluminum	0.75 mg/L
	Total Recoverable Iron	1.0 mg/L

Schedule E – Sector-Specific Requirements for Industrial Activity
Sector O – Steam Electric Generating Facilities.

E.O.1 Additional Technology-Based Effluent Limits.

The following good housekeeping measures are required in addition to Schedule A.1 of permit:

E.O.1.1 *Fugitive Dust Emissions.* Minimize fugitive dust emissions from coal handling areas. To minimize the tracking of coal dust offsite, consider procedures such as installing specially designed tires or washing vehicles in a designated area before they leave the site and controlling the wash water.

E.O.1.2 *Delivery Vehicles.* Minimize contamination of stormwater runoff from delivery vehicles arriving at the plant site. Consider procedures to inspect delivery vehicles arriving at the plant site and ensure overall integrity of the body or container and procedures to deal with leakage or spillage from vehicles or containers.

E.O.1.3 *Fuel Oil Unloading Areas.* Minimize contamination of precipitation or surface runoff from fuel oil unloading areas. Consider using containment curbs in unloading areas, having personnel familiar with spill prevention and response procedures present during deliveries to ensure that any leaks or spills are immediately contained and cleaned up, and using spill and overflow protection devices (e.g., drip pans, drip diapers, or other containment devices placed beneath fuel oil connectors to contain potential spillage during deliveries or from leaks at the connectors).

E.O.1.4 *Chemical Loading and Unloading.* Minimize contamination of precipitation or surface runoff from chemical loading and unloading areas. Consider using containment curbs at chemical loading and unloading areas to contain spills, having personnel familiar with spill prevention and response procedures present during deliveries to ensure that any leaks or spills are immediately contained and cleaned up, and loading and unloading in covered areas and storing chemicals indoors.

E.O.1.5 *Miscellaneous Loading and Unloading Areas.* Minimize contamination of precipitation or surface runoff from loading and unloading areas. Consider covering the loading area; grading, berming, or curbing around the loading area to divert run-on; locating the loading and unloading equipment and vehicles so that leaks are contained in existing containment and flow diversion systems; or equivalent procedures.

E.O.1.6 *Liquid Storage Tanks*. Minimize contamination of surface runoff from above-ground liquid storage tanks. Consider protective guards around tanks, containment curbs, spill and overflow protection, dry cleanup methods, or equivalent measures.

E.O.1.7 *Large Bulk Fuel Storage Tanks.* Minimize contamination of surface runoff from large bulk fuel storage tanks. Consider containment berms (or their equivalent). You must also comply with applicable State and Federal laws, including Spill Prevention, Control and Countermeasure (SPCC) Plan requirements.

E.O.1.8 *Spill Reduction Measures.* Minimize the potential for an oil or chemical spill, or reference the appropriate part of your SPCC plan. Visually inspect as part of your routine facility inspection the structural integrity of all above-ground tanks, pipelines, pumps, and related equipment that may be exposed to stormwater, and make any necessary repairs immediately.

E.O.1.9 *Oil-Bearing Equipment in Switchyards.* Minimize contamination of surface runoff from oil-bearing equipment in switchyard areas. Consider using level grades and gravel surfaces to retard flows and limit the spread of spills, or collecting runoff in perimeter ditches.

E.O.1.10 *Residue-Hauling Vehicles.* Inspect all residue-hauling vehicles for proper covering over the load, adequate gate sealing, and overall integrity of the container body. Repair vehicles without load covering or adequate gate sealing, or with leaking containers or beds.

E.O.1.11 *Ash Loading Areas.* Reduce or control the tracking of ash and residue from ash loading areas. Clear the ash building floor and immediately adjacent roadways of spillage, debris, and excess water before departure of each loaded vehicle.

E.O.1.12 *Areas Adjacent to Disposal Ponds or Landfills.* Minimize contamination of surface runoff from areas adjacent to disposal ponds or landfills. Reduce ash residue that may be tracked on to access roads traveled by residue handling vehicles, and reduce ash residue on exit roads leading into and out of residue handling areas.

E.O.1.13 *Landfills, Scrap yards, Surface Impoundments, Open Dumps, General Refuse Sites.* Minimize the potential for contamination of runoff from these areas.

E.O.2 Additional SWPCP Requirements

E.O.2.1 *Drainage Area Site Map.* Document in your SWPCP the locations of any of the following activities or sources that may be exposed to precipitation or surface runoff: storage tanks, scrap yards, and general refuse areas; short- and long-term storage of general materials (including but not limited to supplies, construction materials, paint equipment, oils, fuels, used and unused solvents, cleaning materials, paint, water treatment chemicals, fertilizer, and pesticides); landfills and construction sites; and stock pile areas (e.g., coal or limestone piles).

E.O.3 Additional Inspection Requirements

E.O.3.1 *Inspection.* Inspect the following areas monthly: coal handling areas, loading or unloading areas, switchyards, fueling areas, bulk storage areas, ash handling areas, areas adjacent to disposal ponds and landfills, maintenance areas, liquid storage tanks, and long term and short term material storage areas.

E.O.4 Sector-Specific Benchmarks

Table E.O-1 identifies benchmarks that apply to the specific subsectors of Sector O. These benchmarks apply to both your primary industrial activity and any co-located industrial activities, which describe your site activities.

Table E.O-1.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Steam Electric Generating Facilities (Industrial Activity Code "SE")	Total Iron	1.0 mg/L

E.O.5 Effluent Limitations Based on Effluent Limitations Guidelines

Table E.O-2 identifies effluent limits that apply to the industrial activities described below. Compliance with these effluent limits is to be determined based on discharges from these industrial activities independent of commingling with any other wastestreams that may be covered under this permit.

Table E.O-2[1]

Industrial Activity	Parameter	Effluent Limit
Discharges from coal storage piles at Steam Electric Generating Facilities	TSS	50 mg/l[2]
	pH	6.0 min - 9.0 max

[1] Monitor semi-annually.
[2] If your facility is designed, constructed, and operated to treat the volume of coal pile runoff that is associated with a 10-year, 24-hour rainfall event, any untreated overflow of coal pile runoff from the treatment unit is not subject to the 50 mg/L limitation for total suspended solids.

Schedule E – Sector-Specific Requirements for Industrial Activity
Sector P – Land Transportation and Warehousing.

E.P.1 Additional Technology-Based Effluent Limits

E.P.1.1 *Good Housekeeping Measures.* In addition to the Good Housekeeping requirements in Schedule A.1 of the permit, you must do the following:

E.P.1.1.1 *Vehicle and Equipment Storage Areas.* Minimize the potential for stormwater exposure to leaky or leak-prone vehicles/equipment awaiting maintenance. Consider the following (or other equivalent measures): use of drip pans under vehicles/equipment, indoor storage of vehicles and equipment, installation of berms or dikes, use of absorbents, roofing or covering storage areas, and cleaning pavement surfaces to remove oil and grease.

E.P.1.1.2 *Fueling Areas.* Minimize contamination of stormwater runoff from fueling areas. Consider the following (or other equivalent measures): Covering the fueling area; using spill/overflow protection and cleanup equipment; minimizing stormwater run-on/runoff to the fueling area; using dry cleanup methods; and treating and/or recycling collected stormwater runoff.

E.P.1.1.3 *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," etc.). Consider the following (or other equivalent measures): storing the materials indoors; installing berms/dikes around the areas; minimizing runoff of stormwater to the areas; using dry cleanup methods; and treating and/or recycling collected stormwater runoff.

E.P.1.1.4 *Vehicle and Equipment Cleaning Areas.* Minimize contamination of stormwater runoff from all areas used for vehicle/equipment cleaning. Consider the following (or other equivalent measures): performing all cleaning operations indoors; covering the cleaning operation, ensuring that all washwater drains to a proper collection system (i.e., not the stormwater drainage system); treating and/or recycling collected washwater, or other equivalent measures.

E.P.1.1.5 *Vehicle and Equipment Maintenance Areas.* Minimize contamination of stormwater runoff from all areas used for vehicle/equipment maintenance. Consider the following (or other equivalent measures): performing maintenance activities indoors; using drip pans; keeping an organized inventory of materials used in the shop; draining all parts of fluid prior to disposal; prohibiting wet clean up practices if these practices would result in the discharge of pollutants to stormwater drainage systems; using dry cleanup methods; treating and/or recycling collected stormwater runoff, minimizing run on/runoff of stormwater to maintenance areas.

E.P.1.1.6 *Locomotive Sanding (Loading Sand for Traction) Areas.* Consider the following (or other equivalent measures): covering sanding areas; minimizing stormwater run on/runoff; or appropriate sediment removal practices to minimize the offsite transport of sanding material by stormwater.

E.P.1.2 *Employee Training.* 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.

E.P.2 Additional SWPCP Requirements

E.P.2.1 *Drainage Area Site Map.* Identify in the SWPCP the following areas of the facility and indicate whether activities occurring there may be exposed to precipitation/surface runoff: Fueling stations; vehicle/equipment maintenance or cleaning areas; storage areas for vehicle/equipment with actual or potential fluid leaks; loading/unloading areas; areas where treatment, storage or disposal of wastes occur; liquid storage tanks; processing areas; and storage areas.

E.P.2.2 *Potential Pollutant Sources.* Assess the potential for the following activities and facility areas to contribute pollutants to stormwater discharges: Onsite waste storage or disposal; dirt/gravel parking areas for vehicles awaiting maintenance; illicit plumbing connections between shop floor drains and the stormwater conveyance system(s); and fueling areas. Describe these activities in the SWPCP.

E.P.2.3 *Description of Good Housekeeping Measures.* You must document in your SWPCP the good housekeeping measures you implement consistent with E.P.1.

E.P.2.4 *Vehicle and Equipment Wash Water Requirements.* If wash water is handled in a manner that does not involve separate NPDES permitting (e.g., hauled offsite), describe the disposal method and include all pertinent information (e.g., frequency, volume, destination, etc.) in your SWPCP. Discharges of vehicle and equipment wash water, including tank cleaning operations, are not authorized by this permit for this sector.

E.P.3 Additional Inspection Requirements Inspect all the following areas/activities: 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.

Schedule E – Sector-Specific Requirements for Industrial Activity
Sector Q – Water Transportation

E.Q.1 Additional Technology-Based Effluent Limits

E.Q.1.1 *Good Housekeeping Measures.* You must implement the following good housekeeping measures in addition to requirements in Schedule A.1 of the permit:

E.Q.1.1.1 *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.

E.Q.1.1.2 *Blasting and Painting Area.* Minimize the potential for spent abrasives, paint chips, and overspray to discharge into receiving waters or the storm sewer systems. Consider containing 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). When necessary, regularly clean stormwater conveyances of deposits of abrasive blasting debris and paint chips.

E.Q.1.1.3 *Material 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. Specify which materials are stored indoors, and consider containment or enclosure for those stored outdoors. If abrasive blasting is performed, discuss the storage and disposal of spent abrasive materials generated at the facility. Consider implementing an inventory control plan to limit the presence of potentially hazardous materials onsite.

E.Q.1.1.4 *Engine Maintenance and Repair Areas.* Minimize the contamination of precipitation or surface runoff from all areas used for engine maintenance and repair. Consider the following (or their equivalents): performing all maintenance activities indoors, maintaining an organized inventory of materials used in the shop, draining all parts of fluid prior to disposal, prohibiting the practice of hosing down the shop floor, using dry cleanup methods, and treating and/or recycling stormwater runoff collected from the maintenance area.

E.Q.1.1.5 *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). Consider the following (or their equivalents): covering fueling areas, using spill and overflow protection, mixing paints and solvents in a designated area (preferably indoors or under a shed), and minimizing runoff of stormwater to material handling areas.

E.Q.1.1.6 *Drydock Activities.* Routinely maintain and clean the drydock to minimize pollutants in stormwater runoff. Address the cleaning of accessible areas of the drydock prior to flooding, and final cleanup following removal of the vessel and raising the dock. Include procedures for cleaning up oil, grease, and fuel spills occurring on the drydock. Consider the following (or their equivalents): sweeping rather than hosing off debris and spent blasting material from accessible areas of the drydock prior to flooding and making absorbent materials and oil containment booms readily available to clean up or contain any spills.

E.Q.1.2 *Employee Training.* At a minimum, address 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.

E.Q.1.3 *Preventive Maintenance.* As part of your preventive maintenance program, perform timely inspection and maintenance of stormwater management devices (e.g., cleaning oil and 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), 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.

E.Q.2 Additional SWPCP Requirements

E.Q.2.1 *Drainage Area Site Map.* Document in your SWPCP where any of the following may be exposed to precipitation or surface runoff: fueling; engine maintenance and repair; vessel maintenance and repair; pressure washing; painting; sanding; blasting; welding; metal fabrication; loading and unloading areas; locations used for the treatment, storage, or disposal of wastes; liquid storage tanks; liquid storage areas (e.g., paint, solvents, resins); and material storage areas (e.g., blasting media, aluminum, steel, scrap iron).

E.Q.2.2 *Summary of Potential Pollutant Sources.* Document in the SWPCP the following additional sources and activities that have potential pollutants associated with them: outdoor manufacturing or processing activities (e.g., welding, metal fabricating) and significant dust or particulate generating processes (e.g., abrasive blasting, sanding, and painting.)

E.Q.3 Additional Inspection Requirements

Inspect pressure washing area; blasting, sanding, and painting areas; material storage areas; engine maintenance and repair areas; material handling areas; drydock area; and general yard area.

E.Q.4 Sector-Specific Benchmarks

Table E.Q-1 identifies benchmarks that apply to the specific subsectors of Sector Q. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

Table E.Q-1.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Water Transportation Facilities (SIC 4412-4499)	Total Aluminum	0.75 mg/L
	Total Iron	1.0 mg/L

Schedule E – Sector-Specific Requirements for Industrial Activity
Sector R – Ship and Boat Building and Repair Yards

E.R.1 Additional Technology-Based Effluent Limits

E.R.1.1 *Good Housekeeping Measures.*

E.R.1.1.1 *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.

E.R.1.1.2 *Blasting and Painting Area.* Minimize the potential for spent abrasives, paint chips, and overspray to discharging into the receiving water or the storm sewer systems. Consider containing 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.

E.R.1.1.3 *Material 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. Consider implementing an inventory control plan to limit the presence of potentially hazardous materials onsite.

E.R.1.1.4 *Engine Maintenance and Repair Areas.* Minimize the contamination of precipitation or surface runoff from all areas used for engine maintenance and repair. Consider the following (or their equivalents): performing all maintenance activities indoors, maintaining an organized inventory of materials used in the shop, draining all parts of fluid prior to disposal, prohibiting the practice of hosing down the shop floor, using dry cleanup methods, and treating and/or recycling stormwater runoff collected from the maintenance area.

E.R.1.1.5 *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). Consider the following (or their equivalents): covering fueling areas, using spill and overflow protection, mixing paints and solvents in a designated area (preferably indoors or under a shed), and minimizing stormwater run-on to material handling areas.

E.R.1.1.6 *Drydock Activities.* Routinely maintain and clean the drydock to minimize pollutants in stormwater runoff. Clean accessible areas of the drydock prior to flooding and 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. Consider the following (or their equivalents): sweeping rather than hosing off debris and spent blasting material from accessible areas of the drydock prior to flooding, and having absorbent materials and oil containment booms readily available to clean up and contain any spills.

E.R.1.2 *Employee Training.* As part of your 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.

E.R.1.3 *Preventive Maintenance.* As part of your preventive maintenance program, perform timely inspection and maintenance of stormwater management devices (e.g., cleaning oil and 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), 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.

E.R.2 Additional SWPCP Requirements

E.R.2.1 *Drainage Area Site Map.* Document in your SWPCP where any of the following may be exposed to precipitation or surface runoff: fueling; engine maintenance or repair; vessel maintenance or repair; pressure washing; painting; sanding; blasting; welding; metal fabrication; loading and unloading areas; treatment, storage, and waste disposal areas; liquid storage tanks; liquid storage areas (e.g., paint, solvents, resins); and material storage areas (e.g., blasting media, aluminum, steel, scrap iron).

E.R.2.2 *Potential Pollutant Sources.* Document in your SWPCP the following additional sources and activities that have potential pollutants associated with them (if applicable): outdoor manufacturing or processing activities (e.g., welding, metal fabricating) and significant dust or particulate generating processes (e.g., abrasive blasting, sanding, and painting).

E.R.2.3 *Documentation of Good Housekeeping Measures.* Document in your SWPCP any good housekeeping measures implemented to meet the effluent limits in E.R.1.1.

E.R.2.3.1 *Blasting and Painting Areas.* Document in the SWPCP any standard operating practices relating to blasting and painting (e.g., prohibiting uncontained blasting and painting over open water or prohibiting blasting and painting during windy conditions, which can render containment ineffective).

E.R.2.3.2 *Storage Areas.* Specify in your SWPCP which materials are stored indoors, and consider containment or enclosure for those stored outdoors.

E.R.3 Additional Inspection Requirements

Include the following in all monthly inspections: pressure washing area; blasting, sanding, and painting areas; material storage areas; engine maintenance and repair areas; material handling areas; drydock area; and general yard area.

Schedule E – Sector-Specific Requirements for Industrial Activity
Sector S – Air Transportation

E.S.1 Limitation on Coverage

E.S.1.1 *Limitations on Coverage.* This permit authorizes stormwater discharges from only those portions of the air transportation facility that are involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling and lubrication), equipment cleaning operations or deicing operations.

Note: the term "deicing" in this permit will generally be used to mean both deicing (removing frost, snow or ice) and anti-icing (preventing accumulation of frost, snow or ice) activities, unless specific mention is made otherwise.

E.S.2 Multiple Operators at Air Transportation Facilities

Air transportation facilities often have more than one operator who could discharge stormwater associated with industrial activity. Operators include the airport authority and airport tenants, including air passenger or cargo companies, fixed based operators, and other parties who routinely perform industrial activities on airport property.

The airport authority and tenants of the airport are encouraged to work in partnership in the development of the SWPCP. Tenants of the airport facility include air passenger or cargo companies, fixed based operators and other parties who have contracts with the airport authority to conduct business operations on airport property and whose operations result in stormwater discharges associated with industrial activity. An airport tenant may obtain authorization under this permit and develop a SWPCP for discharges from his/her own areas of the airport.

E.S.3 Additional Technology-Based Effluent Limits

E.S.3.1 *Good Housekeeping Measures.*

E.S.3.1.1 *Aircraft, Ground Vehicle and Equipment Maintenance Areas*. Minimize the contamination of stormwater runoff from all areas used for aircraft, ground vehicle and equipment maintenance (including the maintenance conducted on the terminal apron and in dedicated hangers). Consider the following practices (or their equivalents): performing maintenance activities indoors; maintaining an organized inventory of material used in the maintenance areas; draining all parts of fluids prior to disposal; prohibiting the practice of hosing down the apron or hanger floor; using dry cleanup methods; and collecting the stormwater runoff from the maintenance area and providing treatment or recycling.

E.S.3.1.2 *Aircraft, Ground Vehicle and Equipment Cleaning Areas*. Clearly demarcate these areas on the ground using signage or other appropriate means. Minimize the contamination of stormwater runoff from cleaning areas.

E.S.3.1.3 *Aircraft, Ground Vehicle and Equipment Storage Areas*. Store all aircraft, ground vehicles and equipment awaiting maintenance in designated areas only and minimize the contamination of stormwater runoff from these storage areas. Consider the following control measures, including any BMPs (or their equivalents): storing aircraft and ground vehicles indoors; using drip pans for the collection of fluid leaks; and perimeter drains, dikes or berms surrounding the storage areas.

E.S.3.1.4 *Material Storage Areas*. Maintain the vessels of stored materials (e.g., used oils, hydraulic fluids, spent solvents, and waste aircraft fuel) in good condition, to prevent or minimize contamination of stormwater. Also plainly label the vessels (e.g., "used oil," "Contaminated Jet A," etc.). Minimize contamination of precipitation/runoff from these areas. Consider the following control measures (or their equivalents): storing materials indoors; storing waste materials in a centralized location; and installing berms/dikes around storage areas.

E.S.3.1.5 *Airport Fuel System and Fueling Areas*. Minimize the discharge of fuel to the storm sewer/surface waters resulting from fuel servicing activities or other operations conducted in support of the airport fuel system. Consider the following control measures (or their equivalents): implementing spill and overflow practices (e.g., placing absorptive materials beneath aircraft during fueling operations); using only dry cleanup methods; and collecting stormwater runoff.

E.S.3.1.6 *Source Reduction*. Minimize, and where feasible eliminate, the use of urea and glycol-based deicing chemicals, in order to reduce the aggregate amount of deicing chemicals used and/or lessen the environmental impact. Chemical options to replace ethylene glycol, propylene glycol and urea include: potassium acetate; magnesium acetate; calcium acetate; and anhydrous sodium acetate.

E.S.3.1.6.1 *Runway Deicing Operation*: To minimize the discharge of pollutants in stormwater from runway deicing operations, implement source reduction control measures such as the following, where determined to be feasible and that accommodate considerations of safety, space, operational constraints, and flight considerations (list not exclusive): metered application of chemicals; pre-wetting dry chemical constituents prior to application; installing a runway ice detection system; implementing anti-icing operations as a preventive measure against ice buildup; heating sand; and product substitution.

E.S.3.1.6.2 *Aircraft Deicing Operations*. Minimize the discharge of pollutants in stormwater from aircraft deicing operations. Determine whether excessive application of deicing chemicals occurs and adjust as necessary, consistent with considerations of flight safety. Determine whether alternatives to glycol and whether containment measures for applied chemicals are feasible. Implement control measures for reducing deicing fluid such as the following, where determined to be feasible and that accommodate considerations of safety, space, operational constraints, and flight considerations (list not exclusive): forced-air deicing systems, computer-controlled fixed-gantry systems, infrared technology, hot water, varying glycol content to air temperature, enclosed-basket deicing trucks, mechanical methods, solar radiation, hangar storage, aircraft covers, and thermal blankets for MD-80s and DC-9s. Consider using ice-detection systems and airport traffic flow strategies and departure slot allocation systems where feasible and that accommodate considerations of safety, space, operational constraints, and flight considerations. The evaluations and determinations required by this Part should be carried out by the personnel most familiar with the particular aircraft and flight operations and related systems in question (versus an outside entity such as the airport authority.

E.S.3.1.7 *Management of Runoff*. Minimize the discharge of pollutants in stormwater from deicing chemicals in runoff. To minimize discharges of pollutants in stormwater from aircraft deicing, implement runoff management control measures such as the following, where determined to be feasible and that accommodate considerations of safety, space, operational constraints, and flight considerations (list not exclusive): installing a centralized deicing pad to recover deicing fluid following application; plug-and-pump (PnP); using vacuum/collection trucks (glycol recovery vehicles); storing contaminated stormwater/deicing fluids in tanks; recycling collected deicing fluid where feasible; releasing controlled amounts to a publicly owned treatment works; separation of contaminated snow; conveying contaminated runoff into a stormwater impoundment for biochemical decomposition (be aware of attracting wildlife that may prove hazardous to flight operations); and directing runoff into vegetative swales or other infiltration measures. To minimize discharges of pollutants in stormwater from runway deicing, implement runoff management control measures such as the following, where determined to be feasible and that accommodate considerations of safety, space, operational constraints, and flight considerations (list not exclusive): mechanical systems (snow plows, brushes); conveying contaminated runoff into swales and/or a stormwater impoundment; and pollution prevention practices such as ice detection systems, and airfield prewetting.
When applying deicing fluids during non-precipitation events (also referred to as "clear ice deicing"), implement control measures to prevent unauthorized discharge of pollutants (dry-weather discharges of pollutants would need coverage under an NPDES wastewater permit), or to minimize the discharge of pollutants from deicing fluids in later stormwater discharges, implement control measures such as the following, where determined to be feasible and that accommodate considerations safety, space, operational constraints, and flight considerations (list not exclusive): recovering deicing fluids; preventing the fluids from entering storm sewers or other stormwater discharge conveyances (e.g., covering storm sewer inlets, using booms, installing absorptive interceptors in the drains); releasing controlled amounts to a publicly owned treatment works Used deicing fluid should be recycled whenever practicable.

E.S.3.2 *Deicing Season.* You must determine the seasonal timeframe (e.g., December- February, October - March, etc.) during which deicing activities typically occur at the facility. Implementation of control measures, including any BMPs, facility inspections and monitoring must be conducted with particular emphasis throughout the defined deicing season. If you meet the deicing chemical usage thresholds of 100,000 gallons glycol and/or 100 tons of urea, the deicing season you identified is the timeframe during which you must obtain the four required benchmark monitoring event results for deicing-related parameters, i.e., BOD, COD, ammonia and pH.

E.S.4 Additional SWPCP Requirements

E.S.4.1 *Drainage Area Site Map*. Document in the SWPCP the following areas of the facility and indicate whether activities occurring there may be exposed to precipitation/surface runoff: aircraft and runway deicing operations; fueling stations; aircraft, ground vehicle and equipment maintenance/cleaning areas; storage areas for aircraft, ground vehicles and equipment awaiting maintenance.

E.S.4.2 *Potential Pollutant Sources.* In your inventory of exposed materials, describe in your SWPCP the potential for the following activities and facility areas to contribute pollutants to stormwater discharges: aircraft, runway, ground vehicle and equipment maintenance and cleaning; aircraft and runway deicing operations (including apron and centralized aircraft deicing stations, runways, taxiways and ramps). If you use deicing chemicals, you must maintain a record of the types (including the Safety Data Sheets [SDS]) used and the monthly quantities, either as measured or, in the absence of metering, as estimated to the best of your knowledge. This includes all deicing chemicals, not just glycols and urea (e.g., potassium acetate), because large quantities of these other chemicals can still have an adverse impact on receiving waters. Tenants or other fixed-based operations that conduct deicing operations must provide the above information to the airport authority for inclusion with any comprehensive airport SWPCPs.

E.S.4.3 *Vehicle and Equipment Washwater Requirements.* Attach to or reference in your SWPCP, a copy of the NPDES permit issued for vehicle/equipment washwater, if applicable. If an industrial user permit is issued under a local pretreatment program, include a copy in your SWPCP. If washwater is handled in another manner (e.g., hauled offsite, retained onsite), describe the disposal method and attach all pertinent documentation/information (e.g., frequency, volume, destination, etc.) in your SWPCP.

E.S.4.4 *Documentation of Control Measures Used for Management of Runoff:* Document in your SWPCP the control measures used for collecting or containing contaminated melt water from collection areas used for disposal of contaminated snow.

E.S.5 Sector-Specific Benchmarks

At a minimum conduct facility inspections at least monthly during the deicing season (e.g., October through April for most mid-latitude airports). If your facility needs to deice before or after this period, expand the monthly inspections to include all months during which deicing chemicals may be used. DEQ may specifically require you to increase inspection frequencies.

E.S.6 Sector-Specific Benchmarks

Table E.S-1 identifies benchmarks that apply to the specific subsectors of Sector S. These benchmarks apply to both your primary industrial activity and any co-located industrial activities, unless a facility has an Individual NPDES Permit for de-icing activities.

Table E.S-1

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Where a single permittee, or a combination of permitted facilities, use more than 100,000 gallons of glycol-based deicing chemicals and/or 100 tons or more of urea on an average annual basis, monitor these parameters in outfalls that collect runoff from areas where deicing activities occur (SIC 4512-4581) and when deicing activities are occurring.	Biochemical Oxygen Demand (BOD_5)	30 mg/L
	Chemical Oxygen Demand (COD)	120 mg/L
	Ammonia	2.14 mg/L
	pH	5.5 - 9.0 s.u.

E.S.7 Effluent Limitations Based on Effluent Limitations Guidelines and New Source Performance Standards

E.S.7.1 *Airfield Pavement Deicing*. For both existing and new "primary airports" (as defined at 40 CFR 449.2) with 1,000 or more annual non-propeller aircraft departures that discharge stormwater from airfield pavement deicing activities, there shall be no discharge of airfield pavement deicers containing urea. To comply with this limitation, such airports must do one of the following: (1) certify annually on the annual report that you do not use pavement deicers containing urea, or (2) meet the effluent limitation in Table E.S-2.

E.S.7.2 *Aircraft Deicing*. Airports that are both "primary airports" (as defined at 40 CFR 449.2) and new sources ("new airports") with 1,000 or more annual non-propeller aircraft departures must meet the applicable requirements for aircraft deicing at 40 CFR 449.11(a). Discharges of the collected aircraft deicing fluid directly to waters of the U.S. are not eligible for coverage under this permit.

E.S.7.3 Monitoring, Reporting and Recordkeeping. For new and existing airports subject to the effluent limitations in E.S.7.1 or E.S.7.2 of this permit, you must comply with the applicable monitoring, reporting and recordkeeping requirements outlined in 40 CFR 449.20.

Table E.S-2[1]

Subsector (You may be subject to requirements for more than one sector/subsector)	**Parameter**	**Effluent Limitation**
Runoff containing urea from airfield pavement deicing at existing and new primary airports with 1,000 or more annual non-propeller aircraft departures	Ammonia as Nitrogen	14.7 mg/L. daily maximum

[1]Monitor semi-annually.

Schedule E – Sector-Specific Requirements for Industrial Activity
Sector T – Treatment Works

E.T.1 Additional Technology-Based Effluent Limits

E.T.1.1 *Control Measures.* In addition to the other control measures, consider the following: routing stormwater to the treatment works; or covering exposed materials (i.e., from the following areas: grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; and septage or hauled waste receiving station).

E.T.1.2 *Employee Training.* At a minimum, training must address the following areas when applicable to a facility: petroleum product management; process chemical management; spill prevention and controls; fueling procedures; general good housekeeping practices; and proper procedures for using fertilizer, herbicides, and pesticides.

E.T.2 Additional SWPCP Requirements

E.T.2.1 *Site Map*. Document in your SWPCP where any of the following may be exposed to precipitation or surface runoff: grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage or hauled waste receiving station; and storage areas for process chemicals, petroleum products, solvents, fertilizers, herbicides, and pesticides.

E.T.2.2 *Potential Pollutant Sources*. Document in your SWPCP the following additional sources and activities that have potential pollutants associated with them, as applicable: grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage or hauled waste receiving station; and access roads and rail lines.

E.T.2.3 *Wastewater and Washwater Requirements.* If wastewater and/or vehicle and equipment wash-water is not covered by another NPDES permit but is handled in another manner (e.g., hauled offsite, retained onsite), the disposal method must be described and all pertinent information (e.g., frequency, volume, destination) must be included in your SWPCP. Discharges of vehicle and equipment washwater, including tank cleaning operations, are not authorized by this permit for this sector.

E.T.3 Additional Inspection Requirements

Include the following areas in all inspections: access roads and rail lines; grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; and septage or hauled waste receiving station.

Schedule E – Sector-Specific Requirements for Industrial Activity
Sector U – Food and Kindred Products

E.U.1 Additional Technology-Based Limitations

E.U.1.1 *Employee Training.* Address pest control in your employee training program.

E.U.2 Additional SWPCP Requirements

E.U.2.1 *Drainage Area Site Map.* Document in your SWPCP the locations of the following activities if they are exposed to precipitation or runoff: vents and stacks from cooking, drying, and similar operations; dry product vacuum transfer lines; animal holding pens; spoiled product; and broken product container storage areas.

E.U.2.2 *Potential Pollutant Sources.* Document in your SWPCP, in addition to food and kindred products processing-related industrial activities, application and storage of pest control chemicals (e.g., rodenticides, insecticides, fungicides) used on plant grounds.

E.U.3 Additional Inspection Requirements

Inspect on a monthly basis, at a minimum, the following areas where the potential for exposure to stormwater exists: loading and unloading areas for all significant materials; storage areas, including associated containment areas; waste management units; vents and stacks emanating from industrial activities; spoiled product and broken product container holding areas; animal holding pens; staging areas; and air pollution control equipment.

E.U.4 Sector-Specific Benchmarks

Table E.U-1 identifies benchmarks that apply to the specific subsectors of Sector U. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

Table E.U-1.

Subsector (You may be subject to requirements for more than one Sector / Subsector)	Parameter	Benchmark Monitoring Concentration
Fats and Oils Products (SIC 2074-2079)	Biochemical Oxygen Demand (BOD_5)	30 mg/L
	Chemical Oxygen Demand (COD)	120 mg/L
	Nitrate plus Nitrite Nitrogen	0.68 mg/L

Schedule E – Sector-Specific Requirements for Industrial Activity
Sector V – Textile Mills, Apparel, and Other Fabric Products

E.V.1 Additional Technology-Based Limitations

E.V.1.1 *Good Housekeeping Measures.*

E.V.1.1.1 *Material Storage Areas.* Plainly label and store all containerized materials (e.g., fuels, petroleum products, solvents, and dyes) in a protected area, away from drains. Minimize contamination of the stormwater runoff from such storage areas. Also consider an inventory control plan to prevent excessive purchasing of potentially hazardous substances. For storing empty chemical drums or containers, ensure that the drums and containers are clean (consider triple-rinsing) and that there is no contact of residuals with precipitation or runoff. Collect and dispose of washwater from these cleanings properly.

E.V.1.1.2 *Material Handling Areas.* Minimize contamination of stormwater runoff from material handling operations and areas. Consider the following (or their equivalents): use of spill and overflow protection; covering fueling areas; and covering or enclosing areas where the transfer of material may occur. When applicable, address the replacement or repair of leaking connections, valves, transfer lines, and pipes that may carry chemicals, dyes, or wastewater.

E.V.1.1.3 *Fueling Areas.* Minimize contamination of stormwater runoff from fueling areas. Consider the following (or their equivalents): covering the fueling area, using spill and overflow protection, minimizing run-on of stormwater to the fueling areas, using dry cleanup methods, and treating and/or recycling stormwater runoff collected from the fueling area.

E.V.1.1.4 *Above-Ground Storage Tank Area.* Minimize contamination of the stormwater runoff from above-ground storage tank areas, including the associated piping and valves. Consider the following (or their equivalents): regular cleanup of these areas; including measures for tanks, piping and valves explicitly in your SPCC program; minimizing runoff of stormwater from adjacent areas; restricting access to the area; inserting filters in adjacent catch basins; providing absorbent booms in unbermed fueling areas; using dry cleanup methods; and permanently sealing drains within critical areas that may discharge to a storm drain.

E.V.1.2 *Employee Training.* As part of your employee training program, address, at a minimum, the following activities (as applicable): use of reused and recycled waters, solvents management, proper disposal of dyes, proper disposal of petroleum products and spent lubricants, spill prevention and control, fueling procedures, and general good housekeeping practices.

E.V.2 Additional SWPCP Requirements

E.V.2.1 *Potential Pollutant Sources. Document in your SWPCP the following additional sources* and activities that have potential pollutants associated with them: industry-specific significant materials and industrial activities (e.g., backwinding, beaming, bleaching, backing bonding, carbonizing, carding, cut and sew operations, desizing, drawing, dyeing locking, fulling, knitting, mercerizing, opening, packing, plying, scouring, slashing, spinning, synthetic-felt processing, textile waste processing, tufting, turning, weaving, web forming, winging, yarn spinning, and yarn texturing).

E.V.2.2 *Description of Good Housekeeping Measures for Material Storage Areas.* Document in the SWPCP your containment area or enclosure for materials stored outdoors.

E.V.3 Additional Inspection Requirements

Inspect, at least monthly, the following activities and areas (at a minimum): transfer and transmission lines, spill prevention, good housekeeping practices, management of process waste products, and all structural and nonstructural management practices.

Schedule E – Sector-Specific Requirements for Industrial Activity
Sector W – Furniture and Fixtures

E.W.1 Additional Technology-Based Limitations

E.W.1.1 *Drainage Area Site Map.* Document in your SWPCP where any of the following may be exposed to precipitation or surface runoff: material storage (including tanks or other vessels used for liquid or waste storage) areas; outdoor material processing areas; areas where wastes are treated, stored, or disposed of; access roads; and rail spurs.

Schedule E – Sector-Specific Requirements for Industrial Activity
Sector X – Printing and Publishing

E.X.1 Additional Technology-Based Effluent Limits

E.X.1.1 *Good Housekeeping Measures*.

E.X.1.1.1 *Material Storage Areas.* Plainly label and store all containerized materials (e.g., skids, pallets, solvents, bulk inks, hazardous waste, empty drums, portable and mobile containers of plant debris, wood crates, steel racks, and fuel oil) in a protected area, away from drains. Minimize contamination of the stormwater runoff from such storage areas. Also consider an inventory control plan to prevent excessive purchasing of potentially hazardous substances.

E.X.1.1.2 *Material Handling Area.* Minimize contamination of stormwater runoff from material handling operations and areas (e.g., blanket wash, mixing solvents, loading and unloading materials). Consider the following (or their equivalents): using spill and overflow protection, covering fueling areas, and covering or enclosing areas where the transfer of materials may occur. When applicable, address the replacement or repair of leaking connections, valves, transfer lines, and pipes that may carry chemicals or wastewater.

E.X.1.1.3 *Fueling Areas.* Minimize contamination of stormwater runoff from fueling areas. Consider the following (or their equivalents): covering the fueling area, using spill and overflow protection, minimizing runoff of stormwater to the fueling areas, using dry cleanup methods, and treating and/or recycling stormwater runoff collected from the fueling area.

E.X.1.1.4 *Above Ground Storage Tank Area.* Minimize contamination of the stormwater runoff from above-ground storage tank areas, including the associated piping and valves. Consider the following (or their equivalents): regularly cleaning these areas, explicitly addressing tanks, piping and valves in the SPCC program, minimizing stormwater runoff from adjacent areas, restricting access to the area, inserting filters in adjacent catch basins, providing absorbent booms in unbermed fueling areas, using dry cleanup methods, and permanently sealing drains within critical areas that may discharge to a storm drain.

E.X.1.2 *Employee Training.* As part of your employee training program, address, at a minimum, the following activities (as applicable): spent solvent management, spill prevention and control, used oil management, fueling procedures, and general good housekeeping practices.

E.X.2 Additional SWPCP Requirements

E.X.2.1 *Description of Good Housekeeping Measures for Material Storage Areas.* In connection with E.X.1.1.1, describe in the SWPCP the containment area or enclosure for materials stored outdoors.

Schedule E – Sector-Specific Requirements for Industrial Activity
Sector Y – Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries

E.Y.1 Additional Technology-Based Effluent Limits

E.Y.1.1 *Controls for Rubber Manufacturers.* Minimize the discharge of zinc in your stormwater discharges. Following are some general control measure options to consider: using chemicals purchased in pre-weighed, sealed polyethylene bags; storing in-use materials in sealable containers, ensuring an airspace between the container and the cover to minimize "puffing" losses when the container is opened, and using automatic dispensing and weighing equipment.

E.Y.1.1.1 *Zinc Bags.* Ensure proper handling and storage of zinc bags at your facility. Following are some control measure options: employee training on the handling and storage of zinc bags, indoor storage of zinc bags, cleanup of zinc spills without washing the zinc into the storm drain, and the use of 2,500-pound sacks of zinc rather than 50- to 100-pound sacks.

E.Y.1.1.2 *Dumpsters.* Minimize discharges of zinc from dumpsters through implementation of control measures such as the following, where determined to be feasible (list not exclusive): covering the dumpster; moving the dumpster indoors; and providing a lining for the dumpster.

E.Y.1.1.3 *Dust Collectors and Baghouses.* Minimize contributions of zinc to stormwater from dust collectors and baghouses. Replace or repair, as appropriate, improperly operating dust collectors and baghouses.

E.Y.1.1.4 *Grinding Operations.* Minimize contamination of stormwater as a result of dust generation from rubber grinding operations. Where determined to be feasible, install a dust collection system.

E.Y.1.1.5 *Zinc Stearate Coating Operations.* Minimize the potential for stormwater contamination from drips and spills of zinc stearate slurry that may be released to the storm drain. Where determined to be feasible, use alternative compounds to zinc stearate.

E.Y.1.2 *Controls for Plastic Products Manufacturers.* Minimize the discharge of plastic resin pellets in your stormwater discharges through implementation of control measures such as the following, where determined to be feasible (list not exclusive): minimizing spills; cleaning up of spills promptly and thoroughly; sweeping thoroughly; pellet capturing; employee education; and disposal precautions.

E.Y.2 Additional SWPCP Requirements

E.Y.2.1 *Potential Pollutant Sources for Rubber Manufacturers.* Document in your SWPCP the use of zinc at your facility and the possible pathways through which zinc may be discharged in stormwater runoff.

Schedule E – Sector-Specific Requirements for Industrial Activity
Sector Z – Leather Tanning and Finishing

E.Z.1 Additional Technology-Based Effluent Limits

E.Z.1.1 *Good Housekeeping Measures.*

E.Z.1.1.1 *Storage Areas for Raw, Semiprocessed, or Finished Tannery By-products.* Minimize contamination of stormwater runoff from pallets and bales of raw, semiprocessed, or finished tannery by-products (e.g., splits, trimmings, shavings). Store or protect indoors with polyethylene wrapping, tarpaulins, roofed storage, etc. where practicable. Place materials on an impermeable surface and enclose or put berms (or equivalent measures) around the area to prevent stormwater run-on and runoff where practicable.

E.Z.1.1.2 *Material Storage Areas.* Label storage containers of all materials (e.g., specific chemicals, hazardous materials, spent solvents, waste materials) minimize contact of such materials with stormwater.

E.Z.1.1.3 *Buffing and Shaving Areas.* Minimize contamination of stormwater runoff with leather dust from buffing and shaving areas through implementation of control measures such as the following, where determined to be feasible (list not exclusive): implementing dust collection enclosures; implementing preventive inspection and maintenance programs; or other appropriate preventive measures.

E.Z.1.1.4 *Receiving, Unloading, and Storage Areas.* Minimize contamination of stormwater runoff from receiving, unloading, and storage areas. If these areas are exposed, implement control measures such as the following, where determined to be feasible (list not exclusive): covering all hides and chemical supplies; diverting drainage to the process sewer; or grade berming or curbing the area to prevent stormwater runoff.

E.Z.1.1.5 *Outdoor Storage of Contaminated Equipment*. Minimize contact of stormwater with contaminated equipment through implementation of control measures such as the following, where determined to be feasible (list not exclusive): covering equipment, diverting drainage to the process sewer, and cleaning thoroughly prior to storage.

E.Z.1.1.6 *Waste Management.* Minimize contamination of stormwater runoff from waste storage areas through implementation of control measures such as the following, where determined to be feasible (list not exclusive): covering dumpsters; moving waste management activities indoors; covering waste piles with temporary covering material such as tarpaulins or polyethylene; and minimizing stormwater runoff by enclosing the area or building berms around the area.

E.Z.2 Additional SWPCP Requirements

E.Z.2.1 *Drainage Area Site Map.* Identify in your SWPCP where any of the following may be exposed to precipitation or surface runoff: processing and storage areas of the beamhouse, tanyard, and re-tan wet finishing and dry finishing operations.

E.Z.2.2 *Potential Pollutant Sources.* Document in your SWPCP the following sources and activities that have potential pollutants associated with them (as appropriate): temporary or permanent storage of fresh and brine-cured hides; extraneous hide substances and hair; leather dust, scraps, trimmings, and shavings.

Schedule E – Sector-Specific Requirements for Industrial Activity
Sector AA – Fabricated Metal Products

E.AA.1 Additional Technology-Based Effluent Limits

E.AA.1.1 *Good Housekeeping Measures.*

E.AA.1.1.1 *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.

E.AA.1.1.2 *Paints and Painting Equipment.* Minimize exposure of paint and painting equipment to stormwater.

E.AA.1.2 *Spill Prevention and Response Procedures.* Ensure that the necessary equipment to implement a cleanup is available to personnel. The following areas should be addressed

E.AA.1.2.1 *Metal Fabricating Areas.* Maintain clean, dry, orderly conditions in these areas. Consider using dry clean-up techniques.

E.AA.1.2.2 *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): maintaining storage areas so that there is easy access in the event of a spill, and labeling stored materials to aid in identifying spill contents.

E.AA.2.2.3 *Metal Working Fluid Storage Areas.* Minimize the potential for stormwater contamination from storage areas for metal working fluids.

E.AA.1.2.4 *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.

E.AA.1.2.5 *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.

E.AA.1.2.6 *Chemical Storage Areas*. Minimize stormwater contamination and accidental spillage in chemical storage areas. Include a program to inspect containers and identify proper disposal methods.

E.AA.1.3 *Spills and Leaks.* In your spill prevention and response procedures, 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.

E.AA.2 Additional SWPCP Requirements

E.AA.2.1 *Drainage Area Site Map.* Document in your SWPCP where any of the following may be exposed to precipitation or surface runoff: raw metal storage areas; finished metal storage areas; scrap disposal collection sites; equipment storage areas; retention and detention basins; temporary and permanent diversion dikes or berms; right-of-way or perimeter diversion devices; sediment traps and barriers; processing areas, including outside painting areas; wood preparation; recycling; and raw material storage.

E.AA.2.2 *Potential Pollutant Sources.* Document in your SWPCP the following additional sources and activities that have potential pollutants associated with them: loading and unloading operations for paints, chemicals, and raw materials; outdoor storage activities for raw materials, paints,

empty containers, corn cobs, chemicals, and scrap metals; outdoor manufacturing or processing activities such as grinding, cutting, degreasing, buffing, and brazing; onsite waste disposal practices for spent solvents, sludge, pickling baths, shavings, ingot pieces, and refuse and waste piles.

E.AA.3 Additional Inspection Requirements

E.AA.3.1 *Inspections.* At a minimum, include the following areas in all inspections: raw metal storage areas, finished product storage areas, material and chemical storage areas, recycling areas, loading and unloading areas, equipment storage areas, paint areas, and vehicle fueling and maintenance areas. Also inspect areas associated with the storage of raw metals, spent solvents and chemicals storage areas, outdoor paint areas, and drainage from roof. Potential pollutants include chromium, zinc, lubricating oil, solvents, aluminum, oil and grease, methyl ethyl ketone, steel, and related materials.

E.AA.4 Sector-Specific Benchmarks

Table E.AA-1 identifies benchmarks that apply to the specific subsectors of Sector AA. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

Table E.AA-1

Subsector (You may be subject to requirements for more than one sector/subsector)	**Parameter**	**Benchmark Monitoring Concentration**
Fabricated Metal Products, except Coating (SIC 3411-3499; 3911-3915)	Total Aluminum	0.75 mg/L
	Total Iron	1.0 mg/L
	Nitrate plus Nitrite Nitrogen	0.68 mg/L
Fabricated Metal coating and Engraving (SIC 3479)	Nitrate plus Nitrite Nitrogen	0.68 mg/L

Schedule E – Sector-Specific Requirements for Industrial Activity
Sector AB – Transportation Equipment, Industrial or Commercial Machinery

E.AB.1 Additional SWPCP Requirements

E.AB.1.1 *Drainage Area Site Map.* Identify in your SWPCP where any of the following may be exposed to precipitation or surface runoff: vents and stacks from metal processing and similar operations.

SCHEDULE F
NPDES GENERAL CONDITIONS

SECTION A. STANDARD CONDITIONS

A1. Duty to Comply with Permit

The permittee must comply with all conditions of this permit. Failure to comply with any permit condition is a violation of Oregon Revised Statutes (ORS) 468B.025 and the federal Clean Water Act and is grounds for an enforcement action. Failure to comply is also grounds for DEQ to terminate, modify and reissue, revoke, or deny renewal of a permit.

A2. Penalties for Water Pollution and Permit Condition Violations

The permit is enforceable by DEQ or EPA, and in some circumstances also by third-parties under the citizen suit provisions of 33 USC § 1365. DEQ enforcement is generally based on provisions of state statutes and Environmental Quality Commission (EQC) rules, and EPA enforcement is generally based on provisions of federal statutes and EPA regulations.

ORS 468.140 allows DEQ to impose civil penalties up to $25,000 per day for violation of a term, condition, or requirement of a permit.

Under ORS 468.943, unlawful water pollution in the second degree, is a Class A misdemeanor and is punishable by a fine of up to $25,000, imprisonment for not more than one year, or both. Each day on which a violation occurs or continues is a separately punishable offense.

Under ORS 468.946, unlawful water pollution in the first degree is a Class B felony and is punishable by a fine of up to $250,000, imprisonment for not more than 10 years, or both.

The Clean Water Act provides that any person who violates permit condition, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed $25,000 per day for each violation.

The Clean Water Act provides that any person who *negligently* violates any condition, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of $2,500 to $25,000 per day of violation, or imprisonment of not more than 1 year, or both.

In the case of a second or subsequent conviction for a *negligent* violation, a person shall be subject to criminal penalties of not more than $50,000 per day of violation, or by imprisonment of not more than 2 years, or both.

Any person who *knowingly* violates such sections, or such conditions or limitations is subject to criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment for not more than 3 years, or both.

In the case of a second or subsequent conviction for a *knowing* violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than 6 years, or both.

Any person who *knowingly* violates section any permit condition, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000 or imprisonment of not more than 15 years, or both.

In the case of a second or subsequent conviction for a *knowing* endangerment violation, a person shall be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both.

An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than $1,000,000 and can be fined up to $2,000,000 for second or subsequent convictions.

Any person may be assessed an administrative penalty by the Administrator for violating any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act.

Administrative penalties for Class I violations are not to exceed $10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed $25,000.

Penalties for Class II violations are not to exceed $10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed $125,000.

A3. Duty to Mitigate

The permittee must take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit. In addition, upon request of DEQ, the permittee must correct any adverse impact on the environment or human health resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

A4. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and have the permit renewed. The application must be submitted at least 180 days before the expiration date of this permit.

DEQ may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date.

A5. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

a. Violation of any term, condition, or requirement of this permit, a rule, or a statute.
b. Obtaining this permit by misrepresentation or failure to disclose fully all material facts.
c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

d. The permittee is identified as a Designated Management Agency or allocated a wasteload under a total maximum daily load (TMDL).

e. New information or regulations.
f. Modification of compliance schedules.
g. Requirements of permit reopener conditions
h. Correction of technical mistakes made in determining permit conditions.
i. Determination that the permitted activity endangers human health or the environment.
j. Other causes as specified in 40 CFR §§ 122.62, 122.64, and 124.5.
k. For communities with combined sewer overflows (CSOs):
   (1) To comply with any state or federal law regulation for CSOs that is adopted or promulgated subsequent to the effective date of this permit.
   (2) If new information that was not available at the time of permit issuance indicates that CSO controls imposed under this permit have failed to ensure attainment of water quality standards, including protection of designated uses.
   (3) Resulting from implementation of the permittee's long-term control plan and/or permit conditions related to CSOs.

The filing of a request by the permittee for a permit modification, revocation or reissuance, termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

A6. Toxic Pollutants
The permittee must comply with any applicable effluent standards or prohibitions established under Oregon Administrative Rule (OAR) 340-041-0033 and section 307(a) of the federal Clean Water Act for toxic pollutants, and with standards for sewage sludge use or disposal established under section 405(d) of the federal Clean Water Act, within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

A7. Property Rights and Other Legal Requirements
The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege, or authorize any injury to persons or property or invasion of any other private rights, or any infringement of federal, tribal, state, or local laws or regulations.

A8. Permit References
Except for effluent standards or prohibitions established under section 307(a) of the federal Clean Water Act and OAR 340-041-0033 for toxic pollutants, and standards for sewage sludge use or disposal established under section 405(d) of the federal Clean Water Act, all rules and statutes referred to in this permit are those in effect on the date this permit is issued.

A9. Permit Fees
The permittee must pay the fees required by OAR.

SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

B1. Proper Operation and Maintenance
The permittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve

compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires

the operation of back-up or auxiliary facilities or similar systems that are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

B2. Need to Halt or Reduce Activity Not a Defense

For industrial or commercial facilities, upon reduction, loss, or failure of the treatment facility, the permittee must, to the extent necessary to maintain compliance with its permit, control production or all discharges or both until the facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power of the treatment facility fails or is reduced or lost. It is not a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

B3. Bypass of Treatment Facilities

a. Definitions
   (1) "Bypass" means intentional diversion of waste streams from any portion of the treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, provided the diversion is to allow essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs b and c of this section.
   (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b. Prohibition of bypass.
   (1) Bypass is prohibited and DEQ may take enforcement action against a permittee for bypass unless:
      i. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
      ii. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventative maintenance; and
      iii. The permittee submitted notices and requests as required under General Condition B3.c.
   (2) DEQ may approve an anticipated bypass, after considering its adverse effects and any alternatives to bypassing, if DEQ determines that it will meet the three conditions listed above in General Condition B3.b.(1).

c. Notice and request for bypass.
   (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, a written notice must be submitted to DEQ at least ten days before the date of the bypass.

(2) Unanticipated bypass. The permittee must submit notice of an unanticipated bypass as required in General Condition D5.

B4. Upset

a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operation error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of General Condition B4.c are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
   (1) An upset occurred and that the permittee can identify the causes(s) of the upset;
   (2) The permitted facility was at the time being properly operated;
   (3) The permittee submitted notice of the upset as required in General Condition D5, hereof (24-hour notice); and
   (4) The permittee complied with any remedial measures required under General Condition A3 hereof.

d. Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

B5. Treatment of Single Operational Upset

For purposes of this permit, a single operational upset that leads to simultaneous violations of more than one pollutant parameter will be treated as a single violation. A single operational upset is an exceptional incident that causes simultaneous, unintentional, unknowing (not the result of a knowing act or omission), temporary noncompliance with more than one federal Clean Water Act effluent discharge pollutant parameter. A single operational upset does not include federal Clean Water Act violations involving discharge without a NPDES permit or noncompliance to the extent caused by improperly designed or inadequate treatment facilities. Each day of a single operational upset is a violation.

B6. Overflows from Wastewater Conveyance Systems and Associated Pump Stations

a. Definition. "Overflow" means any spill, release or diversion of sewage including:
   (1) An overflow that results in a discharge to waters of the United States; and
   (2) An overflow of wastewater, including a wastewater backup into a building (other than a backup caused solely by a blockage or other malfunction in a privately owned sewer or building lateral), even if that overflow does not reach waters of the United States.

b. Reporting required. All overflows must be reported orally to DEQ within 24 hours from the time the permittee becomes aware of the overflow. Reporting procedures are described in more detail in General Condition D5.

B7. Public Notification of Effluent Violation or Overflow

If effluent limitations specified in this permit are exceeded or an overflow occurs that threatens public health, the permittee must take such steps as are necessary to alert the public, health agencies and other affected entities (for example, public water systems) about the extent and nature of the discharge in accordance with the notification procedures developed under General Condition B8.

Such steps may include, but are not limited to, posting of the river at access points and other places, news releases, and paid announcements on radio and television.

B8. Emergency Response and Public Notification Plan

The permittee must develop and implement an emergency response and public notification plan that identifies measures to protect public health from overflows, bypasses, or upsets that may endanger public health. At a minimum the plan must include mechanisms to:

a. Ensure that the permittee is aware (to the greatest extent possible) of such events;
b. Ensure notification of appropriate personnel and ensure that they are immediately dispatched for investigation and response;
c. Ensure immediate notification to the public, health agencies, and other affected public entities (including public water systems). The overflow response plan must identify the public health and other officials who will receive immediate notification;
d. Ensure that appropriate personnel are aware of and follow the plan and are appropriately trained;
e. Provide emergency operations; and
f. Ensure that DEQ is notified of the public notification steps taken.

B9. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters must be disposed of in such a manner as to prevent any pollutant from such materials from entering waters of the state, causing nuisance conditions, or creating a public health hazard.

SECTION C. MONITORING AND RECORDS

C1. Representative Sampling

Sampling and measurements taken as required herein must be representative of the volume and nature of the monitored discharge. All samples must be taken at the monitoring points specified in this permit, and must be taken, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points must not be changed without notification to and the approval of DEQ. Samples must be collected in accordance with requirements in 40 CFR part 122.21 and 40 CFR part 403 Appendix E.

C2. Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices must be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices must be installed, calibrated and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected must be capable of measuring flows with a maximum deviation of less than ± 10 percent from true discharge rates throughout the range of expected discharge volumes.

C3. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under 40 CFR part 136 or, in the case of sludge (biosolids) use and disposal, approved under 40 CFR part 503 unless other test procedures have been specified in this permit.

For monitoring of recycled water with no discharge to waters of the state, monitoring must be conducted according to test procedures approved under 40 CFR part 136 or as specified in the most recent edition of Standard Methods for the Examination of Water and Wastewater unless other test procedures have been specified in this permit or approved in writing by DEQ.

C4. Penalties for Tampering

The federal Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit may, upon conviction, be punished by a fine of not more than $10,000 per violation, imprisonment for not more than two years, or both. If a conviction of a person is for a violation committed after a first conviction of such person, punishment is a fine not more than $20,000 per day of violation, or by imprisonment of not more than four years, or both.

C5. Reporting of Monitoring Results

Monitoring results must be summarized each month on a Discharge Monitoring Report form approved by DEQ. The reports must be submitted monthly and are to be mailed, delivered or otherwise transmitted by the 15th day of the following month unless specifically approved otherwise in Schedule B of this permit.

C6. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR part 136 or, in the case of sludge (biosolids) use and disposal, approved under 40 CFR part 503, or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report. Such increased frequency must also be indicated. For a pollutant parameter that may be sampled more than once per day (for example, total residual chlorine), only the average daily value must be recorded unless otherwise specified in this permit.

C7. Averaging of Measurements

Calculations for all limitations that require averaging of measurements must utilize an arithmetic mean, except for bacteria which must be averaged as specified in this permit.

C8. Retention of Records

Records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities must be retained for a period of at least 5 years (or longer as required by 40 CFR part 503). Records of all monitoring information including all calibration and maintenance records, all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit and records of all data used to complete the application for this permit must be retained for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of DEQ at any time.

C9. Records Contents

Records of monitoring information must include:

a. The date, exact place, time, and methods of sampling or measurements;
b. The individual(s) who performed the sampling or measurements;
c. The date(s) analyses were performed;
d. The individual(s) who performed the analyses;
e. The analytical techniques or methods used; and
f. The results of such analyses.

C10. Inspection and Entry

The permittee must allow DEQ or EPA upon the presentation of credentials to:

a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by state law, any substances or parameters at any location.

C11. Confidentiality of Information

Any information relating to this permit that is submitted to or obtained by DEQ is available to the public unless classified as confidential by the Director of DEQ under ORS 468.095. The permittee may request that information be classified as confidential if it is a trade secret as defined by that statute. The name and address of the permittee, permit applications, permits, effluent data, and information required by NPDES application forms under 40 CFR § 122.21 are not classified as confidential [40 CFR § 122.7(b)].

SECTION D. REPORTING REQUIREMENTS

D1. Planned Changes

The permittee must comply with OAR 340-052, "Review of Plans and Specifications" and 40 CFR § 122.41(l)(1). Except where exempted under OAR 340-052, no construction, installation, or modification involving disposal systems, treatment works, sewerage systems, or common sewers may be commenced until the plans and specifications are submitted to and approved by DEQ. The permittee must give notice to DEQ as soon as possible of any planned physical alternations or additions to the permitted facility.

D2. Anticipated Noncompliance

The permittee must give advance notice to DEQ of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

D3. Transfers

This permit may be transferred to a new permittee provided the transferee acquires a property interest in the permitted activity and agrees in writing to fully comply with all the terms and conditions of the permit and EQC rules. No permit may be transferred to a third party without prior written approval from DEQ. DEQ may require modification, revocation, and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary

under 40 CFR § 122.61. The permittee must notify DEQ when a transfer of property interest takes place.

D4. Compliance Schedule

Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date. Any reports of noncompliance must include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirements.

D5. Twenty-Four Hour Reporting

The permittee must report any noncompliance that may endanger health or the environment. Any information must be provided orally (by telephone) to the DEQ regional office or Oregon Emergency Response System (1-800-452-0311) as specified below within 24 hours from the time the permittee becomes aware of the circumstances.

a. Overflows.
   (1) Oral Reporting within 24 hours.
      i. For overflows other than basement backups, the following information must be reported to the Oregon Emergency Response System (OERS) at 1-800-452-0311. For basement backups, this information should be reported directly to the DEQ regional office.
         (a) The location of the overflow;
         (b) The receiving water (if there is one);
         (c) An estimate of the volume of the overflow;
         (d) A description of the sewer system component from which the release occurred (for example, manhole, constructed overflow pipe, crack in pipe); and
         (e) The estimated date and time when the overflow began and stopped or will be stopped.
      ii. The following information must be reported to the DEQ regional office within 24 hours, or during normal business hours, whichever is earlier:
         (a) The OERS incident number (if applicable); and
         (b) A brief description of the event.
   (2) Written reporting postmarked within 5 days.
      i. The following information must be provided in writing to the DEQ regional office within 5 days of the time the permittee becomes aware of the overflow:
         (a) The OERS incident number (if applicable);
         (b) The cause or suspected cause of the overflow;
         (c) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow and a schedule of major milestones for those steps;
         (d) Steps taken or planned to mitigate the impact(s) of the overflow and a schedule of major milestones for those steps; and
         (e) For storm-related overflows, the rainfall intensity (inches/hour) and duration of the storm associated with the overflow.

      DEQ may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.
b. Other instances of noncompliance.
   (1) The following instances of noncompliance must be reported:

i. Any unanticipated bypass that exceeds any effluent limitation in this permit;
ii. Any upset that exceeds any effluent limitation in this permit;
iii. Violation of maximum daily discharge limitation for any of the pollutants listed by DEQ in this permit; and
iv. Any noncompliance that may endanger human health or the environment.

(2) During normal business hours, the DEQ regional office must be called. Outside of normal business hours, DEQ must be contacted at 1-800-452-0311 (Oregon Emergency Response System).

(3) A written submission must be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission must contain:
i. A description of the noncompliance and its cause;

ii. The period of noncompliance, including exact dates and times;
iii. The estimated time noncompliance is expected to continue if it has not been corrected;
iv. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance; and
v. Public notification steps taken, pursuant to General Condition B**7.**

(4) DEQ may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

D6. Other Noncompliance
The permittee must report all instances of noncompliance not reported under General Condition D4 or D5 at the time monitoring reports are submitted. The reports must contain:
a. A description of the noncompliance and its cause;
b. The period of noncompliance, including exact dates and times;
c. The estimated time noncompliance is expected to continue if it has not been corrected; and
d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

D7. Duty to Provide Information
The permittee must furnish to DEQ within a reasonable time any information that DEQ may request to determine compliance with the permit or to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit. The permittee must also furnish to DEQ, upon request, copies of records required to be kept by this permit.

Other Information: When the permittee becomes aware that it has failed to submit any relevant facts or has submitted incorrect information in a permit application or any report to DEQ, it must promptly submit such facts or information.

D8. Signatory Requirements
All applications, reports or information submitted to DEQ must be signed and certified in accordance with 40 CFR § 122.22.

D9. Falsification of Information
Under ORS 468.953, any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, is subject to a Class C felony punishable by a fine not to exceed $125,000 per violation and up to 5 years in prison per ORS chapter 161. Additionally, according to 40 CFR § 122.41(k)(2), any person who knowingly

makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit including monitoring reports or reports of compliance or non-compliance will, upon conviction, be punished by a federal civil penalty not to exceed $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

D10. Changes to Indirect Dischargers

The permittee must provide adequate notice to DEQ of the following:

a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of the federal Clean Water Act if it were directly discharging those pollutants and;

b. Any substantial change in the volume or character of pollutants being introduced into the POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.

c. For the purposes of this paragraph, adequate notice must include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

SECTION E. DEFINITIONS

E1. *BOD* or BOD_5 means five-day biochemical oxygen demand.
E2. *CBOD* or $CBOD_5$ means five-day carbonaceous biochemical oxygen demand.
E3. *TSS* means total suspended solids.
E4. *Bacteria* means but is not limited to fecal coliform bacteria, total coliform bacteria, *Escherichia coli* (*E. coli*) bacteria, and *Enterococcus* bacteria.
E5. *FC* means fecal coliform bacteria.
E6. *Total residual chlorine* means combined chlorine forms plus free residual chlorine
E7. *Technology based permit effluent limitations* means technology-based treatment requirements as defined in 40 CFR § 125.3, and concentration and mass load effluent limitations that are based on minimum design criteria specified in OAR 340-041.
E8. *mg/l* means milligrams per liter.
E9. *µg/l* means microgram per liter.
E10. *kg* means kilograms.
E11. m^3/d means cubic meters per day.
E12. *MGD* means million gallons per day.
E13. *Average monthly effluent limitation* as defined at 40 CFR § 122.2 means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
E14. *Average weekly effluent limitation* as defined at 40 CFR § 122.2 means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.
E15. *Daily discharge* as defined at 40 CFR § 122.2 means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge must be calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge must be calculated as the average measurement of the pollutant over the day.
E16. *24-hour composite sample* means a sample formed by collecting and mixing discrete samples taken periodically and based on time or flow.

E17. *Grab sample* means an individual discrete sample collected over a period of time not to exceed 15 minutes.
E18. *Quarter* means January through March, April through June, July through September, or October through December.
E19. *Month* means calendar month.
E20. *Week* means a calendar week of Sunday through Saturday.
E21. *POTW* means a publicly-owned treatment works.

Appendix B

SWPCP Forms

A – Annual Plan Review

B – Inspection Form

C – Record of Changes

D – Employee Training Records

Form A

Annual Plan Review Form

Port of Portland Terminal 2 Facility	20__ ANNUAL PLAN REVIEW

SUMMARY OF CHANGES:

FUTURE CONTROLS:

SIGNATURE: _____ **DATE:** _____

TITLE: _____

Inspector(s): _____ Date: _____

PORT OF PORTLAND Terminal 2 - SWPCP MONTHLY INSPECTION FORM

MONTHLY VISUAL STORMWATER MONITORING

Instructions: Report "Visible," "No Visible" or "No Discharge." If there is a visible observation of floating solids or oil and grease, notify the Marine Environmental Project Manager immediately for investigation and corrective action. All corrective action must be documented.

OUTFALL	FLOATING SOLIDS	OIL & GREASE	REQUIRED ACTION (Cleaning or maintenance needs)	COMMENTS
Outfall A/Manhole 1				
Outfall B/Manhole 2				
Manhole 5198 (drains to Outfall A, Berth 203)				
Manhole 5279 (drains to outfall between Berths 204 & 205)				
Scupper at Berth 206 (400 foot mark)				

MONTHLY PREVENTATIVE MAINTENANCE INSPECTION

Instructions: Document any signs of stormwater pollutants and inform the Marine Environmental Project Manager ASAP if any stormwater pollutants are observed.

STORMWATER INSPECTION AREA	REQUIRED ACTION (Cleaning or maintenance needs)	OBSERVATIONS
Storage Yard A		
Storage Yard B		
Main Entrance Pkg Lot		
Low Dock/Berth 203		
Berth 204		
Warehouse 205		
Warehouse 204/206		
Berth 204		
Berth 205		
Berth 206		
Designated Fueling Area		
Material Handling Areas		
General Yard Areas		

Inspector(s): _____ Date: _____

STORMWATER INSPECTION AREA	REQUIRED ACTION (Cleaning or maintenance needs)	OBSERVATIONS
Gearlocker Areas		
Wash Pad		
Fueling Pad		
Covered Equipment Storage		
Shop Floor		
Shop Fluid Storage Areas		
Maintenance Areas		

Inspect beneath the gantry cranes for evidence of spills or sheens		
Location	**Sheen or Spill**	**Action/Observations**
Gantry crane (Berth 204)	**Yes** □ **No** □	
Gantry crane (Berth 206)	**Yes** □ **No** □	
If a spill or sheen is observed immediately call the Environmental on-duty spill phone number (503) 240-2022 and the Port MFM Mechanical/Electrical Manager at (503) 240-2006, to report the spill.		

Inspector(s): _____ Date: _____

OK= CB looks good; **NM** = Needs Maintenance; **Required Action** = Cleaning or maintenance needs

STORM BASIN A			
BERTH 204	**OK**	**NM**	**REQUIRED ACTION**
STSCB 5505	□	□	
STSCB 5464	□	□	
STSCB 5413	□	□	
STSCB 5457	□	□	
STSCB 5414	□	□	
STSCB 5415	□	□	
BERTH 203	**OK**	**NM**	**REQUIRED ACTION**
STSCB 5400	□	□	
STSCB 5404	□	□	
STSCB 5405	□	□	
STSCB 5401	□	□	
STSCB 5403	□	□	
STSCB 5402	□	□	
STSCB 5466	□	□	
STSCB 5467	□	□	
STSCB 5501	□	□	
STSCB 5406	□	□	
STSCB 5408	□	□	
STSCB 5502	□	□	
STSCB 5500	□	□	
STSCB 5407	□	□	
STSCB 5409	□	□	
STSCB 5503	□	□	
STSCB 5507	□	□	
STSCB 5410	□	□	
STSCB 5411	□	□	
STSCB 5412	□	□	
NEAR ADMIN BLDG/SECURITY	**OK**	**NM**	**REQUIRED ACTION**
STSCB 5423	□	□	
STSCB 5459	□	□	
STSCB 5419	□	□	
STSCB 5418	□	□	
STSCB 5420	□	□	
STSCB 5427	□	□	
STSCB 5421	□	□	
STSCB 5426	□	□	
STSCB 5426a	□	□	

Inspector(s): _____ Date: _____

STORM BASIN B			
BERTH 205	**OK**	**NM**	**REQUIRED ACTION**
STSCB 5416	□	□	
STSCB 5417	□	□	
STSCB 5510	□	□	
STSCB 5511	□	□	
STSCB 5512	□	□	
STSCB 5513	□	□	
BERTH 206	**OK**	**NM**	**REQUIRED ACTION**
STSCB 5514	□	□	
STSCB 5515	□	□	
STSCB 5516	□	□	
STSCB 5517	□	□	
STSCB 5518	□	□	
E of Warehouse #205	**OK**	**NM**	**REQUIRED ACTION**
STSCB 5460	□	□	
STSCB 5461	□	□	
STSCB 5462	□	□	
STSCB 5463	□	□	
STSCB 5508	□	□	
STSCB 5509	□	□	
NW of Warehouses	**OK**	**NM**	**REQUIRED ACTION**
STSCB 5469	□	□	
STSCB 5428	□	□	
STSCB 5468	□	□	
STSCB 5431	□	□	
STSCB 5432	□	□	
STSCB 5433	□	□	
STSCB 5506	□	□	
STSCB 5434	□	□	
STSCB 5435	□	□	
STSCB 5436	□	□	
STSCB 5437	□	□	
Near Gearlocker	**OK**	**NM**	**REQUIRED ACTION**
STSCB 5441	□	□	
STSCB 5442	□	□	
STSCB 5443	□	□	
STSCB 5444	□	□	
STSCB 5454	□	□	
STSCB 5455	□	□	
STSCB 5456	□	□	
STSCB 5449	□	□	
STSCB 5446	□	□	
STSCB 5447	□	□	

Inspector(s): _____ Date: _____

STSCB 5448	□	□	
STSCB 5450	□	□	
STSCB 5453	□	□	
STSCB 5452	□	□	
STSCB 5451	□	□	
SE of Warehouses	**OK**	**NM**	**REQUIRED ACTION**
STSCB 5430	□	□	
STSCB 5504	□	□	
STSCB 5429	□	□	
SSA Area	**OK**	**NM**	**REQUIRED ACTION**
STSCB5438	□	□	
STSCB5439	□	□	
STSCB5488	□	□	
STSCB5440	□	□	

Form C
Record of Revisions and Corrective Actions

Date	Revision or Review	Corrective Action?	Person Making Change
January 10, 2018	Updated SSA's BMP Plan. Updates were made by Paul Haculak. Revised the Record of Revisions Form C. Added the new 1200-Z permit to Appendix A	No	Peterson
February 5, 2019	Updated Appendix A with the newly revised 1200-Z permit and permit assignment letter	No Yes/No Yes/No Yes/No Yes/No Yes/No Yes/No	Peterson

Form D

Employee Training Record

STORMWATER POLLUTION CONTROL PLAN

This document is to confirm that I have received training in the Port of Portland Terminal 2 Stormwater Pollution Control Program, including the following topics:

- Importance of preventing stormwater pollution
- Spill prevention and internal reporting procedures
- Proper painting procedures
- Spent solvent management
- Disposal of vessel wastewaters (if occurs)
- Fueling procedures
- Spill prevention and control
- General good housekeeping practices
- Materials handling and storage procedures
- Used oil management
- Disposal of spent abrasives
- Painting and blasting procedures (if used)
- Contents of the SWPCP
- Used battery management.

I understand and will comply with the program procedures and requirements.

(Print Name)	**(Signature)**

Instructor **Date**

Appendix C

Petition to Sample Substantially Similar Outfalls

Appendix C. PETITION TO SAMPLE SUBSTANTIALLY SIMILAR OUTFALLS (NARRATIVE DESCRIPTION/SITE MAP)

I. The Port of Portland Terminal 2, is primarily engaged in marine terminal operations, potentially handling bulk materials listed in Table 2.3 of the Stormwater Pollution Control Plan (SWPCP). This facility is classified under SIC code 4491 - Marine Cargo Handling. This facility is considered to be "engaging in industrial activity" for the purposes of stormwater permit application requirements in 40 CFR 122.26(b)(14)(i) and (ii).

II. "When an applicant has two or more outfalls with substantially similar effluents, the Director may allow the applicant to test only one outfall and report that the quantitative data also apply to the substantially similar outfalls." [40 CFR 122.21(g)(7)] and 1200Z permit section B.2.b.ii.

In accordance with 40 CFR 122.21(g)(7) of the NPDES regulations, the Port of Portland hereby petitions the State of Oregon Department of Environmental Quality (the permitting authority) for approval to sample certain representative stormwater outfalls to represent one unmonitored sub-basin that is substantially similar. This sub-basin cannot be sampled because the catchbasins in this area discharge to the outfall line after the last accessible manhole. The outfall for basin B cannot be safely accessed because it is located beneath the dock structure and routinely extends over the river depending on the river level. The Port of Portland will demonstrate that the four catch basins discharging stormwater from sub-basin B have discharges that are substantially similar to the discharge at the other catch basins monitored within Basin B. Likewise, the scupper drain monitored near Berth 206 is representative of all dockside scupper drains.

III. The Port of Portland will demonstrate that the substantially similar catchbasins and scupper drains contain stormwater discharges associated with: (1) substantially similar industrial activities and processes that are occurring outdoors; (2) substantially similar significant materials (including raw materials, fuels, finished materials, waste products, and material handling equipment) that may be exposed to stormwater; (3) substantially similar material management practices (such as sweeping, inspections, and preventative maintenance and (4) substantially similar flows, as determined by the estimated runoff coefficients within Basin B and sub-basin B1.

1. Industrial Activities

A. Description of Industrial Activities at the Port of Portland

The Port of Portland's Terminal 2 facilityhandles bulk and containerized materials between ships, trucks, and rail cars. These materials and their potential to impact stormwater as summarized on Table 2.3 in the SWPCP. These materials may be handled throughout the facility, including all areas within basin B and sub-basin B1. The facility plan is shown on Figure 2 in the SWPCP.

B. Demonstration of Why Outfalls Are Substantially Similar in Terms of Industrial

Activities Conducted Outdoors.

The same types of materials, material handling practices, and stormwater best management practices occur within sub-basin B1 and the remaining monitored areas in Basin B and at all the berths served by scupper drains. Therefore substantially similar discharges are expected at the representative monitoring location B and at the Berth 206 scupper drain. Mobile fueling occurs in a designated area within Basin A, which is monitored separately at monitoring location A.

2. Significant Materials

A. Description of Significant Materials at the Port of Portland

The significant materials listed below can be handled by tenants or authorized users of the Port's Terminal 2 facility. Some materials are stored indoors; however materials with a low potential to impact stormwater runoff are stored outdoors, including areas within Basin B and sub-basin B1.

(i) Raw materials shown on the following table would be handled at all berths and may be stored or handled throughout Basin B.

Port of Portland Terminal 2 Potential Materials Handling

Material	Constituents	Mobile Solids	Solubility	Overall Pollutant Risk
Logs (with bark and de-barked)	Solids, tannins, oils	Moderate	Low	Moderate
Lumber	Tannins, oils	Low	Low	Moderate
Bulk ores:				
Barite	Barium Sulfate, trace Fe, Hg, Cd, Cu Pb, Zn, sulfide, phosphate	High	Low	High
Manganese	Manganese Oxide	High	Low	High
Urea	Assumes pure synthetic Urea in prill or granules, can break down to ammonia	High	High	High
Bulk Fertilizers:				
Soda Ash	Sodium carbonate	High	High	High
Potash	Potassium carbonate/chloride/sulfate/magnesium sulfate/nitrate	High	High	High
Other Dry Bulks:				
Grains	Carbohydrates, proteins, fiber	High	Low	Moderate
Wood/bio pellets	Solids, tannins, oils	Moderate	Low	Moderate
Hay and other animal feed	Carbohydrates, proteins, fiber	High	Low	Moderate

Material	Constituents	Mobile Solids	Solubility	Overall Pollutant Risk
Cotton seed	Carbohydrates, proteins, oils, fiber	High	Low	Moderate
Salt (Chile)	Sodium chloride, trace Al, Fe, Mg, K, Sr	High	High	High
Fracking Sand	Quartz, silica, ceramic, possible resin	High	Low	Moderate
Scrap metal	Iron, copper, lead, zinc, aluminum	Moderate	Moderate	High
Steel Rail	Iron, trace copper (0.4 to 0.6%), manganese (1.65%)	Low	Low	Low
Steel Plate	Iron, trace copper (0.4 to 0.6%), manganese (1.65%)	Low	Low	Low
Rolled Steel	Iron, trace copper (0.4 to 0.6%), manganese (1.65%)	Low	Low	Low
Transformers and other mechanical equipment	Painted steel, oils	Low	Low	Low
Containers	Materials inside Painted Steel Containers	Low	Low	Low
Relief Trailers	Materials inside Painted Steel Containers	Low	Low	Low
Barge Components	Steel, oils	Low	Low	Low
Military Equipment	Steel, oils	Low	Low	Low
Roll-on/Roll off vehicles	Steel, oils	Low	Low	Low
Sediment (dewatered)	Sand and silt, possible low level contaminants	HIgh	Low	High
Containerized Waste	Materials inside Painted Steel Containers	Low	Low	Low

Note: Many of the bulk materials would be stored inside of warehouses, but will be transferred to/from ships trucks, railcars and other vehicles at the facility.

(ii) Waste Materials, include trash in dumpsters, used oil and solvents stored indoors for recycling and disposal, and dunnage.

B. Demonstration of Why Outfalls are Substantially Similar in Terms of Significant Materials that Potentially May be Exposed to Stormwater

Basin B and Sub-basin B1

The materials handled in both basins are substantially the same.

Dockside Berth Scuppers

The materials handled at all Terminal 2 berths, and the methods of material handling, are substantially the same.

3. Material Management Practices

A. Description of Material Management Practices at the Port of Portland

The Port of Portland uses a wide range of stormwater best management practices (BMPs) and material management practices to limit the contact of significant materials with precipitation as described in the SWPCP. Non- structural stormwater management practices include employee training, spill response, reporting and clean-up, and spill prevention techniques. Other BMPs include use of berms and covers to contain loose materials, routine sweeping of yard areas as needed (including following storage of bulk materials), and monthly stormwater inspections that include all catch basins and dock areas.

B. Demonstration of Why Outfalls Are Substantially Similar in Terms of Stormwater Management Practices Used

Basin B and Sub-basin B1

The material handling methods, post use cleanup, and BMPs employed in both basins are substantially the same.

Dockside Berth Scuppers

The material handling methods, post use cleanup, and BMPs employed at all berth areas at Terminal 2 are substantially the same.

4. Flow Characteristics

Demonstration of Why Outfalls Are Substantially Similar in Terms of Flow, as Determined by the Estimated Runoff Coefficient and Approximate Drainage Area at Each Outfall

Basin B and Sub-basin B1

Sub-basin B1 comprises approximately 1.8 acres of entirely impervious surface. Basin B has about 34 total acres of impervious surface that has the same or similar types of pavement. Therefore the runoff coefficients within Basin B and Sub-basin B1 are substantially similar. Sub-basin B1 includes three catch basins and a grated manhole. The spacing of catch basins, grated manholes, and strip drains within Basin B, are roughly equally spaced, and the topography throughout the basin is very flat and homogenous. Therefore, the flow captured in Sub-basin B1 is similar to the flow captured in similar areas of Basin B.

Dockside Berth Scuppers

The design of the docks at Terminal 2 are similar throughout all of the berths. Therefore, the dock areas expected to have the same runoff coefficient. Scupper drains

along the berths are roughly evenly spaced. Therefore the flow from the scupper drain designated for monitoring at Berth 206 is similar to flows at the other scupper drains.

Appendix D

Stevadoring Services of America Best Practices Plan

SSA MARINE Best Management Practices Plan
GEARLOCKER/MAINTENANCE SHOP

GENERAL INFORMATION

Site Legal Name: SSA Pacific

Site Leasee: SSA Pacific

Site Name: Terminal 2

County: Multnomah

Site Address: 3070 NW Front Avenue
Portland, OR 97210

Mailing Address: 15550 N Lombard Street
Portland, OR 97203

Facility Phone Number: (503) 248-0848

Prepared by Paul Huculak and Jim Brown

Stormwater Pollution Control Committee:

Paul Huculak – General Manager
Representative - URS

SIC Code: 4491
DEQ File: 107985

Correspondence regarding this plan should be directed to:

Paul Huculak, General Manager

(503) 808-3647

Contents

1.0 Stormwater Pollution Control Plan Purpose and Objectives

The purpose of this Stormwater Pollution Control Plan (SWPCP) is to supplement the Port's SWPCP for Terminal 2. This plan identifies sources of pollution that may affect the quality of stormwater discharges associated with SSA activities, evaluates the potential for stormwater contamination from these sources, and presents the management practices that will be used at the facility for reduction of pollutants in stormwater discharges.

1.1 SWPCP Location and Public Access

The SWPCP for Terminal 2 Marine is available in the Gearlocker office, located at 3070 NW Front Avenue, Portland, Oregon 97210. The SWPCP will be maintained in a central, readily accessible location. A copy of the SWPCP will be made available if requested by DEQ.

1.2 SWPCP Review and Revisions

SSA Pacific will complete an annual review of the SWPCP prior to the wet weather season. The annual review of the SWPCP includes: inspection of the areas where potential spills of significant materials could affect stormwater runoff and an evaluation of relevant programs for their effectiveness in preventing pollution of runoff at the facility. Changes in any procedures of plans are made as necessary, but at least annually to effectively eliminate pollutants from identified sources. Changes in procedures and plans will be submitted to the Port within two weeks of change.

1.3 Record Keeping

All inspection reports, water sample test results, and maintenance records are maintained on site for a period of five years.

2.0 Site Description

SSA Pacific leases gear locker space from the Port of Portland at Terminal 2 of the Portland Harbor. The facility is located at 3070 NW Front Avenue, Portland, Oregon. The primary operations at the facility involved fueling of ground service vehicles and equipment, maintenance, repair and some fabrication. As of 2018, all operations have ceased at the facility and equipment is in the process of being removed.

SSA facilities at the Portland Harbor consist of a gated paved area, approximately 2 acres, within Terminal 2. Buildings within the gated area are used for maintenance (Bldg. 3080) and equipment storage (Bldg. 3154). On the west side of Bldg. 3154 is an open area with racks containing boxes of gear and equipment. This area is paved and the rack containing the equipment is covered. The remainder of this area is open and contains various stored equipment and material. A site layout map and topographical map of the gear locker area are attached as Figure 1. Bldg. 3080 is approximately 6,000sqft, Bldg. 3154 is approximately 3,000sqft, and the open storage area is approximately 6,000sqft.

2.1 Drainage Patterns

SSA Pacific's storm drainage system consists of catch basins located throughout the gear locker area. These catch basins are connected to a main trunk storm drainage pipe of 35 to 27 inch diameters. The drainage system that runs through the SSA Pacific gear locker is part of the overall Terminal 2 drainage system. The storm system discharges to the Willamette River located beneath Terminal 2. All storm drains within the gear locker are fitted with drain filter socks to minimize debris and residue, which may contaminate stormwater.

Only the steam cleaning drain, which has a water/oil separator. connects to the city sanitary sewer line.

2.2 Industrial Activities Conducted On-Site

This section contains an assessment and description of existing potential pollutant sources associated with SSA' s industrial activities in the gear locker. The storm system, paved areas and buildings, drainage basin, surface water bodies and locations of potential pollutants and significant materials are depicted in Figure 4. Given the relatively flat topography of the site, and the high percentage of impervious surfaces, significant soil erosion is unlikely. Inspection programs, treatment measures and stormwater pollution controls are identified in Section 3.0. The implementation schedule is provided in Section 4.0.

2.2.1 Areas Associated with Industrial Activity

The SWPCP addresses areas which are associated with industrial activities which have been or may potentially be sources of significant amounts of stormwater pollutants. The significant materials stored in SSA's gear locker are listed in Table 2-1. The following paragraphs briefly describe the industrial activity, and identify the materials that may be stored or used in the gear locker area. The ASTs on site have been cleaned and placed out of service.

TABLE 2-1: List of Significant Materials Stored at SSA Gearlocker Area

Chemical Name	Storage	Capacity	Location
Antifreeze	55-gallon steel drum	2 drums	Bldg. 3080 Recycled
Solvents, spray paint, paint thinner, window cleaner, aerosol cleaners	Metal storage cabinet	4 to 5 containers of each	Bldg. 3080 parts room Recycled

Lube oils*	Double-walled steel tank	1050 gallons – one tank with 3, 350-gallon compartments	Bldg. 3080 against west wall Recycled
*This tank will be pumped out and placed out of service by 2-15-2018.			

2.2.2 Gearlocker and Maintenance Shop

Materials are stored in 350-gallon tanks, 55-gallon drums, 5 and 10-gallon containers and aerosol cans, which are kept closed when not in use. The smaller containers of solvents such as carburetor cleaner, brake fluid, bolt unlock, mineral spirits and aerosol paint cans are stored in flammable safety cabinets. The absorbent materials are stored in the Gearlocker and Maintenance shops and at the vehicle fueling station in order to address and contain spills immediately. Used absorbent is cleaned up and stored in a 55-gallon drum, located in Bldg. 3080 until recycled. The floors in Bldg. 3080 and 3154 are constructed of concrete and have no visible cracks and no floor drains. General housekeeping is performed on a regular basis in order to keep residue, spills and clutter contained. Only dry methods are used which is primarily sweeping and garbage pick. All non-hazardous garbage is deposited in covered garbage dumpsters that are serviced by a certified garbage hauler as needed and located next to fueling station and in front of Bldg. 3080.

2.2.3 Steam Cleaning Area

The Steam Cleaning Area is located outside next to Bldg. 3080. High pressure hot or cold water is used to clean equipment; no chemicals or degreasers are used. The Steam Cleaning area is paved with concrete, but not covered. The area is sloped toward a drainage catch basin that collects wash water for discharge through an oil/water separator which discharges to the Portland sanitary sewer system. A spill containment berm (walls) encloses three sides of the steam cleaning area with an asphalt berm on the entrance of the Steam Cleaning area. Steam cleaning is only used when machinery is excessively dirty and mechanics are unable to spot the troubled areas or if equipment has been used on an exceptionally dirty job. This area was thoroughly cleaned and placed out of service by the end of 2017.

2.2.4 Vehicle Fueling Area

Gasoline and diesel powered vehicles are no longer fueled at the fuel island which has a 2000 gallon gasoline Above Ground Storage Tank (AST) and a 6000 gallon diesel AST. These tanks have been cleaned and placed out of service and the fueling nozzles have been removed. The fuel island is located next to Bldg. 3080 and is not covered due to the extreme size of equipment needing access to the fueling station. Spill containment supplies are stored at the fueling station for rapid spill containment along with the emergency shut off valves for the fuel pumps.

SSA maintains one Mobile Fuel Tank (MFT). The tank is a 150-gallon aluminum diesel tank enclosed within an outer steel tank, and securely mounted and chained to a forklift. The diesel MFT is filled at the diesel tank fueling area adjacent to the steam cleaning area and next to Bldg. 3080. The diesel MFT is also housed inside Bldg. 3080 when not in use. This equipment is scheduled for removal early in 2018.

2.2.5 Sector Specific Source Identification

The primary industrial activity at SSA is classified under SIC code 4491. This classification requires compliance with additional technology-based effluent limits in Schedule E Sector Q Water Transportation Facilities of the 1200-Z NPDES permit.

2.3.1 Potential Stormwater Pollutants

Table 2-3 lists categories of hazardous pollutants that have the potential to be present in stormwater discharge.

TABLE 2-3: Potential Stormwater Pollutants at SSA Gearlocker Area

FACILITY AREA DESCRIPTION	POLLUTANTS
GEAR LOCKER (BLDG. 3154) MAINTENANCE SHOP (BLDG. 3080)	Sediment Oil, grease, hydraulic fluid, brake fluid Welding residue (iron, aluminum, copper, and steel) Diesel and gasoline
GEAR LOCKER (BLDG. 3154) MAINTENANCE SHOP (BLDG. 3080)	Used oil, oil filters, used rags, grease sweep, grease, batteries and antifreeze

3.0 Site Controls

This section describes the Site Controls appropriate for SSA's Gearlocker/Maintenance Facility. The management practices included in this plan are consistently employed by SSA and consistent with the 1200-Z NPDES industrial stormwater permit requirements, 40 CFR 122.22, Subpart K, Criteria and Standards for Best Management Practices Authorized under Section 304(e) and Narrative Technology Based Effluent Limits. The 1200-Z permit is issued to the Port of Portland with SSA performing as the site operator.

3.1 Operational Best Management Practices

3.1.1 Stormwater Pollution Control Team

A Stormwater Pollution Control Team has been formed by SSA for the Gear/Locker Maintenance area. The individuals on the team are responsible for developing the SWPCP and assisting the Terminal Manager in implementing, maintaining and modifying the SWPCP. Team members include Mr. Paul Huculak - General Manager, and an Environmental Specialist.

3.1.2 Good Housekeeping

Good housekeeping involves maintaining a clean and orderly work environment on a daily basis. A clean and orderly environment reduces the possibility of accidental spills caused by mishandling equipment, liquids and materials in addition to reducing safety hazards to personnel. Examples of good housekeeping practices employed by SSA in the Gearlocker include:

- Neat and orderly storage of chemicals
- Prompt cleanup and removal of spillage
- Regular cleaning of floors in maintenance area
- Prevention of accumulation of liquid, solid chemicals and welding residue on the floor

SSA has adopted several procedures to promote good housekeeping. These are:

- Regular facility maintenance
- Proper material storage
- Material inventory controls
- Correct storage of material to be recycled
- Recycling material
- Ongoing removal of equipment

3.1.2.1 Facility Maintenance

Daily maintenance is needed to ensure that the gear locker areas are functioning safely. SSA has developed and implemented the following preventive maintenance program:

Oil and Grease: To control oil and grease contamination of stormwater discharge, filter socks are placed in all catch basins and are replaced annually or as required.

Waste Chemicals and Material Disposal: All waste material is kept in a covered dumpster to eliminate or minimize exposure of pollutants to stormwater. No chemicals are disposed of onsite.

Erosion and Sediment Control: All areas of the site are paved. The Port is responsible for sweeping entire facility and cleaning all catch basins based on their assessment of need required.

Debris Control: General housekeeping is performed on a daily basis to keep the area free of debris, garbage, as well as sediment buildup, to ensure debris is not discharged into receiving waters. The Port is responsible for cleaning all terminal areas outside of SSA's fenced site.

Dust Generation and Vehicle Tracking: SSA's equipment remains on site at all times. If equipment is required off-site, SSA loads equipment onto a trailer, or hires an outside vendor to trailer equipment and transport it to another destination.

Equipment is routinely inspected for leaks or conditions leading to discharge of pollutants or contact of stormwater with raw materials or waste. Equipment, when not working properly, is immediately taken out of service and scheduled for repairs inside Bldg. 3080. A maintenance log is maintained inside Bldg. 3080.

Spill prevention and cleanup procedures are discussed and reviewed monthly during employee safety meetings to ensure the procedures are understood by all SSA personnel.

3.1.2.2 Material Storage Practices

SSA maintains proper material storage in order to prevent the release of materials that may cause stormwater pollution. Proper storage techniques include:

- Posting signs and placards in the vicinity of storage areas to indicate hazards associated with the stored materials.
- Properly storing, labeling and locating containers, drums and bags away from direct traffic routes to prevent accidental spills.
- Storing containers according to manufacturer's instructions to avoid damage from improper weight distribution.
- Storing containers on pallets when necessary to prevent corrosion and spills.

3.1.2.3 Material Inventory Controls

Material inventory practices reduce waste that results from overstocking and the disposal of outdated materials. Careful tracking of all materials will also result in more efficient material use. The following material inventory SWPCP's are implemented at the SSA Gear/Maintenance shops.

- SDS's are maintained for all products used at the Gear/Maintenance shops. SDS's are maintained in the office of the Maintenance shop. An SDS is obtained for all chemicals prior to their use on site.
- Containers are clearly labeled with the name and type of the contained materials. When appropriate or required, containers are labeled with the hazards of the contained materials, expiration date, suggestions for handling and first aid information.

3.1.3 Preventive Maintenance Programs

The General Permit requires a Preventive Maintenance Program in the SWPCP to insure the effective operation of materials management facilities, control facilities and treatment facilities used to comply with the requirements of the permit. The program involves the inspection and maintenance of equipment and systems to uncover conditions that could cause breakdowns, and correction of those conditions by adjustment, repair or replacement of worn parts before the equipment or systems fail. The goal of the program is to expose conditions that could result in discharges of pollutants to storm sewers or surface waters. The preventive maintenance program at SSA's gear/maintenance locker therefore includes inspection and maintenance of the stormwater drainage system within the gear/maintenance area. The regular preventive maintenance program includes:

- Identifying equipment and systems which could potentially fail and release hazardous substances.
- Adjusting, repairing and replacing parts and equipment when necessary.
- Maintaining complete records of deficiencies and corrective actions taken or to be taken.
- Monthly inspections of stormwater catch basins for debris and sheens. Note: The Port maintains Terminal sweeping and catch basin cleaning.

Identifying systems or equipment which could malfunction and cause spills, leaks or other situations that could lead to stormwater contamination is an important first step in developing the preventive maintenance program. Examples of equipment and systems that were identified are pipes, pumps, storage tanks, pressure vessels, pressure release valves, process and material handling equipment and vehicles. Defective equipment found during inspection and testing is promptly removed, repaired or replaced. Also, spare parts are maintained for equipment that need frequent repair in order to avoid failure, resulting in a spill and down time of the equipment.

3.1.4 Spill Prevention Response Procedures

DEQ requires the permitee to develop Spill Prevention and Response Procedures (SPRP) for the permitted facility. The SPRP requires the permittee to identify areas where potential spills of significant materials can contact and contaminate stormwater discharge. The SPRP requires the permittee to establish operating methods that will be used to prevent spilling pollutants used in industrial activities.

The SPRP also requires the permittee to clean up spills on the site should they occur, including notification procedures for the appropriate state and local government agencies. The SPRP also requires the permittee to designate the responsible person for implementation of procedures and outline how the appropriate personnel for the facility are to be made aware of spill response procedures for swift and effective action.

In accordance with the SPRP requirement, the areas where potential spills of significant materials can contact and contaminate stormwater discharge, and stormwater flow exiting the Gear/Maintenance area is shown on Figure 4 of this plan. The operating methods that will be used to prevent spilling pollutants used in industrial activities are provided in Section 4.1 of this plan. The notification procedures and personnel responsibilities to rapidly and efficiently respond to any spill are provided in the Accidental Spill Prevention Plan (ASPP) developed for SSA Gear/Maintenance area. A list of the cleanup and emergency equipment at the Gear/Maintenance shops and an Emergency Action and Evacuation Plans are also provided in the ASPP. A copy of the ASPP is maintained at the SSA office.

3.1.5 Employee Training

SSA and PMA (Pacific Maritime Association) have developed and implemented training programs for preventing stormwater pollution. The purpose of the training program is to inform personnel at all levels of responsibility of the components and goals of the SWPCP. Training topics include spill prevention and response, good housekeeping material management practices. Training occurs annually for all ILWU locals. As of 2018, labor will not be present at the facility, thus no training will occur. If labor is employed in the future, training will resume.

SSA employees involved in industrial activities at the Gear/Maintenance facility are trained in the following areas when first hired (within 30 days), monthly and as needed when new products or procedures are introduced.

- Identifying potential spill areas.
- Reporting spills to appropriate individuals.
- Specifying material handling procedures and storage requirements.
- Implementing spill response procedures.

SSA personnel are trained on how to maintain a clean, orderly and well organized work environment.

- The importance of good housekeeping.
- The prompt cleanup of spilled materials to prevent water contamination.
- The locations where brooms, vacuums, sorbets, absorbent pads and other housekeeping and spill response equipment are stored.
- Securing drums and containers, labeling all containers with correct content information, checking for leaks and potential spill areas.
- Maintaining a regular schedule for housekeeping and recycled materials.
- The proper procedures for recycling wastes, including used oil and waste batteries.

3.1.6 Inspections

Monthly inspection of the facility includes the steam cleaning area, machine and material storage areas and engine maintenance/repair areas and facility catch basins. Monthly inspections are recorded on the forms included in the SWPCP.

Monthly inspections of oil and petroleum and transfer facilities will be conducted according to the following schedule along with a site walk through that includes areas around dumpsters and steam cleaning areas.

- Oil Storage tanks - The lube oil storage tank is visually inspected on a monthly basis. The inspection includes examination of fixtures and seams of storage tanks, tank supports and foundations, evidence of corrosion, erosion and leaks.
- Piping Systems - Above ground oil and petroleum product pipelines are visually inspected on a monthly basis. The inspection includes examination of valve seals and gaskets, relief valves and expansion joints and pipeline supports and contact points. The inspection also includes and examination for evidence of corrosion, erosion and leaks. In addition, a complete inspection, to include a pressure test of relief valves, testing of valves for proper opening and closure, inspection of flame arresters and measurements of pipe thickness will be performed at least biannually. Oil and petroleum pipelines will be pressure tested biannually.
- Spill Containment Systems - Oil spill containment and drainage systems are visually inspected on a monthly basis. The inspection includes an examination for rainwater accumulation together with an inspection of structural materials of dikes, berms, ramps, curbing, dumpsters, catch basin filters, oil residue, industrial materials, trash which could come in contact with stormwater, leaks or spills from industrial equipment, drums, tanks and other containers which have the potential to contaminate stormwater or drainage to stormwater containment systems.
- Loading and Dispersing Area - Loading and dispersing areas are inspected on a monthly basis. The inspection includes examination of hoses and ground connections, valves and valve operators, strainer covers and spill containment structures.

3.2 Source Controls

SSA employs Source Control methods for fuel dispensing, vehicle/equipment washing and steam cleaning, loading and unloading liquids, liquid storage in above ground tanks, container storage of liquids and hazardous waste.

3.2.1 Fuel Dispensing

The following best management practices have been implemented to address fuel dispensing:

- The fuel nozzle has an emergency shut off mechanism and a spill kit is located nearby.
- The fuel island was constructed by the Port in accordance with the Uniform Fire Code.
- The fuel island is paved with ecology blocks surrounding it on three sides and a raised berm at the entrance.
- The fuel nozzles are covered (currently removed).

3.2.2 Minimize Exposure

The following source controls are implemented to minimize or prevent exposure of pollutants to stormwater.

3.2.2.1 Vehicle Equipment Washing/Steam Cleaning

As previously mentioned, this area has been placed out of service, but the section will remain in case of future use. Equipment is cleaned at the on-site steam wash area located next to Bldg. 3080. High-pressure spray hoses using hot or cold water only (no detergent) is used to clean equipment. The wash-water is collected in a below-grade oil/water separator and discharged to the city sanitary sewer system. The following BMPs have been implemented to address vehicle and equipment washing or steam cleaning performed on site:

- Washing and steam cleaning is performed in the area specifically constructed for washing of vehicles and equipment.
- No detergents or other solutions are used, only hot or cold water.
- Wash water from vehicle and equipment cleaning is discharged to the city sanitary sewer after passing through an oil/water separator.

3.2.2.2 Loading and Unloading of Liquids

The following BMPs have been implemented to address loading and unloading of liquids at SSA's gear locker:

- Spill cleanup materials are kept in those areas where liquid spills could occur: fuel island, Bldg. 3080, Bldg. 3154 and on diesel mobile fueling vehicle.

- The area where fuel is unloaded from tanker trucks is paved with a berm at the entrance to contain any spillage.
- Drip pans are placed at locations where spillage may occur as well.

3.2.2.3 Aboveground Storage Tanks (AST's) (Out of Service)

The following BMPs have been implemented to address the storage of liquids in aboveground tanks:

- Tanks are installed per the Uniform Fire Code and the National Electric Code.
- Storage of reactive, ignitable, or flammable liquids complies with the Uniform Fire Code.
- Outlets from tank containment areas have positive control (fully functional fueling devises, mandatory attendance during fueling, emergency shut off, fuel tanks only filled to 80% capacity to allow for expansion) to prevent uncontrolled discharge of spilled product.
- Tanks are guarded against vehicles through the use of bollards or traffic barriers.
- Lube oil vessels are replaced with double wall tanks.
- All double-walled tanks are UL approved.

3.2.2.4 Container Storage of Liquids and Dangerous Wastes

The following BMPs have been implemented by SSA for container storage of liquids or dangerous wastes:

- Containers are kept inside Bldg. 3080 and Bldg. 3154, properly labeled and stored inside flame-proof cabinets if appropriate.
- Reactive, ignitable and flammable liquid storage complies with Uniform Fire Code requirements.
- All containers are stored in designated areas which are covered, on retaining pallets if necessary, paved, free of cracks and impervious.
- Drums are not stored in areas where unauthorized personnel can gain access to them.
- Anti-freeze drums are replaced with self-contained plastic tanks.
- All liquids and wastes are recycled on a regular basis as necessary, at least twice per year. This includes used oil filters which have been drained and aerosol cans which have been punctured.

- Employees loading or unloading liquid chemicals or dangerous waste and other employees who might be working in the vicinity, have received training in emergency spill cleanup procedures. Training is provided by Pacific Maritime Safety to all ILWU Longshoremen on an annual basis in addition to monthly updates and training to ILWU employees employed by SSA in the Gearlocker/Maintenance facility.

3.2.2.5 Welding Residues

Welding residues may include such metals as chrome, copper, titanium dioxide, manganese, nickel, molybdenum, silver, zinc and tin. Most welding occurs inside the Gearlocker/Maintenance buildings where residue can be contained, swept up and disposed of correctly and timely. If the welding must be done outside and near a storm sewer drain or catch basin, a catch basin insert is installed to prevent stormwater contamination along with tarps and containment trays.

3.2.2.6 Maintenance and Repair Areas

During routine maintenance of SSA vehicles, oil and hydraulic fluids are drained and replaced; oil and filters are removed, drained and recycled along with used shop rags and grease sweep. Used oil is stored in a 400-gallon double walled steel tank set on plastic retainer pallets until recycled, normally 2 times per year or as needed. As of 2018, this tank has been placed out of service. Recycle servicing is provided by ORRCO Recycling. General housekeeping is performed on a daily basis and always by dry methods (sweeping). This also includes the inspection of all tanks, drums and containers for leaks and overall condition of the containment vehicle.

3.2.2.7 Material Handling Areas

Equipment used to move cargo consists of forklifts, mobile container handlers, yard trucks and trailers. Loading and unloading equipment along with general and special purpose vehicles are fueled and maintained by SSA personnel (ILWU) who report to the gear locker and maintenance shop. Building 3080 and 3154 are primarily used for storing tools, equipment and supplies for maintenance activities. Building 3080 provides a large interior work area where maintenance and repair activities take place. Bldg. 3080 also contains a storage room where spare parts for equipment are stored, a cabinet containing spray cans of brake cleaner, spray paint, window cleaner, starting fluid, de-icer and other machinery solvents. Bldg. 3080 stores steel, absorbent, drain socks, kitty litter and additional spill containment supplies.

3.3 Schedule E Sector Specific Requirements

The primary industrial activity at for SSA is classified under SIC code 4491. This classification requires compliance with additional technology-based effluent limits in Schedule E Sector Q Water Transportation Facilities of the 1200-Z NPDES permit. Good Housekeeping Measures E.Q.1.1.1 through E.Q.1.1.6 and Additional SWPCP Requirements E.Q.2.1 through E.Q.2.3 are addressed under Sections 3.1 and 3.2 Site Controls.

3.4 Recommended BMPs for Selected Areas at T2

3.4.1 Gearlocker and Maintenance

Recommend BMPs, in addition to those identified in Sections 3.1 and 3.2 above, have been identified for selected areas within SSA's gear locker and maintenance areas where there is a potential for hazardous materials to come into contact with the stormwater are summarized in Table 3-4 below.

TABLE 3-4: Recommended SWPCP's for Selected Areas of SSA's Gear locker Facility

SITE DESCRIPTION	RECOMMENDED BMPs
Steam Cleaning and Truck/Trailer Parking Area	Employee Training • Train employees on proper use of wash areas. • Train employees on proper chemical handling and inspections. • Inform employees of the physical and chemical properties, health & environmental hazards of materials they work with. • Train employees on the proper labeling and storing of drums, containers, spray cans and tanks • Train employees on the proper procedures to be followed if a spill occurs. • Train employees on proper spill containment clean up procedures and where cleanup materials are located. • Train employees on proper recycling procedures and processes. Visual Inspection • Inspect all containers for leaks, evidence of corrosion, proper storage and labeling. Good Housekeeping • Promptly remove any spills or leaks using spill kits and dispose of appropriately (recycle). • Keep shop areas clean of debris and sediment on a daily basis.
Gear Locker & Maintenance Shop	Employee Training • Train in hazardous waste storage. • Define good housekeeping and use of spill clean-up. • Importance of waste oil clean-up.

SITE DESCRIPTION	RECOMMENDED BMPs
Gear Locker & Maintenance Shop (Cont.)	Employee Training • Proper container labeling, storage and recycling. • Proper battery storage and recycling. • Inform of health risk from chemical hazards. Visual Inspection • Regularly inspect hazardous waste storage areas for spills/leaks, open containers, sludge build up and debris. • Inspect spill pans for spills, leaks or cracks • Inspect liquid level in waste oil recycling tanks to prevent overfilling. • Inspect spill container inventory to ensure enough supplies on hand to contain spill rapidly. Good Housekeeping • Promptly remove any spills or leaks. • Prior to and following rains, promptly drain drip and spill pans. • Daily clean shop areas of clutter, trash and welding residues. Waste Chemical Disposal • Properly recycle or dispose of waste chemicals including antifreeze, degreasers, used oils, paints and solvents to prevent contact with stormwater. Substance Containment • Store all hazardous waste within berms or other secondary containment to prevent leaks and spills from contacting stormwater runoff. • Elevate drums off ground or floors using spill containment pallets.

SITE DESCRIPTION	RECOMMENDED BMPs
Gear Locker & Maintenance Shop (Cont.)	• Provide drip pans or secondary containment for all equipment or containers potentially subject to spills or leaks.
Fueling Areas	Employee Training • Train employees on proper methods of fuel dispensing. • New employees within 30 days and monthly refresher training for regular employees. • Instruct new employees where emergency shut- off locations. Visual Inspection • Inspect fueling controls for proper function on monthly basis. • Inspect fueling area for any corrosion, leaks or spills. Good Housekeeping • Promptly remove any spills or leaks. • Provide spill kit for emergency cleanup. Preventive Practices • Position truck for easy access to fill hoses & apply emergency brake, shut engines off. Substance Containment • Provide secondary containment to contain any spills. • Construct spill berm around fuel dispensing area.

4.0 Recordkeeping and Internal Reporting Procedures

SSA has implemented Record keeping and Internal Reporting Procedures so that facility records include information relevant to the SWPCP and are retained on site for at least 3 years and made available to DEQ, agent or local municipality upon request.

(1) A copy of the SWPCP and any revisions, corrective actions reports, and monthly inspection reports.

(2) Inspection, maintenance, repair and education activities.

(3) Spills or leaks of significant materials that impact or had the potential to impact stormwater or surface waters.

(4) Corrective actions to clean up the spill or leak and additional measures taken to prevent future problems of the same nature.

SSA employs one or more of the following means to document inspections: 1) field notebooks, 2) inspection forms, 3) drawings and/or maps, and 4) photographs. The inspection and document forms included in Appendix B are completed and provided to the appropriate recordkeeping personnel and maintained with the SWPCP.

4.1 Annual Review

SSA describes the pollution prevention and treatment procedures (PPTP's) to be used at the facility in an annual review of the SWPCP, completed prior to the onset of the rainy season. The plan review includes a site inspection of areas where potential spills of significant materials could affect stormwater runoff. Relevant programs, plans and PPTP's will be evaluated for their effectiveness in preventing pollution of runoff at the facility.

Changes in any procedures or plans are made as necessary to effectively eliminate or minimize pollutants from identified sources.

5.0 Signature of Responsible Official

The Stormwater Pollution Control Plan will be implemented as herein described.

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 gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Paul Huculak

JAN. 9, 2018

Paul Huculak
General Manager
SSA Pacific

Date

SSA PACIFIC - TERMINAL 2 - PORT OF PORTLAND

Stormwater Best Management Practices (BMP) Training Log

2016 Training	Name	Role	Date	Type
BMP	Gary Kaiser	Steady Gearman	9/20/16	Refresher
BMP	Mike Stanton	Steady Gearman	9/20/16	Initial
2017 Training				
BMP	Mike Stanton	Steady Gearman	1/10/17	Refresher
2018 Training				
BMP	No staff on site			