**Industrial Stormwater SWPPP Template**

Introduction

To help you develop a Stormwater Pollution Prevention Plan (SWPPP) that is consistent with the Industrial Stormwater General Permit (ISWGP), the Department of Ecology (Ecology) has provided this Industrial SWPPP Template (or, “the Template”) modified from a U.S. Environmental Protection Agency (EPA) SWPPP document. Use of the Template will help ensure that your SWPPP addresses all the necessary elements required in Condition S3 of the ISWGP.

Before completing the Template, make sure you read and understand the requirements in the permit. A copy of the permit is available at <http://www.ecy.wa.gov/programs/wq/stormwater/industrial/index.html>

Each section of this Template references applicable sections of the permit. Print out a copy and keep your permit with your SWPPP. Look up each section in the permit as you develop your SWPPP. Additional guidance documents for SWPPP development are also available through the above link.

Tips for completing the Industrial SWPPP Template:

* This Template is designed for use by all facilities covered under the ISWGP. The Template is not tailored to specific industrial sectors or facilities covered under the permit. You may be required to make significant revisions and edits to ensure that all the SWPPP requirements in the ISWGP are addressed.
	+ Depending on your industrial sector, you may need to monitor additional stormwater sampling parameters; refer to Permit Condition S5. (S5.B. Table 3, pp 25-28 ISWGP).
	+ Certain landfill operations are subject to additional sampling, and numeric effluent limits; refer to Condition S5.C. pp 27-28)
	+ Certain facilities are subject to additional sampling and effluent limits for discharges to 303(d)-listed waters; refer to Condition S6, Table 5, pg. 32.
* Ecology has provided blank worksheets for your convenience (Appendix C of this Template). You are not required to use these forms. You may design your own per the requirements of S3. The appropriate worksheet to use is referred to by number throughout the Template.
* Each section includes “instructions” and space for your facility’s specific information. You should read the instructions for each section and the permit requirement references before you complete that section.
* You are required to identify any parts of the SWPPP claimed as Confidential Business Information. It is suggested that these portions be highlighted or otherwise identified.
* The Template was developed in *Microsoft Word* so that you can easily add tables and additional text. Some sections may require only a brief description while others may require several pages of explanation, or require you to add attachments.
* To make it easier to complete, *the Template* generally uses blue text where the operator is expected to enter information.

Ecology notes that while every effort has been made to ensure accuracy of all instructions and guidance contained in the Template, the actual legal requirements for permit compliance at industrial facilities are determined by the relevant provisions of the ISWGP, not by the Template. In the event of a conflict between the Template and any corresponding provision of the ISWGP, the permit controls.

Ecology welcomes comments on the Template at any time and will consider those comments in any future revision of this document.

Stormwater Pollution Prevention Plan (SWPPP)

for:

Insert Facility Name

Insert Facility Address

Insert City, State, Zip Code

Insert Facility Telephone Number (if applicable)

SWPPP Contact(s):

Insert Facility Operator

Insert Name

Insert Address

Insert City, State, Zip Code

Insert Telephone Number

Insert Fax/Email

SWPPP Preparation Date:

**\_\_ \_\_/ \_\_ \_\_ /** **\_\_ \_\_ \_\_ \_\_**

Contents

[Section 1. Facility Description and Contact Information 1](#_Toc251160038)

[1.1 Facility Information 1](#_Toc251160039)

[1.2. Contact Information/Responsible Parties 2](#_Toc251160040)

[1.3. General Location Map (Optional) 2](#_Toc251160041)

[1.4. Site Map 3](#_Toc251160042)

[1.5. Stormwater Pollution Prevention Team 4](#_Toc251160043)

[Section 2. Facility Assessment 4](#_Toc251160044)

[2.1. Facility Description 5](#_Toc251160045)

[2.2. Industrial Activity, Materials Inventory, and Associated Pollutants 5](#_Toc251160046)

[2.3. Spills and Leaks 7](#_Toc251160047)

[Section 3. Best Management Practices (BMPs) 8](#_Toc251160048)

[3.1 Operational Source Control BMP 8](#_Toc251160049)

[3.2. Structural Source Control BMPs 13](#_Toc251160050)

[3.3. Treatment BMPs 14](#_Toc251160051)

[3.4. Stormwater Peak Runoff and Volume Control BMPs 17](#_Toc251160052)

[3.5. Erosion and Sediment Control BMPs 18](#_Toc251160053)

[Section 4. Sampling Plan 19](#_Toc251160054)

[Section 5. SWPPP Certification 24](#_Toc251160055)

[SWPPP Appendices 25](#_Toc251160056)

[Appendix C. Blank Worksheets for Development of the SWPPP](#_Toc251160057)

[Appendix D. SWPPP Certification Form D-1](#_Toc251160058)

[Appendix E. List of Applicable Industry-Specific Source Control BMPs E-1](#_Toc251160059)

[Appendix F. Industrial Stormwater Monthly Inspection Report 1](#_Toc251160060)

# Facility Description and Contact Information

## Facility Information

Instructions:

* Detailed information on determining your site’s latitude and longitude can be found at [www.epa.gov/npdes/stormwater/latlong](http://www.epa.gov/npdes/stormwater/latlong).
* Use this link to enter your address to determine your site’s latitude and longitude: <http://www.mashupsoft.com/maps/latlonlocator>

|  |
| --- |
| **Facility Information** |
| Name of Facility:  |
| Street:  |
| City:  | State: ZIP Code:  |
| County:  |
| Permit Number: WAR  |
| Latitude/Longitude - Use **one** of three possible formats, and specify method (Optional) |
| Latitude: | Longitude: |
| 1. \_ \_ º \_ \_ ' \_ \_'' N (degrees, minutes, seconds) | 1. \_ \_ º \_ \_ ' \_ \_'' W (degrees, minutes, seconds) |
| 2. \_ \_ º \_ \_ . \_ \_' N (degrees, minutes, decimal) | 2. \_ \_ º \_ \_ . \_ \_' W (degrees, minutes, decimal) |
| 3. \_ \_ . \_ \_ \_ \_ º N (decimal) | 3. \_ \_ . \_ \_ \_ \_ º W (decimal) |
|  |
|  |
|  |
|  |
| Estimated area of industrial activity at site exposed to stormwater: (acres) |
| **Discharge Information** |
| Does this facility discharge stormwater into surface waters? [ ]  Yes [ ]  NoDoes this facility discharge stormwater into a municipal storm water conveyance system? [ ]  Yes [ ]  No |
| SIC Code(s): (You can look up your SIC Code at this website: <http://www.osha.gov/pls/imis/sicsearch.html>) |
|  |

## Contact Information/Responsible Parties

Instructions:

* List the facility operator(s), facility owner, and 24 hour emergency contact. Indicate respective responsibilities, where appropriate.

|  |
| --- |
| **Facility Operator (s):** |
| Name: Insert Name |
| Address: Insert Address |
| City, State, Zip Code: Insert City, State, Zip Code |
| Telephone Number: Insert Telephone Number Cell Phone Number: Insert Telephone Number (optional) |
| Email address: Insert email address |
| Fax number: Insert fax number (optional) |
| **Facility Owner (s):** |
| Name: Insert Name |
| Address: Insert Address |
| City, State, Zip Code: Insert City, State, Zip Code |
| Telephone Number: Insert Telephone Number |
| Email address: Insert email address |
| Fax number: Insert fax number (optional) |

|  |
| --- |
| **SWPPP Contact:** |
| Name: Insert SWPPP Contact Name |
| Telephone number: Insert Telephone Number Cell Phone Number: Insert Telephone Number (optional) |
| Email address: Insert email address |
| Fax number: Insert fax number (optional) |

## General Location Map (Optional)

Instructions:

* Provide a general location map (e.g., U.S. Geological Survey (USGS) quadrangle map) with enough detail to identify the location of your facility and all receiving waters for your stormwater discharges (Appendix A).

Include a copy of the general location map for this facility in Appendix A.

## 1.4. Site Map

Instructions (see S3.B.1. pg. 14 of the ISWGP):

Include a map showing the following information:

* The scale or include relative distances between significant structures and drainage systems.
* Significant features.
* The stormwater drainage and discharge structures and identify, by name, any other party other than the Permittee that owns any stormwater drainage or discharge structures.
* The stormwater drainage areas for each stormwater discharge point off-site (including discharges to ground water) and assign a unique identifying number for each discharge point.
* Each sampling location by unique identifying number.
* Paved areas and buildings.
* Areas of pollutant contact (actual or potential) associated with specific industrial activities.
* Conditionally approved non-stormwater discharges (Condition S5.D).
* Surface water locations (including wetlands and drainage ditches).
* Areas of existing and potential soil erosion (in a significant amount).
* Vehicle maintenance areas.
* Lands and waters adjacent to the site that may be helpful in identifying discharge points or drainage routes.

Include a copy of the site map for this facility in Appendix B.

## 1.5. Stormwater Pollution Prevention Team

**Instructions (S3.B.3. pg.16 of the ISWGP):**

* Identify the staff members (by name or title) that comprise the facility’s stormwater pollution prevention team as well as their individual responsibilities.
* Your stormwater pollution prevention team is responsible for assisting the facility manager in developing and revising the facility’s SWPPP, implementing and maintaining control measures/BMPs, and taking corrective actions where required. Each member of the stormwater pollution prevention team must have ready access to either an electronic or paper copy of applicable portions of the ISWGP and your SWPPP.

|  |  |
| --- | --- |
| **Staff Names and/or Title** | **Individual Responsibilities** |
| Insert name or title of SWPPP team member | Insert explanation of that staff person’s responsibilities relating to compliance with the permit e.g. SWPPP updates, monitoring, specific BMP maintenance/implementation, monthly inspections; |
| [Repeat as necessary] | [Repeat as necessary] |
| [Repeat as necessary] | [Repeat as necessary] |
| [Repeat as necessary] | [Repeat as necessary] |
| [Repeat as necessary] | [Repeat as necessary] |
| [Repeat as necessary] | [Repeat as necessary] |

Insert text here

# Facility Assessment

Instructions (see S3.B.2.a.- c. pg. 15 of the ISWGP).

In this section, you are required to include a description of the facility; an inventory of facility activities and equipment that contribute to or have the potential to contribute any pollutants to stormwater; and, an inventory of materials that contribute to or have the potential to contribute pollutants to stormwater.

## Facility Description

Instructions (see S3.B.2.a. pg. 15 of the ISWGP).

In this section, you are required to include a description of the facility:

* The industrial activities conducted at the site.
* Regular business hours and seasonal variations in business hours or industrial activities.
* The general layout of the facility including buildings and storage of raw materials, and the flow of goods and materials through the facility.

**Industrial Activity:** INSERT GENERAL DESCRIPTION OF INDUSTRIAL ACTIVITY HERE

**Regular Business Hours:** INSERT GENERAL REGULAR BUSINESS HOURS AND SEASONAL VARIATIONS IN BUSINESS HOURS OR INDUSTRIAL ACTIVITIES HERE

**General Layout:** INSERT THE GENERAL LAYOUT OF THE FACILITY INCLUDING BUILDINGS AND STORAGE OF RAW MATERIALS, AND THE FLOW OF GOODS AND MATERIALS THROUGH THE FACILITY HERE \*Note: Alternatively, you may also address this in Section 1.4 Site Map

## Industrial Activity, Materials Inventory, and Associated Pollutants

Instructions (S3.B.2.b.- c. pg. 15 of the ISWGP and Worksheets #2, #2A, #3, #5 in Appendix C):

In this section, identify all areas associated with **industrial activities** that have been or may potentially be sources of pollutants, including, but not limited to, the following:

* Loading and unloading of dry bulk materials or liquids.
* Outdoor storage of materials or products.
* Outdoor manufacturing and processing.
* On-site dust or particulate generating processes.
* On-site waste treatment, storage, or disposal.
* Vehicle and equipment fueling, maintenance, and/or cleaning (includes washing).
* Roofs or other surfaces exposed to air emissions from a manufacturing building or a process area
* Roofs or other surfaces composed of materials that may be mobilized by stormwater (e.g., galvanized roofs, galvanized fences, etc.).

Also, identify the types of materials handled at the site that potentially may be exposed to precipitation or runoff and could result in stormwater pollution.

For each **industrial activity** or **exposed material** listed, provide a short narrative (in the **Associated Pollutant** column) describing the potential of pollutant(s) to be present in stormwater discharges. For example:

* Structures and materials with galvanized metal would be a potential source of zinc.

See *Suggested Practices to Reduce Zinc Concentrations in Industrial Stormwater Discharges:*<http://www.ecy.wa.gov/biblio/0810025.html>

* Fueling/vehicle maintenance areas would be a potential source of petroleum and other pollutants.
* Yards surfaced with crushed rock or gravel would be a potential source of sediment, turbidity, and other pollutants depending on industrial activity.

The Permittee must update this narrative if/when data become available to verify the presence or absence of these pollutants.

Include a narrative description of any potential sources of pollutants from past activities, materials and spills that were previously handled, treated, stored, or disposed of in a manner to allow ongoing exposure to stormwater. For example,

* A material handling area that has been subject to fertilizer spills would be a potential source of phosphorus, nitrogen and other pollutants.

Include the method and location of on-site storage or disposal. List significant spills and significant leaks of toxic or hazardous pollutants.

|  |  |
| --- | --- |
| **Industrial Activity / Exposed Materials** | **Associated Pollutants** |
| Insert specific industrial activity / exposed materials | Insert names of pollutants or pollutant constituents that could be associated with this activity / exposed materials and released in stormwater |
| [Repeat as necessary] | [Repeat as necessary] |
| [Repeat as necessary] | [Repeat as necessary] |
| [Repeat as necessary] | [Repeat as necessary] |
| [Repeat as necessary] | [Repeat as necessary] |
| [Repeat as necessary] | [Repeat as necessary] |
| [Repeat as necessary] | [Repeat as necessary] |

## Spills and Leaks

Instructions:

* Include the following in this section:
	+ **Potential spills and leaks:** A description of where potential spills and leaks could occur at your site that could contribute pollutants to your stormwater discharge, and specify which outfall(s) are likely to be affected by such spills and leaks.
	+ **Past spills and leaks (Use Worksheet #4):** A description of significant spills and leaks of oil or toxic or hazardous pollutants that actually occurred at exposed areas, or that drained to a stormwater conveyance.
* *Note: Significant spills and leaks include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under CWA Section 311 (see 40 CFR 110.6 and 40 CFR 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 USC §9602.*

**Areas of Site Where Potential Spills/Leaks Could Occur**

|  |  |
| --- | --- |
| **Location** | **Outfalls** |
| Insert description of area where spill/leak could occur  | Specify which outfall(s) would be affected |
| [Repeat as necessary] | [Repeat as necessary] |
| [Repeat as necessary] | [Repeat as necessary] |
| [Repeat as necessary] | [Repeat as necessary] |
| [Repeat as necessary] | [Repeat as necessary] |
| [Repeat as necessary] | [Repeat as necessary] |
| [Repeat as necessary] | [Repeat as necessary] |

# Best Management Practices (BMPs)

Instructions (See S3.B.4. pg 16 of the ISWGP):

* You must describe each Best Management Practice (BMP) selected to eliminate or reduce the potential to contaminate *stormwater* and prevent violations of *water quality standards*.
* No later than July 1, 2010, you must include and implement each of the mandatory BMPs listed in the permit, including the BMPs from Volume IV of the Stormwater Management Manual for Western Washington or equivalent manuals, listed as “applicable” to certain industrial activities/facilities: <http://www.ecy.wa.gov/programs/wq/stormwater/municipal/StrmwtrMan.html>
* Appendix E of this Template contains the BMPs from the Stormwater Management Manuals that are applicable to certain industrial activities or facilities. “Cut” each applicable BMP that pertains to your type industrial activity/facility from Appendix E, and “paste” them into the appropriate section(s).
* The Permittee may omit individual (mandatory or applicable) BMPs if site conditions render the BMP unnecessary, infeasible, or the Permittee provides alternative and equally effective BMPs; if the Permittee clearly justifies each BMP omission in the SWPPP. For example:
	+ The permit requirement to have a spill kit located within 25’ of fueling areas would not be necessary at a facility that does not have on-site fueling. The SWPPP should state that the spill kit BMP has been omitted from the SWPPP because it is unnecessary.
* Prior to July 1, 2010, the Permittee shall implement the BMP requirements of the previous Industrial *Stormwater* *General Permit*, or Condition S3.B.4 of this permit.

## 3.1 Operational Source Control BMP

**Good Housekeeping**

Instructions (see S3.B.4.b.i.2 Good Housekeeping pg. 16 of the ISWGP):

Describe BMPs implemented for ongoing maintenance and cleanup of areas which may contribute pollutants to stormwater discharges. The SWPPP must include the schedule/frequency for completing each housekeeping task, based upon industrial activity, sampling results and/or observations made during inspections. At a minimum the following Good Housekeeping BMPs are mandatory. The Permittee may omit individual “mandatory” BMPs if site conditions render the BMP unnecessary, infeasible, or the Permittee provides alternative and equally effective BMPs; if the Permittee clearly justifies each BMP omission in the SWPPP.

**Mandatory Operational Source Control BMPs required by condition S3. of the Industrial Stormwater General Permit**:

Good Housekeeping:

* Vacuum paved surfaces with a vacuum sweeper (or a sweeper with a vacuum attachment) to remove accumulated pollutants a minimum of once per quarter.
* Identify and control all on-site sources of dust to minimize stormwater contamination from the deposition of dust on areas exposed to precipitation.
* Inspect and maintain bag houses monthly to prevent the escape of dust from the system. Immediately remove any accumulated dust at the base of exterior bag houses.
* Keep all dumpsters under cover or fit with a lid that must remain closed when not in use.
* Condition S3. of the Industrial Stormwater General Permit requires the SWPPP to include the “applicable” Good Housekeeping Operational and Source Control BMPs listed in Ecology’s SWMMs, or other guidance documents as mandatory. **NOTE: Ecology has provided a list of BMPs applicable to certain industrial activities or facilities in Appendix E. “Cut” the Good Housekeeping Operational Source Control BMPs that apply to your industrial activity from Appendix E, and “paste” them here:**

INSERT DESCRIPTION OF ADDITIONAL BMPs HERE, IF APPLICABLE OR NECESSARY BASED ON CORRECTIVE ACTIONS

**Preventive Maintenance:**

Instructions (see S3.B.4.b.i.3 Preventative Maintenance pg. 16 of the ISWGP):

Describe BMPs to inspect and maintain the stormwater drainage, source controls and treatment systems, and/or other equipment and systems that could fail and result in contamination of stormwater. The SWPPP shall include the schedule/frequency for completing each maintenance task. At a minimum the following Good Housekeeping BMPs are mandatory. The Permittee may omit individual “mandatory” BMPs if site conditions render the BMP unnecessary, infeasible, or the Permittee provides alternative and equally effective BMPs; if the Permittee clearly justifies each BMP omission in the SWPPP.

**Preventive Maintenance:**

* Clean catch basins when the depth of debris reaches 60% of the sump depth. In addition, the Permittee must keep the debris surface at least 6 inches below the outlet pipe.
* Inspect all equipment and vehicles during monthly site inspections for leaking fluids such as oil, antifreeze, etc. Take leaking equipment and vehicles out of service or prevent leaks from spilling on the ground until repaired.
* Immediately clean up spills and leaks (e.g., using absorbents, vacuuming, etc.) to prevent the discharge of pollutants.
* Condition S3. of the Industrial Stormwater General Permit requires the SWPPP to include the “applicable” Preventative Maintenance Operational and Source Control BMPs listed in Ecology’s SWMMs, or other guidance documents as mandatory. **NOTE: Ecology has provided a list of BMPs applicable to certain industrial activities or facilities in Appendix E. “Cut” the Preventative Maintenance Operational Source Control BMPs that apply to your industrial activity from Appendix E, and “paste” them here:**

INSERT DESCRIPTION OF ADDITIONAL BMPs HERE, IF APPLICABLE OR NECESSARY BASED ON CORRECTIVE ACTIONS

**Spill Prevention and Emergency Cleanup:**

Instructions (see S3.B.4.b.i.4 Spill Prevention and Emergency Cleanup Plan pg. 17 of the ISWGP):

Include a Spill Prevention and Emergency Cleanup Plan (SPECP) that includes BMPs to prevent spills that can contaminate stormwater. The SPECP shall specify BMPs for material handling procedures, storage requirements, cleanup equipment and procedures, and spill logs, as appropriate.

* Describe any BMPs or procedures used to minimize the potential for leaks, spills, and other releases.
* Describe where each BMP is to be located or where applicable procedures will be implemented (pg 17-18, S3.B.4.b.i.4.a-i) at your site.
* Note: Some facilities may be required to develop a Spill Prevention Control and Countermeasure (SPCC) plan under a separate regulatory program (40 CFR 112). If you are required to develop an SPCC plan, or you already have one, you should include references to the relevant requirements from your plan. Such a plan may be included by reference if it contains these necessary elements.)

**Spill Prevention and Emergency Cleanup:**

* Store all chemical liquids, fluids, and petroleum products, on an impervious surface that is surrounded with a containment berm or dike that is capable of containing 10% of the total enclosed tank volume or 110% of the volume contained in the largest tank, whichever is greater.
* Prevent precipitation from accumulating in containment areas with a roof or equivalent structure or include a written plan on how it will manage and dispose of accumulated water if a containment area cover is not practical.
* Locate spill kits within 25 feet of all stationary fueling stations, fuel transfer stations, and mobile fueling units. At a minimum, spill kits shall include:
	+ Oil absorbents capable of absorbing 15 gallons of fuel.
	+ A storm drain plug or cover kit.
	+ A non-water containment boom, a minimum of 10 feet in length with a 12 gallon absorbent capacity.
	+ A non-metallic shovel.
	+ Two five-gallon buckets with lids.
* Not lock shut-off fueling nozzles in the open position. Do not “topoff” tanks being refueled.
* Block, plug or cover storm drains that receive runoff from areas where fueling, during fueling.
* Use drip pans or equivalent containment measures during all petroleum transfer operations.
* Locate materials, equipment, and activities so that leaks are contained in existing containment and diversion systems (confine the storage of leaky or leak-prone vehicles and equipment awaiting maintenance to protected areas).
* Use drip pans and absorbents under or around leaky vehicles and equipment or store indoors where feasible. Drain fluids from equipment and vehicles prior to on-site storage or disposal.
* Maintain a spill log that includes the following information for chemical and petroleum spills: date, time, amount, location, and reason for spill; date/time clean-up completed, notifications made and staff involved.
* Condition S3. of the Industrial Stormwater General Permit requires the SWPPP to include the “applicable” Spill Prevention Operational and Source Control BMPs listed in Ecology’s SWMMs, or other guidance documents as mandatory. **NOTE: Ecology has provided a list of BMPs applicable to certain industrial activities or facilities in Appendix E. “Cut” the Spill Prevention Operational Source Control BMPs that apply to your industrial activity from Appendix E, and “paste” them here:**

INSERT DESCRIPTION OF ADDITIONAL BMPs HERE, IF APPLICABLE OR NECESSARY BASED ON CORRECTIVE ACTIONS

**Employee Training**

Instructions (see S3.B.4.b.i.5 Employee Training) pg. 18 of the ISWGP):

* Describe your plan for training the employees who work in areas where industrial materials or activities are exposed to stormwater, or who are responsible for implementing activities necessary to meet the conditions of the ISWGP, including all members of your Pollution Prevention Team. Included in your description must be the frequency and schedule of training (note: you are required under the ISWGP to provide proof of training of at least one time per year).

Be sure to address the following items in this section:

* The content of the training:
	+ An overview of what is in the SWPPP.
	+ How employees make a difference in complying with the SWPPP and preventing contamination of stormwater.
	+ Spill response procedures, good housekeeping, maintenance requirements, and material management practices.
* How the Permittee will conduct training.
* The frequency/schedule of training. The Permittee shall train employees annually, at a minimum.
* A log of the dates on which specific employees received training.

INSERT DESCRIPTION OF PLAN FOR TRAINING APPLICABLE STAFF HERE.

**Inspections, Reporting, and Recordkeeping**

Instructions (see S3.B.4.b.i.6 Inspections and Recordkeeping pg. 18; S7 INSPECTIONS and S9 REPORTING AND RECORDKEEPING of the ISWGP):

* The Permittee must conduct and document visual inspections of the site each month.
* The Permittee must ensure that inspections are conducted by qualified personnel.
* Definition: *Qualified Personnel* means people who possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility, and evaluate the effectiveness of best management practices required by this permit.
* Describe the documentation procedures for inspections and recordkeeping below. Documentation of monthly inspections must be kept on-site available for Ecology inspection (use Inspection Report Form in Appendix F).
* Identify facility personnel who will inspect designated equipment and facility areas as required in Condition S7.
* Contain a visual inspection report or check list that includes all items required by Condition S7.C.
* Provide a tracking or follow-up procedure to ensure that a report is prepared and any appropriate action taken in response to visual inspections.
* Define how the Permittee will comply with signature requirements and records retention identified in Special Condition S9, Reporting and Recordkeeping Requirements.
* Include a certification of compliance with the SWPPP and permit for each inspection using the language in S7.C.1.c.

INSERT DESCRIPTION OF PLAN FOR MONTHLY INSPECTION, QUARTERLY DMR REPORTING, ANNUAL CORRECTIVE ACTION REPORTING, AND RECORDKEEPING. INCLUDE REPORTING PERMIT VIOLATION PROCEEDURES (PG 39 9SE.) HERE.

**Illicit Discharges**

Instructions (see S3.B.4.b.i.7. pg. 19):

* The SWPPP must include measures to identify and eliminate the discharge of process wastewater, domestic wastewater, noncontact cooling water, and other illicit discharges, to stormwater sewers, or to surface waters and ground waters of the state.
* The Permittee can find BMPs to identify and eliminate illicit discharges in Volume IV of Ecology's SWMM for Western Washington and Chapter 8 of the SWMM for Eastern Washington: <http://www.ecy.wa.gov/programs/wq/stormwater/municipal/StrmwtrMan.html>
* Water from washing vehicles or equipment, steam cleaning and/or pressure washing is considered process wastewater. The Permittee must not allow this process wastewater to comingle with stormwater or enter storm drains; and must collect in a tank for off-site disposal, or discharge it to a sanitary sewer, with written approval from the local sewage authority.
* The following text would be an acceptable way to address this permit condition and should be retained or modified, as appropriate.

Water from washing vehicles or equipment, steam cleaning and/or pressure washing is considered process wastewater. The Permittee must not allow this process wastewater to comingle with stormwater or enter storm drains; and must collect in a tank for off-site disposal, or discharge it to a sanitary sewer, with written approval from the local sewage authority.

During each monthly site inspection, look for signs of illicit discharges, especially during dry weather when stormwater isn’t discharging from the site. Each monthly site inspection will include:

* Observations made at stormwater sampling locations and areas where stormwater associated with industrial activity is discharged off-site; or discharged to waters of the state, or to a storm sewer system that drains to waters of the state.
* Observations for the presence of floating materials, visible oil sheen, discoloration, turbidity, odor, etc. in the stormwater discharge(s).
* Observations for the presence of illicit discharges such as domestic wastewater, noncontact cooling water, or process wastewater (including leachate).
	+ If an illicit discharge is discovered, the Permittee shall notify Ecology within seven days.
	+ The Permittee shall eliminate the illicit discharge within 30 days.

## 3.2. Structural Source Control BMPs

Instructions (see S3.B.4.ii. Structural Source Control pg. 19 of the ISWGP):

Describe BMPs to minimize the exposure of manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) to rain, snow, snowmelt, and *runoff* by either locating these industrial materials and activities inside or protecting them with storm resistant coverings.

**Mandatory Structural Source Control BMPs required by Condition S3. of the Industrial Stormwater General Permit**:

* Use grading, berming, or curbing to prevent runoff of contaminated flows and divert run-on away from manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations).
* Perform all cleaning operations indoors, under cover, or in bermed areas that prevent stormwater runoff and run-on and also that capture any overspray.
* Ensure that all washwater drains to a collection system that directs the washwater to further treatment or storage and not to the stormwater drainage system.
* Condition S3. of the Industrial Stormwater General Permit requires the SWPPP to include the “applicable” Structural Source Control BMPs listed in Ecology’s SWMMs, or other guidance documents as mandatory. **NOTE: Ecology has provided a list of BMPs applicable to certain industrial activities or facilities in Appendix E. “Cut” the Structural Source Control BMPs that apply to your industrial activity from Appendix E, and “paste” them here:**

INSERT DESCRIPTION OF ADDITIONAL BMPs HERE, IF APPLICABLE OR NECESSARY BASED ON CORRECTIVE ACTIONS

## 3.3. Treatment BMPs

**Instructions:** The previously listed operational and structural source control BMPs are designed to prevent the contact of stormwater with pollutants. Contamination of stormwater can still occur in spite of source control BMPs. Develop a list of treatment BMPs to address this residual pollution, including the Mandatory BMPs in the Permit, and “Applicable BMPs” from the Stormwater Management Manuals. Include any existing stormwater controls at the site (e.g., oil/water separators, vaults, catch basins, swales, etc.) and discuss their effectiveness at reducing contamination of discharges.

Treatment BMPs include all BMPs that are intended to remove pollutants from stormwater. Some treatment BMPs only addresses certain pollutant types (e.g., sediment, petroleum hydrocarbons, metals, etc.); some address combinations of pollutant types. Examples of treatment BMPs include, but are not limited to:

* Detention or retention basins and vaults
* Oil/water separators
* Infiltration basins or trenches
* Bio-filtration (or Bio-infiltration) swales
* Media (e.g. compost, etc.) filters, including downspout media filters and catch basin media filters
* Sand Filters
* Advanced chemical treatment structures including chitosan enhanced sand filtration systems, and electro-coagulation systems (need prior approval by Ecology).

For each treatment BMP or structure at your facility, fill out a copy of the following table with the appropriate information (cut/paste additional tables, if necessary). Additional treatment BMPs added over time (e.g., Level 3 corrective actions) need to be included in this section.

|  |  |
| --- | --- |
| Structure: |  |
| Date of Implementation: |  |
| Discharge Point: |  |
| Area(s) Treated: |  |
| Pollutants Removed: |  |
|  |  |
| Maintenance Requirement(s): | Frequency: |
|  |  |
|  |  |

|  |  |
| --- | --- |
| Structure: |  |
| Date of Implementation: |  |
| Discharge Point: |  |
| Area(s) Treated: |  |
| Pollutants Removed: |  |
|  |  |
| Maintenance Requirement(s): | Frequency: |
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**Mandatory Treatment BMPs required by Condition S3. of the Industrial Stormwater General Permit (**See Condition **S3.B.4.b.iii** of the permit **(beginning on pg. 20)** for more information):

* Condition S3 of the Industrial Stormwater General Permit requires permittees to implement Treatment BMPs listed as “applicable” in Ecology’s SWMMs, or other approved guidance documents (see Condition S3.A.3).
* The Permittee may omit individual BMPs if site conditions render the BMP unnecessary, infeasible, or the Permittee provides alternative and equally effective BMPs; if the Permittee clearly justifies each BMP omission in the SWPPP.
* Employ oil/water separators, booms, skimmers or other methods to eliminate or minimize oil and grease contamination of stormwater discharges.
	+ Many “off the shelf” oil removal BMPs are available (Absorptive booms, skimmers, pads, etc.)
	+ If an **oil/water separator** needs to be designed and installed, refer to:
		- Stormwater Management Manual for Western WA (Vol. V, Ch.11): <http://www.ecy.wa.gov/biblio/0510033.html>
		- Stormwater Management Manual for Eastern WA (Chapter 5.10) <http://www.ecy.wa.gov/pubs/0410076.pdf>
* Obtain Ecology approval before beginning construction/installation of all treatment BMPs that include the addition of chemicals to provide treatment (e.g., polymer enhanced sand-filter systems, electro-coagulation systems, etc.

**Applicable Treatment BMPs from Ecology’s Stormwater Management Manual for Western Washington**

**NOTE: Only include the Treatment BMPs that are relevant to your type of operation/industry:**

**Treatment BMPs for Commercial Composting (Delete if not applicable to your facility):**

* Convey all leachate from composting operations to a sanitary sewer, holding tank, or on-site treatment systems designed to treat the leachate and TSS.
* Ponds used to collect, store, or treat leachate and other contaminated waters associated with the composting process must be lined to prevent ground water contamination. Apply “AKART” or All Known Available and Reasonable Methods of Prevention and Treatment to all pond liners, regardless of the construction materials.

**Treatment BMPs for Log Sorting and Handling (Delete if not applicable to your facility):**

Required Treatment BMPs are presented in detail in Ecology’s Guidance Document: “Industrial Stormwater General Permit Implementation Manual for Log Yards”.

**Treatment BMPs for Maintenance and Repair of Vehicles and Equipment (Delete if not applicable to your facility):**

* Contaminated stormwater runoff from vehicle staging and maintenance areas must be conveyed to a sanitary sewer, if allowed by the local sewer authority, or to an API or CP oil and water separator followed by a basic treatment BMP, applicable filter, or other equivalent oil treatment system.

**Treatment BMPs for Parking and Storage of Vehicles and Equipment (Delete if not applicable to your facility):**

* An oil removal system such as an API or CP oil and water separator, catch basin filter, or equivalent BMP, approved by the local jurisdiction, is applicable for parking lots meeting the threshold vehicle traffic intensity level of a high-use site.

A high-use site is:

* Subject to an expected average daily vehicle traffic (ADT) count equal to or greater than 100 vehicles per 1,000 square feet of gross building area: or
* Is subject to storage of a fleet of 25 or more diesel vehicles that are over 10 tons gross weight (trucks, buses, trains, heavy equipment, etc.).

**Treatment BMPs for Railroad Yards (Delete if not applicable to your facility):**

* In areas subjected to leaks/spills of oils or other chemicals convey the contaminated stormwater to appropriate treatment such as a sanitary sewer, if approved by the appropriate sewer authority, or, to a CP or API oil/water separator for floating oils, or other treatment, as approved by the local jurisdiction.

**Treatment BMPs for Recyclers and Scrap Yards (Delete if not applicable to your facility):**

For facilities subject to Ecology’s Industrial Stormwater General Permit refer to BMP Guidance Document “Best Management Practices to Prevent Stormwater Pollution at Vehicle Recycler Facilities,” for selection of BMPs. The BMPs in that guidance document can also be applied to scrap material recycling facilities depending on the pollutant sources existing at those facilities and to non-permitted facilities.

**Treatment BMPs for Storage of Liquid, Food Waste, or Dangerous Waste Containers (Delete if not applicable to your facility):**

* For contaminated stormwater in the containment area, connect the sump outlet to a sanitary sewer, if approved by the local Sewer Authority, or to appropriate treatment such as an API or CP oil/water separator, catch basin filter or other appropriate system (see Volume V). Equip the sump outlet with a normally closed valve to prevent the release of spilled or leaked liquids, especially flammables (compliance with Fire Codes), and dangerous liquids. This valve may be opened only for the conveyance of contaminated stormwater to treatment.
* Another option for discharge of contaminated stormwater is to pump it from a dead-end sump or catchment to a tank truck or other appropriate vehicle for off-site treatment and/or disposal.

**Treatment BMPs for Storage of Liquids in Permanent Above-ground Tanks (Delete if not applicable to your facility):**

* If the tank containment area is uncovered, equip the outlet from the spill-containment sump with a shutoff valve, which is normally closed and may be opened, manually or automatically, only to convey contaminated stormwater to approved treatment or disposal, or to convey uncontaminated stormwater to a storm drain. Evidence of contamination can include the presence of visible sheen, color, or turbidity in the runoff, or existing or historical operational problems at the facility. Simple pH measurements with litmus or pH paper can be used for areas subject to acid or alkaline contamination.
* At petroleum tank farms, convey stormwater contaminated with floating oil or debris in the contained area through an API or CP-type oil/water separator or other approved treatment prior to discharge to storm drain or surface water.

**Treatment BMPs for Storage or Transfer (Outside) of Solid Raw Materials, By-Products, or Finished Products (Delete if not applicable to your facility):**

* Convey contaminated stormwater from the stockpile area to a wet pond, wet vault, settling basin, media filter, or other appropriate treatment system depending on the contamination.

## 3.4. Stormwater Peak Runoff and Volume Control BMPs

**Only required at facilities with “new development or redevelopment”. Delete this section if not required at your facility. See below or refer to Permit Condition S3.B.4.b.iv. pg. 20:**

Facilities with *new development* or *redevelopment (terms defined below)* shall evaluate whether flow control BMPs (also called Stormwater Peak Runoff and Volume Control BMPs) are necessary to satisfy the state’s AKART requirements (All Known and Reasonable Methods of Prevention, Control and Treatment), and prevent violations of water quality standards. If flow control BMPs are required, they must be selected, sized and installed according to Permit Condition S3.A.3; refer to the SWMM that applies to your area of the state, and keep a copy of plans, designs and calculations in your SWPPP:

* Stormwater Management Manual for Western WA (Vol. V): <http://www.ecy.wa.gov/biblio/0510033.html>
* Stormwater Management Manual for Eastern WA (Chapter 5) <http://www.ecy.wa.gov/pubs/0410076.pdf>

*Definitions:*

*New Development* means land disturbing activities, including Class IV -general forest practices that are conversions from timber land to other uses; structural development, including construction or installation of a building or other structure; creation of impervious surfaces; and subdivision, short subdivision and binding site plans, as defined and applied in Chapter 58.17 RCW. Projects meeting the definition of redevelopment shall not be considered new development.

*Redevelopment* means on a site that is already substantially developed (i.e., has 35% or more of existing impervious surface coverage), the creation or addition of impervious surfaces; the expansion of a building footprint or addition or replacement of a structure; structural development including construction, installation or expansion of a building or other structure; replacement of impervious surface that is not part of a routine maintenance activity; and land disturbing activities.

INSERT DESCRIPTION OF STORMWATER PEAK RUNOFF AND VOLUME CONTROL BMPS HERE, IF REQUIRED; INCLUDE ENGINEERING PLANS, CALCULATIONS, DESIGNS, ETC.

**Delete this section if not required at your facility.**

## 3.5. Erosion and Sediment Control BMPs

Refer to Permit Condition **(S3.B.4.b.iv. pg. 20):**

The SWPPP must describe the erosion and sediment control BMPs necessary to prevent off-site sedimentation and violations of water quality standards. The Permittee shall implement and maintain:

1. Sediment control BMPs such as detention or retention ponds or traps, vegetated filter strips, bioswales, or other permanent sediment control BMPs to minimize sediment loads in stormwater discharges.
2. Filtration BMPs to remove solids from catch basins, sumps or other stormwater collection and conveyance system components (filter socks, modular canisters, sand filtration, centrifugal separators, etc.).

*Definition:*

*Erosion and Sediment Control BMPs* means BMPs that are intended to prevent erosion and sedimentation, such as preserving natural vegetation, seeding, mulching and matting, plastic covering, filter fences, and sediment traps and ponds.

Instructions: Develop a list of BMPs used to prevent the erosion of earthen materials (soil, sand, gravel, etc.) that can cause off-site sedimentation and turbidity. Include any existing BMPs at the site and discuss their effectiveness at reducing contamination erosion and sediment. Typical practices include:

* Areas that are not paved are covered with landscaping or well maintained vegetation that prevents soil erosion.
* Runoff is routed to a detention or retention basin
* Catch basin inserts (filter socks) are installed in catch basin
* Impervious areas are not curbed to promote sheet flow onto vegetated areas
* A bioswale, sandfilter or other treatment structures is used to treat runoff.

For each treatment BMP or structure at your facility, fill out a copy of the following table with the appropriate information (cut/paste additional tables, if necessary).

|  |  |
| --- | --- |
| Structure: |  |
| Date of Implementation: |  |
| Discharge Point: |  |
| Area(s) Treated: |  |
| Pollutants Removed: |  |
|  |  |
| Maintenance Requirement(s): | Frequency: |
|  |  |
|  |  |

INSERT DESCRIPTION OF ADDITIONAL BMPs HERE, IF APPLICABLE OR NECESSARY BASED ON CORRECTIVE ACTIONS

# Section 4. Sampling Plan

Instructions (see S3.B.5. Sampling Plan pg. 20)

Describe your procedures for conducting analytical and visual monitoring specified by the ISWGP by completing the following section.

1. **Discharge Location(s).**  Identify all points of *discharge* to surface water, *storm sewers*, or discrete *ground water* infiltration locations, such as dry wells or *detention* ponds. INSERT TEXT HERE or use Table Below.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Discharge ID** | **Common description** | **Latitude****(optional)** | **Longitude****(optional)** | **Discharge Type** | **Comments** |
| A1 (example) | Drain by SW corner of shop  | 45°00’00” | 124°00’00” | Surface Water | Storm drain connected to Blue Creek |
| INSERT TEXT HERE | INSERT TEXT HERE | INSERT TEXT HERE | INSERT TEXT HERE | INSERT TEXT HERE | INSERT TEXT HERE |
| INSERT TEXT HERE | INSERT TEXT HERE | INSERT TEXT HERE | INSERT TEXT HERE | INSERT TEXT HERE | INSERT TEXT HERE |

1. Identify each sampling location by its unique identifying number such as A1, A2, etc. Include these sampling locations on site map. INSERT TEXT HERE or use Table Below

**Note:** When identifying sampling locations, follow these permit conditions:

* The Permittee shall designate sampling location(s) at the point(s) where it discharges *stormwater* associated with *industrial activity* off-site.
* The Permittee is not required to sample on-site discharges to ground (e.g., infiltration, etc.) or *sanitary sewer* discharges, unless specifically required by *Ecology* (Condition G12).
* The Permittee shall sample each distinct point of *discharge* off-site except as otherwise exempt from monitoring as a “substantially identical outfall” per S3.B.5.b. The Permittee is required to monitor only one of the “substantially identical outfalls” if two or more outfalls discharge substantially identical effluents (based on similar industrial activities and site conditions).
* The exception to sampling each point of *discharge* in S4.B.2.c does not apply to any point of discharge subject to numeric effluent limitations (Conditions S5.C, S6.C & S6.D).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Discharge ID** | **Common description** | **Latitude****(optional)** | **Longitude****(optional)** | **Discharge Type** | **Comments** |
| A1 (example) | Drain by SW corner of shop  | 45°00’00” | 124°00’00” | Surface Water | Storm drain connected to Blue Creek |
| INSERT TEXT HERE | INSERT TEXT HERE | INSERT TEXT HERE | INSERT TEXT HERE | INSERT TEXT HERE | INSERT TEXT HERE |
| INSERT TEXT HERE | INSERT TEXT HERE | INSERT TEXT HERE | INSERT TEXT HERE | INSERT TEXT HERE | INSERT TEXT HERE |

1. **Substantially identical outfall exception** (if applicable)

If you plan to use the substantially identical outfall exception for your discharge monitoring per Condition S4.B.2.c, include the following information here to substantiate your claim that these outfalls are substantially identical:

* Location of which discharge points the Permittee does not sample because the pollutant concentrations are substantially identical to a discharge point being sampled: INSERT TEXT HERE
* Description of general industrial activities conducted in the drainage area of each discharge point: INSERT TEXT HERE
* Description of the Best Management Practices conducted in the drainage area of each discharge point: INSERT TEXT HERE
* Description of the exposed materials located in the drainage area of each discharge point that are likely to be significant contributors of pollutants to stormwater discharges: INSERT TEXT HERE
* Description of the *impervious surfaces* in the drainage area that could affect the percolation of stormwater runoff into the ground (e.g., asphalt, crushed rock, grass, etc.): INSERT TEXT HERE
	+ Definitions:
		- *Impervious*: A surface which cannot be easily penetrated. For instance, rain does not readily penetrate paved surfaces.
		- *Impervious surface*: A hard surface area which either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development. A hard surface area which causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development. Common impervious surfaces include, but are not limited to, roof tops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, and oiled, macadam or other surfaces which similarly impede the natural infiltration of stormwater.
* Describe the reasons why the you expect the discharge points to discharge substantially identical effluents (e.g., identical stormwater): INSERT TEXT HERE
1. **Staff Responsible for Sampling**. Identify the staff responsible for conducting *stormwater* sampling INSERT TEXT HERE
2. **Sample Collection and Handling.** Specify the procedures for sample collection and handling; and for sending samples to the laboratory INSERT TEXT HERE
3. **Submitting Sample Results to Ecology.** Specify the procedures for submitting Discharge Monitoring Reports (DMRs) to Ecology.

**NOTE: The following excerpt from Permit Condition S9 may be retained to satisfy this requirement:**

* The Permittee shall submit sampling data obtained during each reporting period on a Discharge Monitoring Report (DMR) form provided, or otherwise approved, by *Ecology*.
* The Permittee shall submit sampling results within 45 days of the end of each reporting period.
* The first reporting period shall begin on the effective date of permit coverage.
* Upon permit coverage, the Permittee shall ensure that DMRs are postmarked or received by *Ecology* by the DMR Due Dates below:

 **Reporting Dates and DMR Due Dates**

|  |  |  |
| --- | --- | --- |
| **Reporting Period** | **Months** | **DMR Due Date** |
| 1st | January-March | May 15 |
| 2nd | April-June | August 14 |
| 3rd  | July-Sept | November 14 |
| 4th | October-December | February 14 |

* DMRs shall be submitted using *Ecology*’s WebDMR system or by mail to the following address:

Department of Ecology

Water Quality Program – Industrial Stormwater

PO Box 47696

Olympia, Washington 98504-7696

* Upon permit coverage, the Permittee shall submit a DMR each reporting period, whether or not the *facility* has discharged *stormwater* from the site.
* If discharge(s) occurred during normal working hours, and during safe conditions; but no sample was collected during the entire quarter, the Permittee shall submit a DMR form indicating “no sample obtained”. If no discharge(s) occurred during the entire quarter or the discharges during the quarter occurred outside normal working hours or during unsafe conditions, the Permittee shall submit a DMR indicating “no discharge”.
* If a Permittee has suspended sampling for a parameter due to consistent attainment, the Permittee shall submit a DMR and indicate that it has achieved Consistent Attainment for that parameter(s).
1. **Sampling Parameters**. Identify parameters for analysis, holding times and preservatives, laboratory *quantitation levels,* and analytical methods.
	1. Table 2 lists the parameters that apply to all facilities
	2. Table 3 lists the parameters that only apply to certain facilities (Delete or modify if not applicable to your facility).

**Table 2. Benchmarks and Sampling Requirements Applicable to All Facilities**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Units** | **Benchmark Value** | **Analytical Method** | **Laboratory Quantitation Level a** | **Minimum Sampling Frequency b** |
| Turbidity | NTU | 25 | EPA 180.1 Meter | 0.5 | 1/quarter |
| pH | Standard Units | Between 5.0 and 9.0 | Meter/Paper c | ±0.5 | 1/quarter |
| Oil Sheen | Yes/No | No Visible Oil Sheen | N/A | N/A | 1/quarter |
| Copper, Total | µg/L | Western WA: 14Eastern WA: 32 | EPA 200.8 | 2.0 | 1/quarter |
| Zinc, Total | µg/L | 117 | EPA 200.8 | 2.5 | 1/quarter |

a The Permittee shall ensure laboratory results comply with the *quantitation level* specified in the table. However, if a Permittee knows that an alternate, less sensitive method (higher detection level and *quantitation level*) from *40 CFR* Part 136 is sufficient to produce measurable results in its effluent, it may use that method for analysis.

b. 1/quarter means 1 sample taken each quarter, year-round.

c. Permittees shall use either a calibrated pH meter or narrow-range pH indicator paper with a resolution not greater than ± 0.5 SU.

**Table 3. Additional Benchmarks and Sampling Requirements Applicable to Specific Industries (Delete or modify if not applicable to your facility)**

| **Parameter** | **Units** | **Benchmark Value** |  | **Analytical Method** | **Laboratory Quantitation Level a** | **Minimum Sampling Frequency b** |
| --- | --- | --- | --- | --- | --- | --- |
| 1. Chemical and Allied Products (28xx), Food and Kindred Products (20xx) |
| BOD5 | mg/L | 30 |  | EPA 405.1 orSM 5210B | 2 | 1/quarter |
| Nitrate/Nitrite, as Nitrogen | mg/L | 0.68 |  | EPA 353.1 | 0.10 | 1/quarter |
| Phosphorus, Total | mg/L | 2.0 |  | EPA 365.1 | 0.10 | 1/quarter |
| 2. Primary Metals(33xx), Metals Mining (10xx), Automobile Salvage and Scrap Recycling (5015 and 5093), Metals Fabricating (34xx) |
| Lead, Total | µg/L | 81.6 |  | EPA 200.8 | 0.5 | 1/quarter |
| Total Petroleum Hydrocarbons (TPH) | mg/L | 10 |  | NWTPH-Dx | 0.1 | 1/quarter |
| 3. Hazardous Waste Treatment, Storage and Disposal Facilities and Dangerous Waste Recyclers subject to the provisions of Resource Conservation and Recovery Act (RCRA) Subtitle C |
| Chemical Oxygen Demand (COD) | mg/L  | 120 |  | SM5220-D | 10 | 1/quarter |
| Ammonia, Total, as N | mg/L  | 2.1 |  | SM4500-NH3- GH  | 0.3 | 1/quarter |
| TSS | mg/L | 100 |  | SM2540-D | 5 | 1/quarter |
| Arsenic, Total  | µg/L | 150 |  | EPA 200.8 | 0.5 | 1/quarter |
| Cadmium, Total  | µg/L | 2.1 |  | EPA 200.8 | 0.25 | 1/quarter |
| Cyanide, Total | µg/L | 22 |  | SM 4500-CN I | 10 | 1/quarter |
| Lead, Total  | µg/L | 81.6 |  | EPA 200.8 | 0.5 | 1/quarter |
| Magnesium, Total  | µg/L | 64 |  | EPA 200.7 | 80 | 1/quarter |
| Mercury, Total  | µg/L | 1.4 |  | EPA 1631E | 0.0005 | 1/quarter |
| Selenium, Total  | µg/L | 5.0 |  | EPA 200.8 | 1.0 | 1/quarter |
| Silver, Total  | µg/L | 3.8 |  | EPA 200.8 | 0.2 | 1/quarter |
| Total Petroleum Hydrocarbons (TPH) | mg/L | 10 |  | NWTPH-Dx | 0.1 | 1/quarter |
| 4. Air Transportationc (45xx) |
| Ammonia | mg/L  | 2.1 |  | SM4500-NH3- GH  | 0.3 | 1/quarter |
| BOD5 | mg/L | 30 |  | EPA 405.1 orSM 5210B | 2 | 1/quarter |
| COD | mg/L | 120 |  | EPA 410.2 | 5 | 1/quarter |
| Nitrate/Nitrite, as N | mg/L | 0.68 |  | EPA 4500-NO3-E/F/H | 0.10 | 1/quarter |
|  5. Timber Product Industry (24xx), Paper and Allied Products (26xx) |
| COD | mg/L | 120 |  | SM5220-D | 10 | 1/quarter |
| TSS | mg/L | 100 |  | SM2540-D | 5 | 1/quarter |

a The Permittee shall ensure laboratory results comply with the *quantitation level* specified in the table. However, if a Permittee knows that an alternate, less sensitive method (higher detection level and *quantitation level*) from *40 CFR* Part 136 is sufficient to produce measurable results in their effluent, that method may be used for analysis.

b. 1/quarter means 1 sample taken each quarter, year-round.

c. For airports 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 additional four parameters in those outfalls that collect *runoff* from areas where deicing activities occur (SIC 4512-4581).

# Section 5. SWPPP Certification

SWPPP Appendices

Instructions:

* A SWPPP certification form needs to be completed and attached to all SWPPPs.
* The SWPPP Certification Form is available in ISWGP Appendix 3 (pg. 59) or Appendix D of this SWPPP template.
* Sign and certify that the Stormwater Pollution Prevention Plan (SWPPP) is complete, accurate and in compliance with Conditions S3, S8, and G2 of the Industrial Stormwater General Permit.
* Each time a Level 1, 2, or 3 Corrective Action is required, this form needs to be re-signed and re-certified by the Permittee, and attached to the SWPPP.

Attach the following documentation to the SWPPP:

**Appendix A** – General Location Map

**Appendix B** – Site Map

**Appendix C** – Blank Worksheets for Development of the SWPPP

**Appendix D** – SWPPP Certification or Recertification Form (for Level 1, 2, or 3 Corrective Action(s))

**Appendix E** – Applicable Industry-Specific Source Control BMPs

**Appendix F** – Industrial Stormwater Monthly Inspection Report

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# Appendix C. Blank Worksheets for Development of the SWPPP

Note: Use these forms or create your own.

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| **Pollution Prevention Team** | **Worksheet #1****Completed by: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Title: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
| Responsible Official: Title: Team Leader: Office Phone: Responsibilities:    |
| (1) Title: Office phone\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Cell phone \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Office Phone: Responsibilities:     |
| (2) Title: Office phone\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Cell phone \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Office Phone: Responsibilities:    |

|  |  |
| --- | --- |
| **Material Inventory** | **Worksheet #2** **Completed by:** **Title:** **Date:**  |
| **List materials handled, treated, stored, or disposed of at the site that may potentially be exposed to precipitation or runoff. Also indicate if any spills or leaks of pollutants have occurred in the past. (Including any pollutants no longer handled on-site.)** |
|  |  | **Quantity (Units)** | **Exposed** | **Likelihood of contact with stormwater** | **Past Spill or** |
|  |  | **Used** | **Produced** | **Stored** | **Since Nov. 89** | **If Yes, describe reason** | **Leak** |
| **Material** | **Purpose/****Location** | **(indicate per/wk. or yr.)** | **(Yes/No)** |  | **Yes** | **No.** |
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| **Description of Exposed Significant Material** | **Worksheet #2A** **Completed by:** **Title:** **Date:**  |
| **Based on your material inventory, list significant materials that have been exposed since November 18, 1989, and/or are currently exposed.** |
| **List of Exposed Significant Materials** | **Period of Exposure** | **Quantity Exposed (units)** | **Location (as indicated on the site map)** | **Method of storage, handling, treatment, or disposal (e.g., sealed drum standing outside, or covered pile, drum, tank)** |
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| **Potential Pollutant Source Identification** | **Worksheet #3** **Completed by:** **Title:** **Date:**  |
| **List all potential stormwater pollutants from materials handled, treated, or stored on-site.** |
| **Potential Stormwater Pollutant** | **Stormwater Pollutant Source** | **Likelihood of pollutant being present in your stormwater discharge. If yes, explain** |
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| **List of Significant Spills and Leaks** | **Worksheet #4** **Completed by:** **Title:** **Date:**  |
| **List all spills and leaks (as indicated on Worksheet #2) of toxic or hazardous pollutants that were significant. Significant spills and leaks include but are not limited to, release of oil or hazardous substances in excess of reportable quantities (see chapter 2 of text). Although not required, we suggest you list spills and leaks of non-hazardous materials.** |
|  |  | **Description** | **Response Procedure** |  |
| **Date****(month/day/year)** | **Location (as indicated on site map)** | **Type of Material** | **Quantity** | **Source, If Known** | **Reason for Spill/Leak** | **Amount of Material Recovered** | **Material No longer exposed to Storm-water (Yes/No)** | **Preventive Measure Taken** |
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| **Spill Log** | **Worksheet #4A** **Completed by:** **Title:** **Date:**  |
| **List all chemical and petroleum spills and leaks** |
|  |  | **Description** | **Response Procedure** |  |
| **Date and Time** | **Location**  | **Amount** | **Type of Material** | **Source, If Known** | **Reason for Spill/Leak** | **Notifications****Made** | **Staff Involved** | **Comments** |
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| **Identify Areas Associated With Industrial Activity** | **Worksheet #5** **Completed by:** **Title:** **Date:**  |
| **List areas and activities, not included on Worksheets 2, 2A, and 3, which may be sources of pollution. Discuss the potential of these areas and activities as potential pollutant sources and identify any pollutant that may be generated by that activity...** |
| **Industrial Area or Activity** | **Potential Stormwater Pollutant from Area or Activity** | **Likelihood of being present in your stormwater discharge. If yes, describe reason.** |
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| **BMP Identification** | **Worksheet #8** **Completed by:** **Title:** **Date:**  |
| **Describe the BMPs that are needed for the facility to address existing and potential pollutant sources identified in Worksheets #3, 4, and 5.**  |
| **BMPs** | **Brief Description of Activities or Improvements** |
| **Good Housekeeping** |  |
| **Preventive Maintenance** |  |
| **Spill Prevention and Emergency Cleanup** |  |

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| **BMPs** | **Brief Description of Activities or Improvements** |
| **Inspections** |  |
| **Source / Operational Control BMPs** |  |
| **Erosion and Sediment Control BMPs**  |  |

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| **Additional BMP Identification** | **Worksheet #8A** **Completed by:** **Title:** **Date:**  |
| **Describe any treatment and innovative BMPs that are required to address existing and potential pollutant sources identified in Worksheet 3, 4, and 5. These are BMPs needed to prevent the discharge of significant amounts of pollutants despite implementation of operational and source control BMPs.** |
| **BMPs** | **Brief Description of Activities or Improvements** |
| **Treatment BMPs** |  |
| **Emerging technologies****Flow Control BMPs** |  |

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| **BMP Implementation** | **Worksheet #9** **Completed by:** **Title:** **Date:**  |
| **Develop a plan for implementing each BMP. Describe the steps necessary to implement the BMP (i.e., any construction or design), the schedule for completing those steps (list dates) and the person(s) responsible for implementation.** |
| **BMPs** | **Description of Action(s) Required for Implementation** | **Schedule Milestone and Completion Date(s)** | **Person Responsible for Action** |
| **Good Housekeeping** | **1.** |  |  |
|  | **2.** |  |  |
|  | **3** |  |  |
| **Preventive****Maintenance** | **1.** |  |  |
| **2.** |  |  |
| **3.** |  |  |
| **4.** |  |  |
| **Spill Prevention and Emergency Cleanup** | **1.** |  |  |
| **2.** |  |  |
|  | **3.** |  |  |
| **Inspections** | **1.** |  |  |
|  | **2.** |  |  |
|  | **3.** |  |  |

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| **BMPs** | **Description of Action(s) Required for Implementation** | **Schedule Milestone and Completion Date(s)** | **Person Responsible for Action** |
| **Source Control BMPs** | **1.** |  |  |
|  | **2.** |  |  |
|  | **3** |  |  |
| **Operational Control BMPs** | **4.** |  |  |
|  | **5.** |  |  |
|  | **6.** |  |  |
|  | **7.** |  |  |
|  | **8.** |  |  |
| **Erosion and Sediment Control** | **1.** |  |  |
| **2.** |  |  |
| **3.** |  |  |
|  | **4.** |  |  |
| **Treatment BMPs** | **1.** |  |  |
|  | **2.** |  |  |
|  | **3.** |  |  |
|  | **4.** |  |  |
| **Emerging technologies** | **1.** |  |  |
|  | **2.** |  |  |
| **Flow Control BMPs** | **3.** |  |  |
|  | **4.** |  |  |

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| **Employee Training** | **Worksheet #10** **Completed by:** **Title:** **Date:**  |
| **Describe the annual training of employees on the SWPPP, addressing spill response, good housekeeping, and material management practices.** |
| **Training Topics****1.) LINE WORKERS** | **Brief Description of Training Program/Materials (e.g., film, newsletter, course)** | **Schedule for Training (list dates)** | **Attendees** |
| **Spill Prevention and Response** |  |  |  |
| **Good Housekeeping** |  |  |  |
| **Material Management Practices** |  |  |  |
| **2.) P2 TEAM:** |  |  |  |
| **SWPPP Implementation** |  |  |  |
| **Monitoring Procedures** |  |  |  |

# Appendix D. SWPPP Certification Form

The Permittee shall use this form to sign and certify that the Stormwater Pollution Prevention Plan (SWPPP) is complete, accurate and in compliance with Conditions S3 and S8 of the Industrial Stormwater General Permit.

* A SWPPP certification form needs to be completed and attached to all SWPPPs.
* Each time a Level 1, 2, or 3 Corrective Action is required, this form needs to be re-signed and re-certified by the Permittee, and attached to the SWPPP.

**Is this SWPPP certification in response to a Level 1, 2 or 3 Corrective Action? [ ] Yes [ ] No**

**If Yes**:

* Type of Corrective Action?: [ ] Level 1 [ ] Level 2 [ ] Level 3
* Date SWPPP update/revision completed:       .

“I certify under penalty of law that this SWPPP and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate information to determine compliance with the Industrial Stormwater General Permit. Based on my inquiry of the person or persons who are responsible for stormwater management at my facility, this SWPPP is, to the best of my knowledge and belief, true, accurate, and complete, and in full compliance with Permit Conditions S3 and S8, including the correct Best Management Practices from the applicable Stormwater Management Manual. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

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 Operator’s Printed Name **\*** Title

      \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Operator’s Signature **\*** Date

**\*** Federal regulations require this document to be signed as follows:

For a corporation, by a principal executive officer of at least the level of vice president;

For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or

For a municipality, state, federal, or other public facility, by either a principal executive officer or ranking elected official.

This document shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to the Ecology.
2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.

Changes to authorization. If an authorization under number 2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of number 2 above shall be submitted to Ecology prior to, or together with, any reports, information, or applications to be signed by an authorized representative.

# Appendix E. List of Applicable Industry-Specific Source Control BMPs

**Mandatory BMPs**:

Condition S3. of the Industrial Stormwater General Permit requires SWPPP to include all Operational and Structural Source Control BMPs listed as “applicable” in Ecology’s SWMMs, or other guidance documents as mandatory. The Permittee may omit individual BMPs if site conditions render the BMP unnecessary, infeasible, or the Permittee provides alternative and equally effective BMPs; if the Permittee clearly justifies each BMP omission in the SWPPP.

**Cut and paste applicable BMPs from Appendix E into the Sections 3 of this template.**

Operational Source Control BMPs for Building, Repair, and Maintenance of Boats and Ships:

* Clean regularly all accessible work, service and storage areas to remove debris, spent sandblasting material, and any other potential stormwater pollutants.
* Sweep rather than hose debris on the dock. If hosing is unavoidable the hose water must be collected and conveyed to treatment.
* Collect spent abrasives regularly and store under cover to await proper disposal.
* Dispose of greasy rags, oil filters, air filters, batteries, spent coolant, and degreasers properly.
* Drain oil filters before disposal or recycling.
* Immediately repair or replace leaking connections, valves, pipes, hoses and equipment that causes the contamination of stormwater.
* Use drip pans, drop cloths, tarpaulins or other protective devices in all paint mixing and solvent operations unless carried out in impervious contained and covered areas.
* Convey sanitary sewage to pump-out stations, portable on-site pump-outs, or commercial mobile pump-out facilities or other appropriate onshore facilities.
* Maintain automatic bilge pumps in a manner that will prevent waste material from being pumped automatically into surface water.
* Prohibit uncontained spray painting, blasting or sanding activities over open water.
* Do not dump or pour waste materials down floor drains, sinks, or outdoor storm drain inlets that discharge to surface water. Plug floor drains that are connected to storm drains or to surface water. If necessary, install a sump that is pumped regularly.
* Prohibit outside spray painting, blasting or sanding activities during windy conditions that render containment ineffective.
* Do not burn paint and/or use spray guns on topsides or above decks.
* Immediately clean up any spillage on dock, boat or ship deck areas and dispose of the wastes properly.
* In the event of an accidental discharge of oil or hazardous material into waters of the state or onto land with a potential for entry into state waters, immediately notify the yard, port, or marina owner or manager, the Department of Ecology, and the National Response Center at 1-800-424-8802 (24-hour). If the spill can reach or has reached marine water, call the U.S. Coast Guard at (206) 217-6232.

Operational Source Control BMPs for Commercial Animal Handling Areas:

* Regularly sweep and clean animal keeping areas to collect and properly dispose of droppings, uneaten food, and other potential stormwater contaminants.
* Do not hose down to storm drains or to receiving water those areas that contain potential stormwater contaminants.
* Do not allow any washwaters to be discharged to storm drains or to receiving water without proper treatment.
* If animals are kept in unpaved and uncovered areas, the ground must either have vegetative cover or some other type of ground cover such as mulch.
* If animals are not leashed or in cages, the area where animals are kept must be surrounded by a fence or other means that prevents animals from moving away from the controlled area where BMPs are used.

Operational Source Control BMPs for Commercial Composting:

* Ensure that the compost feedstocks do not contain dangerous wastes, regulated under Chapter 173-303 WAC or hazardous products of a similar nature, or solid wastes that are not beneficial to the composting process. Employees must be trained to screen these materials in incoming wastes.
* Contact other federal, state, and local agencies with environmental or zoning authority for applicable permit and regulatory information. Local health departments are responsible for issuing solid waste handling permits for commercial compost facilities.
* Apply for coverage under the General Permit to Discharge Stormwater Associated with Industrial Activities, if the facility discharges stormwater to surface water or a municipal stormwater system. If all stormwater from the facility infiltrates into the surrounding area, the General Permit is not required.
* Discharge of compost leachate, stormwater that has contacted compost, or stormwater comingled with leachate is prohibited.
* Develop a plan of operations as outlined in the Compost Facility Resource Handbook, Publication #97-502.
* Store finished compost in a manner to prevent contamination of stormwater.

Operational Source Control BMPs for Commercial Printing Operations:

* Discharge process wastewaters to a sanitary sewer, if approved by the local sewer authority, or to an approved process wastewater treatment system.
* Do not discharge process wastes or wastewaters into storm drains or surface water.
* Determine whether any of these wastes qualify for regulation as dangerous wastes and dispose of them accordingly.

Operational Source Control BMPs for Dust Control at Disturbed Land Areas and Unpaved Roadways and Parking Lots:

* Sprinkle or wet down soil or dust with water as long as it does not result in a wastewater discharge.
* Use only local and/or state government approved dust suppressant chemicals such as those listed in Ecology Publication #96-433, “Techniques for Dust Prevention and Suppression.”
* Avoid excessive and repeated applications of dust suppressant chemicals. Time the application of dust suppressants to avoid or minimize their wash-off by rainfall or human activity such as irrigation.
* Apply stormwater containment to prevent the conveyance of stormwater TSS into storm drains or receiving waters.
* The use of motor oil for dust control is prohibited. Care should be taken when using lignin derivatives and other high BOD chemicals in excavations or areas easily accessible to surface water or ground water.
* Consult with the Ecology Regional Office in your area on discharge permit requirements if the dust suppression process results in a wastewater discharge to the ground, ground water, storm drain, or surface water.

Operational Source Control BMPs for Dust Control at Manufacturing Areas:

* Clean, as needed, powder material handling equipment and vehicles that can be sources of stormwater pollutants, to remove accumulated dust and residue.
* Regularly sweep dust accumulation areas that can contaminate stormwater. Sweeping should be conducted using vacuum filter equipment to minimize dust generation and to ensure optimal dust removal.

Operational Source Control BMPs for Fueling At Dedicated Stations:

* Prepare an emergency spill response and cleanup plan (per BMPs for Spills of Oil and Hazardous Substances) and have designated trained person(s) available either on site or on call at all times to promptly and properly implement that plan and immediately cleanup all spills. Keep suitable cleanup materials, such as dry adsorbent materials, on site to allow prompt cleanup of a spill.
* Train employees on the proper use of fuel dispensers. Post signs in accordance with the Uniform Fire Code (UFC). Post “No Topping Off” signs (topping off gas tanks causes spillage and vents gas fumes to the air). Make sure that the automatic shutoff on the fuel nozzle is functioning properly.
* The person conducting the fuel transfer must be present at the fueling pump during fuel transfer, particularly at unattended or self-serve stations.
* Keep drained oil filters in a suitable container or drum.

Operational Source Control BMPs for Illicit Connections to Storm Drains:

* Eliminate unpermitted wastewater discharges to storm drains, ground water, or surface water; and,
* Convey unpermitted discharges to a sanitary sewer if allowed by the local sewer authority, or to other approved treatment; and,
* Obtain appropriate permits for these discharges.

Operational Source Control BMPs for Landscaping and Lawn/Vegetation Management:

Landscaping:

* Install engineered soil/landscape systems to improve the infiltration and regulation of stormwater in landscaped areas.
* Do not dispose of collected vegetation into waterways or storm drainage systems.

Pesticides:

* Develop and implement an Integrated Pest Management (IPM) plan and use pesticides only as a last resort.

An IPM program might consist of the following steps:

Step 1: Correctly identify problem pests and understand their life cycle

Step 2: Establish tolerance thresholds for pests.

Step 3: Monitor to detect and prevent pest problems.

Step 4: Modify the maintenance program to promote healthy plants and discourage pests.

Step 5: Use cultural, physical, mechanical, or biological controls first if pests exceed the tolerance thresholds.

Step 6: Evaluate and record the effectiveness of the control and modify maintenance practices to support lawn or landscape recovery and prevent recurrence.

* Implement a pesticide-use plan and include at a minimum: a list of selected pesticides and their specific uses; brands, formulations, application methods and quantities to be used; equipment use and maintenance procedures; safety, storage, and disposal methods; and monitoring, record keeping, and public notice procedures. All procedures shall conform to the requirements of Chapter 17.21 RCW and Chapter 16-228 WAC (Appendix IV-D R.7).
* Choose the least toxic pesticide available that is capable of reducing the infestation to acceptable levels. The pesticide should readily degrade in the environment and/or have properties that strongly bind it to the soil. Any pest control used should be conducted at the life stage when the pest is most vulnerable. For example, if it is necessary to use a Bacillus thuringiens is application to control tent caterpillars, it must be applied before the caterpillars cocoon or it will be ineffective. Any method used should be site-specific and not used wholesale over a wide area.
* Apply the pesticide according to label directions. Under no conditions shall pesticides be applied in quantities that exceed manufacturer’s instructions.
* Mix the pesticides and clean the application equipment in an area where accidental spills will not enter surface or ground waters, and will not contaminate the soil.
* Store pesticides in enclosed areas or in covered impervious containment. Ensure that pesticide contaminated stormwater or spills/leaks of pesticides are not discharged to storm drains. Do not hose down the paved areas to a storm drain or conveyance ditch. Store and maintain appropriate spill cleanup materials in a location known to all near the storage area.
* Clean up any spilled pesticides and ensure that the pesticide contaminated waste materials are kept in designated covered and contained areas.
* The pesticide application equipment must be capable of immediate shutoff in the event of an emergency.
* Do not spray pesticides within 100 feet of open waters including wetlands, ponds, and streams, sloughs and any drainage ditch or channel that leads to open water except when approved by Ecology or the local jurisdiction. All sensitive areas including wells, creeks and wetlands must be flagged prior to spraying.
* As required by the local government or by Ecology, complete public posting of the area to be sprayed prior to the application.
* Spray applications should only be conducted during weather conditions as specified in the label direction and applicable local and state regulations. Do not apply during rain or immediately before expected rain.

Vegetation Management:

* Use at least an eight-inch "topsoil" layer with at least 8 percent organic matter to provide a sufficient vegetation-growing medium. Amending existing landscapes and turf systems by increasing the percent organic matter and depth of topsoil can substantially improve the permeability of the soil, the disease and drought resistance of the vegetation, and reduce fertilizer demand. This reduces the demand for fertilizers, herbicides, and pesticides. Organic matter is the least water-soluble form of nutrients that can be added to the soil. Composted organic matter generally releases only between 2 and 10 percent of its total nitrogen annually, and this release corresponds closely to the plant growth cycle. If natural plant debris and mulch are returned to the soil, this system can continue recycling nutrients indefinitely.
* Select the appropriate turfgrass mixture for your climate and soil type. Certain tall fescues and rye grasses resist insect attack because the symbiotic endophytic fungi found naturally in their tissues repel or kill common leaf and stem-eating lawn insects. They do not, however, repel root-feeding lawn pests such as Crane Fly larvae, and are toxic to ruminants such as cattle and sheep. The fungus causes no known adverse effects to the host plant or to humans. Endophytic grasses are commercially available and can be used in areas such as parks or golf courses where grazing does not occur. The local Cooperative Extension office can offer advice on which types of grass are best suited to the area and soil type.
* Use the following seeding and planting BMPs, or equivalent BMPs to obtain information on grass mixtures, temporary and permanent seeding procedures, maintenance of a recently planted area, and fertilizer application rates: Temporary Seeding, Mulching and Matting, Clear Plastic Covering, Permanent Seeding and Planting, and Sodding as described in Volume II).
* Selection of desired plant species can be made by adjusting the soil properties of the subject site. For example, a constructed wetland can be designed to resist the invasion of reed canary grass by layering specific strata of organic matters (e.g., compost forest product residuals) and creating a mildly acidic pH and carbon-rich soil medium. Consult a soil restoration specialist for site-specific conditions.
* Aerate lawns regularly in areas of heavy use where the soil tends to become compacted. Aeration should be conducted while the grasses in the lawn are growing most vigorously. Remove layers of thatch greater than ¾-inch deep.
* Mowing is a stress-creating activity for turfgrass. When grass is mowed too short its productivity is decreased and there is less growth of roots and rhizomes. The turf becomes less tolerant of environmental stresses, more disease prone and more reliant on outside means such as pesticides, fertilizers and irrigation to remain healthy. Set the mowing height at the highest acceptable level and mow at times and intervals designed to minimize stress on the turf. Generally mowing only 1/3 of the grass blade height will prevent stressing the turf.

Irrigation:

* The depth from which a plant normally extracts water depends on the rooting depth of the plant. Appropriately irrigated lawn grasses normally root in the top 6 to 12 inches of soil; lawns irrigated on a daily basis often root only in the top 1 inch of soil. Improper irrigation can encourage pest problems, leach nutrients, and make a lawn completely dependent on artificial watering. The amount of water applied depends on the normal rooting depth of the turfgrass species used, the available water holding capacity of the soil, and the efficiency of the irrigation system. Consult with the local water utility, Conservation District, or Cooperative Extension office to help determine optimum irrigation practices.

Fertilizer Management:

* Turfgrass is most responsive to nitrogen fertilization, followed by potassium and phosphorus. Fertilization needs vary by site depending on plant, soil and climatic conditions. Evaluation of soil nutrient levels through regular testing ensures the best possible efficiency and economy of fertilization. For details on soils testing, contact the local Conservation District or Cooperative Extension Service.
* Fertilizers should be applied in amounts appropriate for the target vegetation and at the time of year that minimizes losses to surface and ground waters. Do not fertilize during a drought or when the soil is dry. Alternatively, do not apply fertilizers within three days prior to predicted rainfall. The longer the period between fertilizer application and either rainfall or irrigation, the less fertilizer runoff occurs.
* Use slow release fertilizers such as methylene urea, IDBU, or resin coated fertilizers when appropriate, generally in the spring. Use of slow release fertilizers is especially important in areas with sandy or gravelly soils.
* Time the fertilizer application to periods of maximum plant uptake. Generally fall and spring applications are recommended, although WSU turf specialists recommend four fertilizer applications per year.
* Properly trained persons should apply all fertilizers. At commercial and industrial facilities fertilizers should not be applied to grass swales, filter strips, or buffer areas that drain to sensitive water bodies unless approved by the local jurisdiction.

Operational Source Control BMPs for Loading and Unloading Areas for Liquid or Solid Material:

All Loading/Unloading Areas:

* A significant amount of debris can accumulate at outside, uncovered loading/unloading areas. Sweep these surfaces frequently to remove material that could otherwise be washed off by stormwater. Sweep outside areas that are covered for a period of time by containers, logs, or other material after the areas are cleared.
* Place drip pans, or other appropriate temporary containment device, at locations where leaks or spills may occur such as hose connections, hose reels and filler nozzles. Drip pans shall always be used when making and breaking connections (see Figure 2.2). Check loading/unloading equipment such as valves, pumps, flanges, and connections regularly for leaks and repair as needed.

Tanker Truck and Rail Transfer Areas to Above/Below-ground Storage Tanks:

* To minimize the risk of accidental spillage, prepare an "Operations Plan" that describes procedures for loading/unloading. Train the employees, especially fork lift operators, in its execution and post it or otherwise have it readily available to employees.
* Report spills of reportable quantities to Ecology (refer to Section 2.1 for telephone numbers of Ecology Regional Offices).
* Prepare and implement an Emergency Spill Cleanup Plan for the facility (BMP Spills of Oil and Hazardous Substances) which includes the following BMPs:
	+ Ensure the clean up of liquid/solid spills in the loading/ unloading area immediately, if a significant spill occurs, and, upon completion of the loading/unloading activity, or, at the end of the working day.
	+ Retain and maintain an appropriate oil spill cleanup kit on-site for rapid cleanup of material spills. (See BMP Spills of Oil and Hazardous Substances).
	+ Ensure that an employee trained in spill containment and cleanup is present during loading/unloading.

Rail Transfer Areas to Above/below-ground Storage Tanks:

* Install a drip pan system as illustrated (see Figure 2.3) within the rails to collect spills/leaks from tank cars and hose connections, hose reels, and filler nozzles.

Loading/Unloading from/to Marine Vessels:

* Facilities and procedures for the loading or unloading of petroleum products must comply with Coast Guard requirements.

Transfer of Small Quantities from Tanks and Containers:

* Refer to BMPs Storage of Liquids in Permanent Above-Ground Tanks, and Storage of Liquid, Food Waste, or Dangerous Waste Containers, for requirements on the transfer of small quantities from tanks and containers, respectively.

Operational Source Control BMPs for Log Sorting and Handling:

* Required operational source control BMPs are presented in detail in Ecology’s Guidance Document: ”Industrial Stormwater General Permit Implementation Manual for Log Yards

Operational Source Control BMPs for Maintenance and Repair of Vehicles and Equipment:

* Inspect for leaks all incoming vehicles, parts, and equipment stored temporarily outside.
* Use drip pans or containers under parts or vehicles that drip or that are likely to drip liquids, such as during dismantling of liquid containing parts or removal or transfer of liquids.
* Remove batteries and liquids from vehicles and equipment in designated areas designed to prevent stormwater contamination. Store cracked batteries in a covered non-leaking secondary containment system.
* Empty oil and fuel filters before disposal. Provide for proper disposal of waste oil and fuel.
* Do not pour/convey washwater, liquid waste, or other pollutant into storm drains or to surface water. Check with the local sanitary sewer authority for approval to convey to a sanitary sewer.
* Do not connect maintenance and repair shop floor drains to storm drains or to surface water. To allow for snowmelt during the winter a drainage trench with a sump for particulate collection can be installed and used only for draining the snowmelt and not for discharging any vehicular or shop pollutants.

Operational Source Control BMPs for Maintenance of Public and Private Utility Corridors and Facilities:

* Operational Source Control BMPs for Landscaping and Lawn/Vegetation Management and Pesticides.
* When water or sediments are removed from electric transformer vaults, determine whether contaminants might be present before disposing of the water and sediments. This includes inspecting for the presence of oil or sheen, and determining from records or testing if the transformers contain PCBs. If records or tests indicate that the sediment or water are contaminated above applicable levels, manage these media in accordance with applicable federal and state regulations, including the federal PCB rules (40 CFR 761) and the state MTCA cleanup regulations (Chapter 173-340 WAC). Water removed from the vaults can be discharged in accordance with the federal 40 CFR 761.79, and state regulations (Chapter 173-201A WAC and Chapter 173-200 WAC), or via the sanitary sewer if the requirements, including applicable permits, for such a discharge are met. (See also Appendix IV-D R.1 and R.3).
* Within utility corridors, consider preparing maintenance procedures and an implementation schedule that provides for a vegetative, gravel, or equivalent cover that minimizes bare or thinly vegetated ground surfaces within the corridor, to prevent the erosion of soil.
* Provide maintenance practices to prevent stormwater from accumulating and draining across and/or onto roadways. Stormwater should be conveyed through roadside ditches and culverts. The road should be crowned, outsloped, water barred or otherwise left in a condition not conducive to erosion. Appropriately maintaining grassy roadside ditches discharging to surface waters is an effective way of removing some pollutants associated with sediments carried by stormwater.
* Maintain ditches and culverts at an appropriate frequency to ensure that plugging and flooding across the roadbed, with resulting overflow erosion, does not occur.
* Operational Source Control BMPs for the Storage of Waste Materials That can Contaminate Stormwater.

Operational Source Control BMPs for Maintenance of Roadside Ditches:

* Inspect roadside ditches regularly, as needed, to identify sediment accumulations and localized erosion.
* Clean ditches on a regular basis, as needed. Ditches should be kept free of rubbish and debris.
* Vegetation in ditches often prevents erosion and cleanses runoff waters. Remove vegetation only when flow is blocked or excess sediments have accumulated. Conduct ditch maintenance (seeding, fertilizer application, harvesting) in late spring and/or early fall, where possible. This allows vegetative cover to be re-established by the next wet season thereby minimizing erosion of the ditch as well as making the ditch effective as a biofilter.
* In the area between the edge of the pavement and the bottom of the ditch, commonly known as the “bare earth zone,” use grass vegetation, wherever possible. Vegetation should be established from the edge of the pavement if possible, or at least from the top of the slope of the ditch.
* Diversion ditches on top of cut slopes that are constructed to prevent slope erosion by intercepting surface drainage must be maintained to retain their diversion shape and capability.
* Ditch cleanings are not to be left on the roadway surfaces. Sweep dirt and debris remaining on the pavement at the completion of ditch cleaning operations.
* Roadside ditch cleanings, not contaminated by spills or other releases and not associated with a stormwater treatment system such as a bioswale, may be screened to remove litter and separated into soil and vegetative matter (leaves, grass, needles, branches, etc.). The soil fraction may be handled as ‘clean soils’ and the vegetative matter can be composted or disposed of in a municipal waste landfill.
* Roadside ditch cleanings contaminated by spills or other releases known or suspected to contain dangerous waste must be handled following the Dangerous Waste Regulations (Chapter 173-303 WAC) unless testing determines it is not dangerous waste.
* Examine culverts on a regular basis for scour or sedimentation at the inlet and outlet, and repair as necessary. Give priority to those culverts conveying perennial and/or salmon-bearing streams and culverts near streams in areas of high sediment load, such as those near subdivisions during construction.

Operational Source Control BMPs for Maintenance of Stormwater Drainage and Treatment Systems:

* Inspect and clean treatment BMPs, conveyance systems, and catch basins as needed, and determine whether improvements in O & M are needed.
* Promptly repair any deterioration threatening the structural integrity of the facilities. These include replacement of clean-out gates, catch basin lids, and rock in emergency spillways.
* Ensure that storm sewer capacities are not exceeded and that heavy sediment discharges to the sewer system are prevented.
* Regularly remove debris and sludge from BMPs used for peak-rate control, treatment, etc. and discharge to a sanitary sewer if approved by the sewer authority, or truck to a local or state government approved disposal site.
* Clean catch basins when the depth of deposits reaches 60 percent of the sump depth as measured from the bottom of basin to the invert of the lowest pipe into or out of the basin. However, in no case should there be less than six inches clearance from the debris surface to the invert of the lowest pipe. Some catch basins (for example, WSDOT Type 1L basins) may have as little as 12 inches sediment storage below the invert. These catch basins will need more frequent inspection and cleaning to prevent scouring. Where these catch basins are part of a stormwater collection and treatment system, the system owner/operator may choose to concentrate maintenance efforts on downstream control devices as part of a systems approach.
* Clean woody debris in a catch basin as frequently as needed to ensure proper operation of the catch basin.
* Post warning signs; “Dump No Waste - Drains to Ground Water,” “Streams,” “Lakes,” or emboss on or adjacent to all storm drain inlets where practical.
* Disposal of sediments and liquids from the catch basins must comply with “Recommendations for Management of Street Wastes” described in Appendix IV-G of this volume.
* Operational Source Control BMPs for Soil Erosion and Sediment Control at Industrial Sites, Storage of Liquid, Food Waste, or Dangerous Waste Containers, Spills of Oil and Hazardous Substances, Illicit Connections to Storm Drains, Urban Streets.

Operational Source Control BMPs for Manufacturing Activities - Outside:

* Alter the activity by eliminating or minimizing the contamination of stormwater.
* Enclose the activity (see Figure 2.6): If possible, enclose the manufacturing activity in a building.
* Cover the activity and connect floor drains to a sanitary sewer, if approved by the local sewer authority. Berm or slope the floor as needed to prevent drainage of pollutants to outside areas. (Figure 2.7)
* Isolate and segregate pollutants as feasible. Convey the segregated pollutants to a sanitary sewer, process treatment or a dead-end sump depending on available methods and applicable permit requirements.

Operational Source Control BMPs for Mobile Fueling of Vehicles and Heavy Equipment:

* Ensure that all mobile fueling operations are approved by the local fire department and comply with local and Washington State fire codes.
* In fueling locations that are in close proximity to sensitive aquifers, designated wetlands, wetland buffers, or other waters of the State, approval by local jurisdictions is necessary to ensure compliance with additional local requirements.
* Ensure the compliance with all 49 CFR 178 requirements for DOT 406 cargo tanker. Documentation from a Department of Transportation (DOT) Registered Inspector shall be proof of compliance.
* Ensure the presence and the constant observation/monitoring of the driver/operator at the fuel transfer location at all times during fuel transfer and ensure that the following procedures are implemented at the fuel transfer locations:
	+ Locating the point of fueling at least 25 feet from the nearest storm drain or inside an impervious containment with a volumetric holding capacity equal to or greater than 110 percent of the fueling tank volume, or covering the storm drain to ensure no inflow of spilled or leaked fuel. Storm drains that convey the inflow to a spill control separator approved by the local jurisdiction and the fire department need not be covered. Potential spill/leak conveyance surfaces must be impervious and in good repair.
	+ Placement of a drip pan, or an absorbent pad under each fueling location prior to and during all dispensing operations. The pan (must be liquid tight) and the absorbent pad must have a capacity of 5 gallons. Spills retained in the drip pan or the pad need not be reported.
	+ The handling and operation of fuel transfer hoses and nozzle, drip pan(s), and absorbent pads as needed to prevent spills/leaks of fuel from reaching the ground, storm drains, and receiving waters.
	+ Not extending the fueling hoses across a traffic lane without fluorescent traffic cones, or equivalent devices, conspicuously placed so that all traffic is blocked from crossing the fuel hose.
	+ Removing the fill nozzle and cessation of filling when the automatic shut-off valve engages. Do not allow automatic shutoff fueling nozzles to be locked in the open position.
	+ Not “topping off” the fuel receiving equipment
* Provide the driver/operator of the fueling vehicle with:
	+ Adequate flashlights or other mobile lighting to view fill openings with poor accessibility. Consult with local fire department for additional lighting requirements.
	+ Two-way communication with his/her home base.
* Train the driver/operator annually in spill prevention and cleanup measures and emergency procedures. Make all employees aware of the significant liability associated with fuel spills.
* The fueling operating procedures should be properly signed and dated by the responsible manager, distributed to the operators, retained in the organization files, and made available in the event an authorized government agency requests a review.
* Ensure that the local fire department (911) and the appropriate regional office of the Department of Ecology are immediately notified in the event of any spill entering the surface or ground waters. Establish a “call down list” to ensure the rapid and proper notification of management and government officials should any significant amount of product be lost off-site. Keep the list in a protected but readily accessible location in the mobile fueling truck. The “call down list” should also pre-identify spill response contractors available in the area to ensure the rapid removal of significant product spillage into the environment.
* Maintain a minimum of the following spill clean-up materials in all fueling vehicles, that are readily available for use:
	+ Non-water absorbents capable of absorbing 15 gallons of diesel fuel;
	+ A storm drain plug or cover kit;
	+ A non-water absorbent containment boom of a minimum 10 feet in length with a 12-gallon absorbent capacity;
	+ A non-metallic shovel; and,
	+ Two, five-gallon buckets with lids.
* Use automatic shutoff nozzles for dispensing the fuel. Replace automatic shut-off nozzles as recommended by the manufacturer.
* Maintain and replace equipment on fueling vehicles, particularly hoses and nozzles, at established intervals to prevent failures.

Operational Source Control BMPs for Painting/Finishing/ Coating of Vehicles/Boats/ Buildings/ Equipment:

* Train employees in the careful application of paints, finishes, and coatings to reduce misuse and over spray. Use ground or drop cloths underneath outdoor painting, scraping, sandblasting work, and properly clean and temporarily store collected debris daily.
* Do not conduct spraying, blasting, or sanding activities over open water or where wind may blow paint into water.
* Wipe up spills with rags and other absorbent materials immediately. Do not hose down the area to a storm drain or receiving water or conveyance ditch to receiving water.
* On marine dock areas sweep rather than hose down debris. Collect any hose water generated and convey to appropriate treatment and disposal.
* Use a storm drain cover, filter fabric, or similarly effective runoff control device if dust, grit, washwater, or other pollutants may escape the work area and enter a catch basin. The containment device(s) must be in place at the beginning of the workday. Collect contaminated runoff and solids and properly dispose of such wastes before removing the containment device(s) at the end of the workday.
* Use a ground cloth, pail, drum, drip pan, tarpaulin, or other protective device for activities such as paint mixing and tool cleaning outside or where spills can contaminate stormwater.
* Properly dispose of all wastes and prevent all uncontrolled releases to the air, ground or water.
* Clean brushes and tools covered with non-water-based paints, finishes, or other materials in a manner that allows collection of used solvents (e.g., paint thinner, turpentine, xylol, etc.) for recycling or proper disposal.
* Store toxic materials under cover (tarp, etc.) during precipitation events and when not in use to prevent contact with stormwater.

Operational Source Control BMPs for Parking and Storage of Vehicles and Equipment:

* If washing of a parking lot is conducted, discharge the washwater to a sanitary sewer, if allowed by the local sewer authority, or other approved wastewater treatment system, or collect it for off-site disposal.
* Do not hose down the area to a storm drain or to a receiving water. Sweep parking lots, storage areas, and driveways, regularly to collect dirt, waste, and debris.

Operational Source Control BMPs for Railroad Yards:

* Implement all required BMPs depending on the pollutant generating activities/sources at a railroad yard facility.
* Do not allow discharge to outside areas from toilets while a train is in transit. Pumpout facilities should be used to service these units.
* Use drip pans at hose/pipe connections during liquid transfer and other leak-prone areas.
* During maintenance do not discard debris or waste liquids along the tracks or in railroad yards.

Operational Source Control BMPs for Recyclers and Scrap Yards:

For facilities subject to Ecology’s Industrial Stormwater General Permit refer to BMP Guidance Document “Best Management Practices to Prevent Stormwater Pollution at Vehicle Recycler Facilities,” for selection of BMPs. The BMPs in that guidance document can also be applied to scrap material recycling facilities depending on the pollutant sources existing at those facilities and to non-permitted facilities.

Operational Source Control BMPs for Roof/Building Drains at Manufacturing and Commercial Buildings:

* If leachates and/or emissions from buildings are suspected sources of stormwater pollutants, then sample and analyze the stormwater draining from the building.
* If a roof/building stormwater pollutant source is identified, implement appropriate source control measures such as air pollution control equipment, selection of materials, painting galvanized surfaces, operational changes, material recycle, process changes, etc.

Operational Source Control BMPs for Soil Erosion and Sediment Control at Industrial Sites:

* Cover Practice Options:
	+ Vegetative cover such as grass, trees, shrubs, on erodible soil areas; or,
	+ Covering with mats such as clear plastic, jute, synthetic fiber; and/or,
	+ Preservation of natural vegetation including grass, trees, shrubs, and vines,
* Structural Practice Options:
	+ Vegetated swale, dike, silt fence, check dam, gravel filter berm, sedimentation basin, and proper grading.

Operational Source Control BMPs for Spills of Oil and Hazardous Substances:

* Prepare an Emergency Spill Control Plan (SCP), which includes:
	+ A description of the facility including the owner's name and address;
	+ The nature of the activity at the facility;
	+ The general types of chemicals used or stored at the facility;
	+ A site plan showing the location of storage areas for chemicals, the locations of storm drains, the areas draining to them, and the location and description of any devices to stop spills from leaving the site such as positive control valves;
	+ Cleanup procedures;
	+ Notification procedures to be used in the event of a spill, such as notifying key personnel. Agencies such as Ecology, local fire department, Washington State Patrol, and the local Sewer Authority, shall be notified;
	+ The name of the designated person with overall spill cleanup and notification responsibility;
* Train key personnel in the implementation of the Emergency SCP. Prepare a summary of the plan and post it at appropriate points in the building, identifying the spill cleanup coordinators, location of cleanup kits, and phone numbers of regulatory agencies to be contacted in the event of a spill;
* Update the SCP regularly;
* Immediately notify Ecology and the local Sewer Authority if a spill may reach sanitary or storm sewers, ground water, or surface water, in accordance with federal and Ecology spill reporting requirements;
* Immediately clean up spills. Do not use emulsifiers for cleanup unless an appropriate disposal method for the resulting oily wastewater is implemented. Absorbent material shall not be washed down a floor drain or storm sewer; and,
* Locate emergency spill containment and cleanup kit(s) in high potential spill areas. The contents of the kit shall be appropriate for the type and quantities of chemical liquids stored at the facility.

Operational Source Control BMPs for Storage of Liquid, Food Waste, or Dangerous Waste Containers:

* Place tight-fitting lids on all containers.
* Place drip pans beneath all mounted container taps and at all potential drip and spill locations during filling and unloading of containers.
* Inspect container storage areas regularly for corrosion, structural failure, spills, leaks, overfills, and failure of piping systems. Check containers daily for leaks/spills. Replace containers, and replace and tighten bungs in drums as needed.
* Businesses accumulating Dangerous Wastes that do not contain free liquids need only to store these wastes in a sloped designated area with the containers elevated or otherwise protected from storm water runon.
* Drums stored in an area where unauthorized persons may gain access must be secured in a manner that prevents accidental spillage, pilferage, or any unauthorized use.
* If the material is a Dangerous Waste, the business owner must comply with any additional Ecology requirements as required.
* Storage of reactive, ignitable, or flammable liquids must comply with the Uniform Fire Code.
* Cover dumpsters, or keep them under cover such as a lean-to, to prevent the entry of stormwater. Replace or repair leaking garbage dumpsters.
* Drain dumpsters and/or dumpster pads to sanitary sewer. Keep dumpster lids closed. Install waterproof liners.

Operational Source Control BMPs for Storage of Liquids in Permanent Above-ground Tanks:

* Inspect the tank containment areas regularly to identify problem components such as fittings, pipe connections, and valves, for leaks/spills, cracks, corrosion, etc.
* Place adequately sized drip pans beneath all mounted taps and drip/spill locations during filling/ unloading of tanks. Valved drain tubing may be needed in mounted drip pans.
* Sweep and clean the tank storage area regularly, if paved.
* Replace or repair tanks that are leaking, corroded, or otherwise deteriorating.
* All installations shall comply with the Uniform Fire Code and the National Electric Code

Operational Source Control BMPs for Storage or Transfer (Outside) of Solid Raw Materials, By-Products, or Finished Products:

* Do not hose down the contained stockpile area to a storm drain or a conveyance to a storm drain or to a receiving water.

Operational Source Control BMPs for Washing and Steam Cleaning Vehicles/Equipment/Building Structures:

* Conduct vehicle/equipment washing in one of the following locations:
	+ At a commercial washing facility in which the washing occurs in an enclosure and drains to the sanitary sewer, or
	+ In a building constructed specifically for washing of vehicles and equipment, which drains to a sanitary sewer.
* Conduct outside washing operation in a designated wash area with the following features:
	+ In a paved area, constructed as a spill containment pad to prevent the run-on of stormwater from adjacent areas. Slope the spill containment area so that washwater is collected in a containment pad drain system with perimeter drains, trench drains or catchment drains. Size the containment pad to extend out a minimum of four feet on all sides of the vehicles and/or equipment being washed.
	+ Convey the washwater to a sump (like a grit separator) and then to a sanitary sewer (if allowed by the local Sewer Authority), or other appropriate wastewater treatment or recycle system. An NPDES permit may be required for any washwater discharge to a storm drain or receiving water after treatment. Contact the Ecology regional office for NPDES Permit requirements.
	+ The containment sump must have a positive control outlet valve for spill control with live containment volume, and oil/water separation. Size the minimum live storage volume to contain the maximum expected daily washwater flow plus the sludge storage volume below the outlet pipe. The outlet valve will be shut during the washing cycle to collect the washwater in the sump. The valve should remain shut for at least two hours following the washing operation to allow the oil and solids to separate before discharge to a sanitary sewer.
	+ The inlet valve in the discharge pipe should be closed when washing is not occurring, thereby preventing the entry of uncontaminated stormwater into the pretreatment/ treatment system. The stormwater can then drain into the conveyance/discharge system outside of the wash pad (essentially bypasses the washwater treatment/conveyance system). Post signs to inform people of the operation and purpose of the valve. Clean the concrete pad thoroughly until there is no foam or visible sheen in the washwater prior to closing the inlet valve and allowing uncontaminated stormwater to overflow and drain off the pad.
	+ Collect the washwater from building structures and convey it to appropriate treatment such as a sanitary sewer system if it contains oils, soaps, or detergents, where feasible. If the washwater does not contain oils, soaps, or detergents then it could drain to soils that have sufficient natural attenuation capacity for dust and sediment.

Operational Source Control BMPs for Wood Treatment Areas:

* Dedicate equipment that is used for treatment activities to prevent the tracking of treatment chemicals to other areas on the site.
* Eliminate non-process traffic on the drip pad. Scrub down nondedicated lift trucks on the drip pad.
* Immediately remove and properly dispose of soils with visible surface contamination (green soil) to prevent the spread of chemicals to ground water and/or surface water via stormwater runoff.
* If any wood is observed to be contributing chemicals to the environment in the treated wood storage area, relocate it on a concrete chemical containment structure until the surface is clean and until it is drip free and surface dry.

**Mandatory Structural Source Control BMPs required by condition S3. of the Industrial Stormwater General Permit**:

* Use grading, berming, or curbing to prevent runoff of contaminated flows and divert run-on away from manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations).
* Perform all cleaning operations indoors, under cover, or in bermed areas that prevent stormwater runoff and run-on and also that capture any overspray.
* Ensure that all washwater drains to a collection system that directs the washwater to further treatment or storage and not to the stormwater drainage system.

Condition S3. of the Industrial Stormwater General Permit requires Structural Source Control BMPs listed as “applicable” in Ecology’s SWMMs, or other guidance documents as mandatory:

**Mandatory Structural Source Control BMPs From Ecology’s Stormwater Management Manual for Western Washington**:

Structural Source Control BMPs for Building, Repair, and Maintenance of Boats and Ships:

* Use fixed platforms with appropriate plastic or tarpaulin barriers as work surfaces and for containment when work is performed on a vessel in the water to prevent blast material or paint overspray from contacting stormwater or the receiving water. Use of such platforms will be kept to a minimum and at no time be used for extensive repair or construction (anything in excess of 25 percent of the surface area of the vessel. Work above the water on the topsides is limited to the deck, and structures above the deck).
* Use plastic or tarpaulin barriers beneath the hull and between the hull and dry dock walls to contain and collect waste and spent materials. Clean and sweep regularly to remove debris.
* Enclose, cover, or contain blasting and sanding activities to the maximum extent practicable to prevent abrasives, dust, and paint chips, from reaching storm sewers or receiving water. Use plywood and/or plastic sheeting to cover open areas between decks when sandblasting (scuppers, railings, freeing ports, ladders, and doorways).
* Direct deck drainage to a collection system sump for settling and/or additional treatment.
* Store batteries in a covered secondary container.
* Apply source control BMPs for other activities conducted at the marina, boat yard, shipyard, or port facility (BMPs for Fueling at Dedicated Stations, BMPs for Washing and Steam Cleaning Vehicle/ Equipment/Building Structures, and BMPs for Spills of Oil and Hazardous Substances).

Structural Source Control BMPs for Commercial Composting:

* Compost pads are required for all uncovered facilities in areas of the state with wet climates (per water quality regulations).
* Provide curbing for all compost pads to prevent stormwater run-on and leachate run-off.
* Slope all compost pads sufficiently to direct leachate to the collection device.
* Provide one or more sumps or catch basins capable of collecting all leachate generated by the design storm and conveying it to the leachate holding structure for all compost pads.

Structural Source Control BMPs for Commercial Printing Operations:

* Store raw materials or waste materials that could contaminate stormwater in covered and contained areas.

Structural Source Control BMPs for Fueling At Dedicated Stations:

* Design the fueling island to control spills (dead-end sump or spill control separator in compliance with the UFC), and to treat collected stormwater and/or wastewater to required levels. Slope the concrete containment pad around the fueling island toward drains; either trench drains, catch basins and/or a dead-end sump. The slope of the drains shall not be less than 1 percent (Section 7901.8 of the UFC). Drains to treatment shall have a shutoff valve, which must be closed in the event of a spill. The spill control sump must be sized in compliance with Section 7901.8 of the UFC; or
* Design the fueling island as a spill containment pad with a sill or berm raised to a minimum of four inches (Section 7901.8 of the UFC) to prevent the runoff of spilled liquids and to prevent run-on of stormwater from the surrounding area. Raised sills are not required at the open-grate trenches that connect to an approved drainage-control system.
* The fueling pad must be paved with Portland cement concrete, or equivalent. Asphalt is not considered an equivalent material.
* The fueling island must have a roof or canopy to prevent the direct entry of precipitation onto the spill containment pad (see Figure 2.1). The roof or canopy should, at a minimum, cover the spill containment pad (within the grade break or fuel dispensing area) and preferably extend several additional feet to reduce the introduction of windblown rain. Convey all roof drains to storm drains outside the fueling containment area.
* Stormwater collected on the fuel island containment pad must be conveyed to a sanitary sewer system, if approved by the sanitary authority; or to an approved treatment system such as an oil/water separator and a basic treatment BMP. (Basic treatment BMPs are listed in Volume V and include media filters and biofilters) Discharges from treatment systems to storm drains or surface water or to the ground must not display ongoing or recurring visible sheen and must not contain greater than a significant amount of oil and grease.
* Alternatively, stormwater collected on the fuel island containment pad may be collected and held for proper off site disposal.
* Conveyance of any fuel-contaminated stormwater to a sanitary sewer must be approved by the local sewer authority and must comply with pretreatment regulations (WAC 173-216-060). These regulations prohibit discharges that could "cause fire or explosion. An explosive or flammable mixture is defined under state and federal pretreatment regulations, based on a flash point determination of the mixture. If contaminated stormwater is determined not to be explosive, then it could be conveyed to a sanitary sewer system.
* Transfer the fuel from the delivery tank trucks to the fuel storage tank in impervious contained areas and ensure that appropriate overflow protection is used. Alternatively, cover nearby storm drains during the filling process and use drip pans under all hose connections.

Structural Source Control BMPs for Loading and Unloading Areas for Liquid or Solid Material:

All Loading/ Unloading Areas:

* Consistent with Uniform Fire Code requirements (Appendix IV-D R.2) and to the extent practicable, conduct unloading or loading of solids and liquids in a manufacturing building, under a roof, or lean-to, or other appropriate cover.
* Berm, dike, and/or slope the loading/unloading area to prevent run-on of stormwater and to prevent the runoff or loss of any spilled material from the area.
* Large loading areas frequently are not curbed along the shoreline. As a result, stormwater passes directly off the paved surface into surface water. Place curbs along the edge, or slope the edge such that the stormwater can flow to an internal storm drain system that leads to an approved treatment BMP.
* Pave and slope loading/unloading areas to prevent the pooling of water. The use of catch basins and drain lines within the interior of the paved area must be minimized as they will frequently be covered by material, or they should be placed in designated “alleyways” that are not covered by material, containers or equipment.

Loading and Unloading Docks:

* Install/maintain overhangs, or door skirts that enclose the trailer end (see Figures 2.4 and 2.5) to prevent contact with rainwater.
* Design the loading/unloading area with berms, sloping, etc. to prevent the run-on of stormwater.
* Retain on-site the necessary materials for rapid cleanup of spills.

Tanker Truck Transfer Areas to Above/Below-Ground Storage Tanks:

* Pave the area on which the transfer takes place. If any transferred liquid, such as gasoline, is reactive with asphalt pave the area with Portland cement concrete.
* Slope, berm, or dike the transfer area to a dead-end sump, spill containment sump, a spill control (SC) oil/water separator, or other spill control device. The minimum spill retention time should be 15 minutes at the greater flow rate of the highest fuel dispenser nozzle through-put rate, or the peak flow rate of the 6-month, 24-hour storm event over the surface of the containment pad, whichever is greater. The volume of the spill containment sump should be a minimum of 50 gallons with an adequate grit sedimentation volume.

Structural Source Control BMPs for Log Sorting and Handling:

Required Structural Source Control BMPs are presented in detail in Ecology’s Guidance Document: ”Industrial Stormwater General Permit Implementation Manual for Log Yards.

Structural Source Control BMPs for Maintenance and Repair of Vehicles and Equipment:

* Conduct all maintenance and repair of vehicles and equipment in a building, or other covered impervious containment area that is sloped to prevent run-on of uncontaminated stormwater and runoff of contaminated stormwater.
* The maintenance of refrigeration engines in refrigerated trailers may be conducted in the parking area with due caution to avoid the release of engine or refrigeration fluids to storm drains or surface water.
* Park large mobile equipment, such as log stackers, in a designated contained area.
* The Structural Source Control BMPs for the following are also required: Fueling at Dedicated Stations; Washing and Steam Cleaning Vehicle/Equipment/Building Structures; Loading and Unloading Areas for Liquid or Solid Material; Storage of Liquids in Permanent Above-Ground Tanks; Storage of Liquid, Food Waste, or Dangerous Waste Containers; Storage or Transfer (Outside) of Solid Raw Materials, By-Products, or Finished Products; Spills of Oil and Hazardous Substances; Illicit Connections to Storm Drains.

Structural Source Control BMPs for Mobile Fueling of Vehicles and Heavy Equipment:

* Automatic fuel transfer shut-off nozzles; and,
* An adequate lighting system at the filling point.

Structural Source Control BMPs for Painting/Finishing/ Coating of Vehicles/Boats/ Buildings/ Equipment:

* Enclose and/or contain all work while using a spray gun or conducting sand blasting and in compliance with applicable air pollution control, OSHA, and WISHA requirements. Do not conduct outside spraying, grit blasting, or sanding activities during windy conditions which render containment ineffective.

Structural Source Control BMPs for Recyclers and Scrap Yards:

For facilities subject to Ecology’s Industrial Stormwater General Permit refer to BMP Guidance Document “Best Management Practices to Prevent Stormwater Pollution at Vehicle Recycler Facilities,” for selection of BMPs. The BMPs in that guidance document can also be applied to scrap material recycling facilities depending on the pollutant sources existing at those facilities and to non-permitted facilities.

Structural Source Control BMPs for Storage of Liquid, Food Waste, or Dangerous Waste Containers:

* Keep containers with Dangerous Waste, food waste, or other potential pollutant liquids inside a building unless this is impracticable due to site constraints or Uniform Fire Code requirements.
* Store containers in a designated area, which is covered, bermed or diked, paved and impervious in order to contain leaks and spills. The secondary containment shall be sloped to drain into a dead-end sump for the collection of leaks and small spills.
* For liquid wastes, surround the containers with a dike as illustrated in Figure 2.10. The dike must be of sufficient height to provide a volume of either 10 percent of the total enclosed container volume or 110 percent of the volume contained in the largest container, whichever is greater, or, if a single container, 110 percent of the volume of that container.
* Where material is temporarily stored in drums, a containment system can be used as illustrated, in lieu of the above system.
* Place containers mounted for direct removal of a liquid chemical for use by employees inside a containment area as described above. Use a drip pan during liquid transfer.

Structural Source Control BMPs for Storage of Liquids in Permanent Above-ground Tanks:

* Locate permanent tanks in impervious (Portland cement concrete or equivalent) secondary containment surrounded by dike or UL Approved double-walled. The dike must be of sufficient height to provide a containment volume of either 10 percent of the total enclosed tank volume or 110 percent of the volume contained in the largest tank, whichever is greater, or, if a single tank, 110 percent of the volume of that tank.
* Slope the secondary containment to drain to a dead-end sump (optional), or equivalent, for the collection of small spills.
* Include a tank overfill protection system to minimize the risk of spillage during loading.

Structural Source Control BMPs for Storage or Transfer (Outside) of Solid Raw Materials, By-Products, or Finished Products:

* Store in a building or paved and bermed covered area (include berm if needed)
* Place temporary plastic sheeting (polyethylene, polypropylene, hypalon, or equivalent) over the material.
* Pave the area and install a stormwater drainage system. Place curbs or berms along the perimeter of the area to prevent the run-on of uncontaminated stormwater and to collect and convey runoff to treatment. Slope the paved area in a manner that minimizes the contact between stormwater (e.g., pooling) and leachable materials in compost, logs, bark, wood chips, etc.
* For large stockpiles that cannot be covered, implement containment practices at the perimeter of the site and at any catch basins as needed to prevent erosion and discharge of the stockpiled material offsite or to a storm drain. Ensure that contaminated stormwater is not discharged directly to catch basins without conveying through a treatment BMP.

Structural Source Control BMPs for Wood Treatment Areas:

* Cover and/or enclose, and contain with impervious surfaces, all wood treatment areas. Slope and drain areas around dip tanks, spray booths, retorts, and any other process equipment in a manner that allows return of treatment chemicals to the wood treatment process.
* Cover storage areas for freshly treated wood to prevent contact of treated wood products with stormwater. Segregate clean stormwater from process water. Ensure that all process water is conveyed to an approved treatment system.
* Seal any holes or cracks in the asphalt areas that are subject to wood treatment chemical contamination.
* Elevate stored, treated wood products to prevent contact with stormwater run-on and runoff
* Place dipped lumber over the dip tank, or on an inclined ramp for a minimum of 30 minutes to allow excess chemical to drip back to the dip tank.
* Place treated lumber either from dip tanks or retorts in a covered paved storage area for at least 24 hours before placement in outside storage. Use a longer storage period during cold weather unless the temporary storage building is heated. The wood shall be drip free and surface dry before it is moved outside.

**Mandatory Treatment BMPs required by condition S3. of the Industrial Stormwater General Permit**:

* Employ oil/water separators, booms, skimmers or other methods to eliminate or minimize oil and grease contamination of stormwater discharges.
* Obtain Ecology approval before beginning construction/installation of all treatment BMPs that include the addition of chemicals to provide treatment.

Condition S3. of the Industrial Stormwater General Permit requires Treatment BMPs listed as “applicable” in Ecology’s SWMMs, or other guidance documents as mandatory:

**Mandatory Treatment BMPs From Ecology’s Stormwater Management Manual for Western Washington**:

Treatment BMPs for Commercial Composting:

* Convey all leachate from composting operations to a sanitary sewer, holding tank, or on-site treatment systems designed to treat the leachate and TSS.
* Ponds used to collect, store, or treat leachate and other contaminated waters associated with the composting process must be lined to prevent ground water contamination. Apply “AKART” or All Known Available and Reasonable Methods of Prevention and Treatment to all pond liners, regardless of the construction materials.

Treatment BMPs for Log Sorting and Handling:

Required Treatment BMPs are presented in detail in Ecology’s Guidance Document: ”Industrial Stormwater General Permit Implementation Manual for Log Yards.

Treatment BMPs for Maintenance and Repair of Vehicles and Equipment:

* Contaminated stormwater runoff from vehicle staging and maintenance areas must be conveyed to a sanitary sewer, if allowed by the local sewer authority, or to an API or CP oil and water separator followed by a basic treatment BMP, applicable filter, or other equivalent oil treatment system.

Treatment BMPs for Parking and Storage of Vehicles and Equipment:

* An oil removal system such as an API or CP oil and water separator, catch basin filter, or equivalent BMP, approved by the local jurisdiction, is applicable for parking lots meeting the threshold vehicle traffic intensity level of a high-use site.

A high-use site is:

* Subject to an expected average daily vehicle traffic (ADT) count equal to or greater than 100 vehicles per 1,000 square feet of gross building area: or
* Is subject to storage of a fleet of 25 or more diesel vehicles that are over 10 tons gross weight (trucks, buses, trains, heavy equipment, etc.).

Treatment BMPs for Railroad Yards:

* In areas subjected to leaks/spills of oils or other chemicals convey the contaminated stormwater to appropriate treatment such as a sanitary sewer, if approved by the appropriate sewer authority, or, to a CP or API oil/water separator for floating oils, or other treatment, as approved by the local jurisdiction.

Treatment BMPs for Recyclers and Scrap Yards:

For facilities subject to Ecology’s Industrial Stormwater General Permit refer to BMP Guidance Document “Best Management Practices to Prevent Stormwater Pollution at Vehicle Recycler Facilities,” for selection of BMPs. The BMPs in that guidance document can also be applied to scrap material recycling facilities depending on the pollutant sources existing at those facilities and to non-permitted facilities.

Treatment BMPs for Storage of Liquid, Food Waste, or Dangerous Waste Containers:

* For contaminated stormwater in the containment area, connect the sump outlet to a sanitary sewer, if approved by the local Sewer Authority, or to appropriate treatment such as an API or CP oil/water separator, catch basin filter or other appropriate system (see Volume V). Equip the sump outlet with a normally closed valve to prevent the release of spilled or leaked liquids, especially flammables (compliance with Fire Codes), and dangerous liquids. This valve may be opened only for the conveyance of contaminated stormwater to treatment.
* Another option for discharge of contaminated stormwater is to pump it from a dead-end sump or catchment to a tank truck or other appropriate vehicle for off-site treatment and/or disposal.

Treatment BMPs for Storage of Liquids in Permanent Above-ground Tanks:

* If the tank containment area is uncovered, equip the outlet from the spill-containment sump with a shutoff valve, which is normally closed and may be opened, manually or automatically, only to convey contaminated stormwater to approved treatment or disposal, or to convey uncontaminated stormwater to a storm drain. Evidence of contamination can include the presence of visible sheen, color, or turbidity in the runoff, or existing or historical operational problems at the facility. Simple pH measurements with litmus or pH paper can be used for areas subject to acid or alkaline contamination.
* At petroleum tank farms, convey stormwater contaminated with floating oil or debris in the contained area through an API or CP-type oil/water separator or other approved treatment prior to discharge to storm drain or surface water.

Treatment BMPs for Storage or Transfer (Outside) of Solid Raw Materials, By-Products, or Finished Products:

* Convey contaminated stormwater from the stockpile area to a wet pond, wet vault, settling basin, media filter, or other appropriate treatment system depending on the contamination.

**Mandatory Erosion and Sediment Control BMPs required by condition S3. of the Industrial Stormwater General Permit**:

* Sediment control BMPs such as detention or retention ponds or traps, vegetated filter strips, bioswales, or other permanent sediment control BMPs to minimize sediment loads in stormwater discharges.
* Filtration BMPs to remove solids from catch basins, sumps or other stormwater collection and conveyance system components (filter socks, modular canisters, sand filtration, centrifugal separators, etc.).

**Mandatory BMPs for Deicing and Anti-Icing Operations - Airports and Streets from Ecology’s Stormwater Management Manual for Western Washington**:

BMPs for Aircraft:

* Conduct aircraft deicing or anti-icing applications in impervious containment areas. Collect aircraft deicer or anti-icer spent chemicals, such as glycol, draining from aircraft in deicing or anti-icing application areas and convey to a sanitary sewer, treatment, or other approved disposal or recovery method. Divert deicing runoff from paved gate areas to appropriate collection areas or conveyances for proper treatment or disposal.
* Do not allow spent deicer or anti-icer chemicals or stormwater contaminated with aircraft deicer or anti-icer chemicals to be discharged from application areas including gate areas, to surface water, or ground water, directly or indirectly.
* Transfer deicing and anti-icing chemicals on an impervious containment pad, or equivalent spill/leak containment area, and store in secondary containment areas. (See Storage of Liquids in Above-Ground Tanks).

BMPs for Airport Runways/Taxiways:

* Avoid excessive application of all de/anti-icing chemicals, which could contaminate stormwater.
* Store and transfer de/anti-icing materials on an impervious containment pad or an equivalent containment area and/or under cover in accordance with BMP Storage or Transfer (Outside) of Solid Raw Materials, By-Products, or Finished Products in this volume. Other material storage and transfer approaches may be considered if it can be demonstrated that stormwater will not be contaminated with or that the de/anti-icer material cannot reach surface or ground waters.

BMPs for Streets/Highways:

* Select de and anti-icers that cause the least adverse environmental impact. Apply only as needed using minimum quantities.
* Where feasible and practicable use roadway deicers, such as calcium magnesium acetate, potassium acetate, or similar materials, that cause less adverse environmental impact than urea, and sodium chloride.
* Store and transfer de/anti-icing materials on an impervious containment pad in accordance with BMP Storage or Transfer (Outside) of Solid Raw Materials, By-Products, or Finished Products in this volume.
* Sweep/clean up accumulated de/anti-icing materials and grit from roads as soon as possible after the road surface clears.

# Appendix F. Industrial Stormwater Monthly Inspection Report

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| **Industrial Stormwater Monthly Inspection Report**Inspections must be conducted by a person with the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility, and evaluate the effectiveness of best management practices required by this permit. Retain a copy of the completed and signed form in accordance with Permit Condition S9.C. |
| **FACILITY NAME:**  | **INSPECTION TIME: DATE:**  |
| **WEATHER INFORMATION:** * Description of Weather Conditions (e.g., sunny, cloudy, raining, snowing, etc.): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Was stormwater (e.g., runoff from rain or snowmelt) flowing at outfalls and/or discharge areas shown on the Site Map during the inspection: **[ ]  Yes [ ]  No [ ]  Comments:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
 |
| I. Potential Pollutant Source Area Inspection and Best Management Practices Evaluation |
| **SWPPP and Site Map**: Have a copy of the SWPPP and site map with you during the inspection so that you can ensure they are current and accurate. Use it as an aide in recording the location of any issues you identify during the inspection. * Is the Site Map current and accurate?
* Is the SWPPP inventory of activities, materials and products current?

Any new potential pollutant sources must be added to the map and reflected in the *SWPPP Facility Assessment & Tables 2, 2A, 3 and 5.* | Yes | **No** | **Findings and Remedial Action Documentation:** Describe any findings below and the schedule for remedial action completion including the date initiated and date completed or expected to be completed.  |
| **Vehicle/Equipment Areas**: ***Equipment cleaning: Check NA if not performed on-site. Skip section.***Is equipment washed and/or cleaned only in designated areas?* Observe washing: Is all wash water captured and properly disposed of?

***Equipment fueling: Check NA if not performed on-site. Skip section.**** Are all fueling areas free of contaminant buildup and evidence of chronic leaks/spills?
* Are all chemical liquids, fluids, and petroleum products, on an impervious surface that is surrounded with a containment berm or dike that is capable of containing 10% of the total enclosed tank volume or 110% of the volume contained in the largest tank, whichever is greater?
* Are structures in place to prevent precipitation from accumulating in containment areas?
	+ If not, is there any water or other fluids accumulated within the containment area?
	+ Note: If containment areas are not covered to prevent water from accumulating, the SWPPP must include a plan describing how accumulated water will be managed and disposed of.
 | Yes | No | NA | **Findings and Remedial Action Documentation:**  |
| ***Equipment maintenance:**** Are maintenance tools, equipment and materials stored under shelter, elevated and covered?
* Are all drums and containers of fluids stored with proper cover and containment?
* Are exteriors of containers kept outside free of deposits?
* Are any vehicles and/or equipment leaking fluids? Identify leaking equipment.
* Is there evidence of leaks or spills since last inspection? Identify and address.
* Are materials, equipment, and activities located so that leaks are contained in existing containment and diversion systems (confine the storage of leaky or leak-prone vehicles and equipment awaiting maintenance to protected areas)?

Add any additional site-specific BMPs: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Yes | No | NA | **Findings and Remedial Action Documentation:**  |

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| I. Potential Pollutant Source Area Inspection and Best Management Practices Evaluation |
| **Good Housekeeping BMPs:**1. Are paved surfaces free of accumulated dust/sediment and debris?
* Date of last quarterly vacuum/sweep \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Are there areas of erosion or sediment/dust sources that discharge to storm drains?
1. Are all waste receptacles located outdoors:
* In good condition?
* Not leaking contaminants?
* Closed when is not being accessed?
* External surfaces and area free of excessive contaminant buildup?
1. Are the following areas free of accumulated dust/sediment, debris, contaminants, and/or spills/leaks of fluids?
* External dock areas
* Pallet, bin, and drum storage areas
* Maintenance shop(s)
* Equipment staging areas (loaders, tractors, trailers, forklifts, etc)
* Around bag-house(s)
* Around bone yards
* Other areas of industrial activity: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
 | **Yes** | **No** | **NA** | **Findings and Remedial Action Documentation:**  |
| **Spill Response and Equipment:** Are spill kits available, in the following locations? * Fueling stations
* Transfer and mobile fueling units
* Vehicle and equipment maintenance areas

Do the spill kits contain all the permit required items?* Oil absorbents capable of absorbing 15 gallons of fuel.
* A storm drain plug or cover kit.
* A non-water containment boom, a minimum of 10 feet in length with a 12 gallon absorbent capacity.
* A non-metallic shovel.
* Two five-gallon buckets with lids.

Are contaminated absorbent materials properly disposed of? | **Yes** | **No** | **NA** | **Findings and Remedial Action Documentation:**  |
| I. Potential Pollutant Source Area Inspection and Best Management Practices Evaluation |
| **General Material Storage Areas:*** Are damaged materials stored inside a building or another type of storm resistance shelter?
* Are all uncontained material piles stored in a manner that does not allow discharge of impacted stormwater?
* Are scrap metal bins covered?
* Are outdoor containers covered?
 | **Yes** | **No** | **NA** | **Findings and Remedial Action Documentation:**  |
| **Stormwater BMPs and Treatment Structures:** Visually inspect all stormwater BMPs and treatment structures devices, discharge areas infiltration and outfalls shown on the Site Map. * Are BMPs and treatment structures in good repair and operational?
* Are BMPs and treatment structures free from debris buildup that may impair function?
* The permit requires Permittees to clean catch basins when the depth of debris reaches 60% of the sump depth. In addition, the Permittee must keep the debris surface at least 6 inches below the outlet pipe. Based on this, do catch basins need to be cleaned?
* Are berms, curbing or other methods used to divert and direct discharges adequate and in good condition?
 | **Yes** | **No** | **NA** | **Findings and Remedial Action Documentation:**  |
| **Observation of Stormwater Discharges:** * Is the discharge free of floating materials, visible oil sheen, discoloration, turbidity, odor, foam or any other signs of contamination?
* Water from washing vehicles or equipment, steam cleaning and/or pressure washing is considered process wastewater and is not allowed to comingle with stormwater or enter storm drains. Is process water comingling with stormwater or entering storm drains?
* Illicit discharges include domestic wastewater, noncontact cooling water, or process wastewater (including leachate). Were any illicit discharges observed during the inspection?
 | **Yes** | **No** | **NA** | **Findings and Remedial Action Documentation:**  |
| II. CORRECTIVE ACTION AND SWPPP MODIFICATIONS DESCRIPTIONS: Additional space to describe inspection findings and corrective actions if needed. Provide brief explanation of the general location and the rationale for the additional or different BMPs. |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| III. Certification STATEMENTS AND SignatureS:  |
| **Inspector - Certification:** This section must be completed by the person who conducted the site inspection prior to submitting this form to the person with signature authority (see Permit Condition G2) or a duly authorized representative of that person. [ ]  The facility is in compliance with the terms and conditions of the SWPPP and the Industrial Stormwater General Permit. [ ]  The facility is out of compliance with the terms and conditions of the SWPPP and the Industrial Stormwater General Permit. This report includes the remedial actions that must be taken to meet the requirements of the SWPPP and permit, including a schedule of implementation of the remedial actions. *“I certify that this report is true, accurate, and complete, to the best of my knowledge and belief.”*

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| **Inspector’s Name – Printed** | **Inspector’s Signature** | **Inspector’s Title** | **Date** |

**Permittee – Certification:** [ ]  The facility is in compliance with the terms and conditions of the SWPPP and the Industrial Stormwater General Permit. [ ]  The facility is out of compliance with the terms and conditions of the SWPPP and the Industrial Stormwater General Permit. This report includes the remedial actions that must be taken to meet the requirements of the SWPPP and permit, including a schedule of implementation of the remedial actions. *“I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering 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.”*

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| PRINTED NAME of person with **Signature Authority** (permit condition G2.A) or a **Duly Authorized Representative1** | SIGNATURE of person with **Signature Authority** (permit condition G2.A) or a **Duly Authorized Representative1** | **DATE** |

**1**A person is duly authorized representative only if 1) the authorization is made in writing by a person described in Permit Condition G2.A and submitted to Ecology, and 2) the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated *facility*, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.  |