

GENERAL INSTRUCTIONS AND CAVEATS

This template presents the recommended structure and content for preparation of a Construction Stormwater General Permit (CSWGP) Stormwater Pollution Prevention Plan (SWPPP).

The Washington State Department of Ecology's (Ecology) CSWGP requirements inform the structure and content of this SWPPP template; however, **you must customize this template to reflect the conditions of your site.**

A Construction Stormwater Site Inspection Form can be found on Ecology's website. <http://www.ecy.wa.gov/programs/wq/stormwater/construction/index.html>

Using the SWPPP Template

Each section will include instructions and space for information specific to your project. Please read the instructions for each section and provide the necessary information when prompted. This Word template can be modified electronically. You may add/delete text, copy and paste, edit tables, etc. Some sections may be completed with brief answers while others may require several pages of explanation.

INSTRUCTIONS

Instructions are identified by gray shading, and **should be deleted upon SWPPP completion.**

Delete this entire section upon SWPPP completion.

Use the F11 key for easier navigation through the form fields.

After completing your template, and removing the gray instruction boxes, right-click anywhere on the Table of Contents and choose "Update Field", then choose "Update page numbers only", click "OK". Do the same for the list of Tables.

Follow this link to a copy of the Construction Stormwater General Permit: <http://www.ecy.wa.gov/programs/wq/stormwater/construction/index.html>

Construction Stormwater General Permit

Stormwater Pollution Prevention Plan (SWPPP)

for
[Insert Project Name]

Prepared for:
The Washington State Department of Ecology
[Insert Ecology Regional Office Name]

| Permittee / Owner | Developer | Operator / Contractor |
|-------------------|---------------|-----------------------|
| [Insert Name] | [Insert Name] | [Insert Name] |

[Insert Project Site Location]

Update as necessary.

Certified Erosion and Sediment Control Lead (CESCL)

| Name | Organization | Contact Phone Number |
|---------------|---------------|----------------------|
| [Insert Name] | [Insert Name] | [Insert Name] |

SWPPP Prepared By

| Name | Organization | Contact Phone Number |
|---------------|---------------|----------------------|
| [Insert Name] | [Insert Name] | [Insert Name] |

SWPPP Preparation Date

Project Construction Dates

| Activity / Phase | Start Date | End Date |
|------------------|------------|----------|
| [Insert Name] | | |

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- F. 303(d) List Waterbodies / TMDL Waterbodies Information
- G. Contaminated Site Information
- H. Engineering Calculations

List of Acronyms and Abbreviations

| Acronym / Abbreviation | Explanation |
|-------------------------------|---|
| 303(d) | Section of the Clean Water Act pertaining to Impaired Waterbodies |
| BFO | Bellingham Field Office of the Department of Ecology |
| BMP(s) | Best Management Practice(s) |
| CESCL | Certified Erosion and Sediment Control Lead |
| CO₂ | Carbon Dioxide |
| CRO | Central Regional Office of the Department of Ecology |
| CSWGP | Construction Stormwater General Permit |
| CWA | Clean Water Act |
| DMR | Discharge Monitoring Report |
| DO | Dissolved Oxygen |
| Ecology | Washington State Department of Ecology |
| EPA | United States Environmental Protection Agency |
| ERO | Eastern Regional Office of the Department of Ecology |
| ERTS | Environmental Report Tracking System |
| ESC | Erosion and Sediment Control |
| GULD | General Use Level Designation |
| NPDES | National Pollutant Discharge Elimination System |
| NTU | Nephelometric Turbidity Units |
| NWRO | Northwest Regional Office of the Department of Ecology |
| pH | Power of Hydrogen |
| RCW | Revised Code of Washington |
| SPCC | Spill Prevention, Control, and Countermeasure |
| su | Standard Units |
| SWMMEW | Stormwater Management Manual for Eastern Washington |
| SWMMWW | Stormwater Management Manual for Western Washington |
| SWPPP | Stormwater Pollution Prevention Plan |
| TESC | Temporary Erosion and Sediment Control |
| SWRO | Southwest Regional Office of the Department of Ecology |
| TMDL | Total Maximum Daily Load |
| VFO | Vancouver Field Office of the Department of Ecology |
| WAC | Washington Administrative Code |
| WSDOT | Washington Department of Transportation |
| WWHM | Western Washington Hydrology Model |

1 Project Information

Project/Site Name:

Street/Location:

City:

State:

Zip code:

Subdivision:

Receiving waterbody:

1.1 Existing Conditions

Total acreage (including support activities such as off-site equipment staging yards, material storage areas, borrow areas).

Total acreage:

Disturbed acreage:

Existing structures:

Landscape

topography:

Drainage patterns:

Existing Vegetation:

Critical Areas (wetlands, streams, high erosion risk, steep or difficult to stabilize slopes):

List of known impairments for 303(d) listed or Total Maximum Daily Load (TMDL) for the receiving waterbody:

Table 1 includes a list of suspected and/or known contaminants associated with the construction activity.

List all known or suspected contaminants associated with this site in Table 1. Include contaminants previously remediated.

Table 1 – Summary of Site Pollutant Constituents

| Constituent (Pollutant) | Location | Depth | Concentration |
|-------------------------|----------|-------|---------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

1.2 Proposed Construction Activities

Description of site development (example: subdivision):

Description of construction activities (example: site preparation, demolition, excavation):

Description of site drainage including flow from and onto adjacent properties. Must be consistent with Site Map in Appendix A:

Description of final stabilization (example: extent of revegetation, paving, landscaping):

Contaminated Site Information:

Proposed activities regarding contaminated soils or groundwater (example: on-site treatment system, authorized sanitary sewer discharge):

2 Construction Stormwater Best Management Practices (BMPs)

Describe the BMPs identified to control pollutants in stormwater discharges. Depending on the site, multiple BMPs for each element may be necessary. For each element identified:

- Clearly describe the control measure(s).
- Describe the implementation sequence.
- Describe the inspection and maintenance procedures for that specific BMP.
- Identify the responsible party for maintaining BMPs (if your SWPPP is shared by multiple operators, indicate the operator responsible for each BMP).

Categorize each BMP under one of the following elements as listed below:

1. Preserve Vegetation / Mark Clearing Limits
2. Establish Construction Access
3. Control Flow Rates
4. Install Sediment Controls
5. Stabilize Soils
6. Protect Slopes
7. Protect Drain Inlets
8. Stabilize Channels and Outfalls
9. Control Pollutants
10. Control Dewatering
11. Maintain BMPs
12. Manage the Project
13. Protect Low Impact Development

- BMPs must be consistent with the most current approved edition (at the time the CSWGP was issued) of the Stormwater Management Manual for Western Washington (SWMMWW) at sites west of the crest of the Cascade Mountains; the Stormwater Management Manual for Eastern Washington (SWMMEW) for sites east of the crest of the Cascade Mountains; or other Ecology-approved manual.
- Note the location of each BMP on your Site Map in Appendix A.
- Include the corresponding Ecology source control BMPs and runoff conveyance and treatment BMPs in Appendix B.
 - SWMMWW Volume II Chapter 4 Sections 4.1 and 4.2 – <https://fortress.wa.gov/ecy/publications/SummaryPages/1410055.html> or
 - SWMMEW Chapter 7 Section 7.3.1 and 7.3.2 – <http://www.ecy.wa.gov/biblio/0410076.html>

If it can be justified that a particular element does not apply to the project site, include a written justification in lieu of the BMP description in the text for the appropriate element.

The SWPPP is a living document reflecting current conditions and changes throughout the life of the project. These changes may be informal (i.e., hand-written notes and deletions). Update the SWPPP when the CESCL has noted a deficiency in BMPs or deviation from original design.

2.1 The 13 Elements

2.1.1 Element 1: Preserve Vegetation / Mark Clearing Limits

Describe the methods (signs, fences, etc.) you will use to protect those areas that should not be disturbed.

Describe natural features identified and how each will be protected during construction. Trees that are to be preserved, as well as all sensitive areas and their buffers, shall be clearly delineated, both in the field and on the plans.

Describe how natural vegetation and native topsoil will be preserved.

List and describe BMPs:

Installation Schedules:

Inspection and Maintenance plan:

Responsible Staff:

2.1.2 Element 2: Establish Construction Access

Describe how you will minimize dust generation and vehicles tracking sediment off-site.

Limit vehicle access to one route, if possible.

Recycled concrete used to establish construction ingress or egress may be a stormwater pollutant source that requires treatment prior to discharge.

Street sweeping, street cleaning, or wheel wash/tire baths may be necessary if the stabilized construction access is not effective. All wheel wash wastewater shall be controlled on-site and CANNOT be discharged into waters of the State.

Install site ingress/egress stabilization BMPs according to BMP C105.

Describe how you will clean the affected roadway(s) from sediment which is tracked off-site.

List and describe BMPs:

Installation Schedules:

Inspection and Maintenance plan:

Responsible Staff:

2.1.3 Element 3: Control Flow Rates

Describe how you will protect properties and waterways downstream of the project from increased speed and volume of stormwater discharges due to construction activity.

Construction of stormwater retention and/or detention facilities must be done as one of the first steps in grading.

Assure that detention facilities are functioning properly before constructing site improvements (i.e., impervious surfaces).

If applicable, describe how you will protect areas designed for infiltration from siltation during the construction phase.

Will you construct stormwater retention and/or detention facilities?

Yes No

Will you use permanent infiltration ponds or other low impact development (example: rain gardens, bio-retention, porous pavement) to control flow during construction?

Yes No

List and describe BMPs:

Installation Schedules:

Inspection and Maintenance plan:

Responsible Staff:

2.1.4 Element 4: Install Sediment Controls

Describe how you will minimize sediment discharges from the site. Construct sediment control BMPs as one of the first steps of grading. These BMPs must be functional before other land disturbing activities – especially grading and filling – take place.

Describe the BMPs identified to filter sediment prior to it being discharged to an infiltration system or leaving the construction site.

Describe how you will direct stormwater for maximum infiltration where feasible.

Describe how you will not interfere with the movement of juvenile Salmonids attempting to enter off-channel areas or drainages.

Describe how you will respond if sediment controls are ineffective and turbid water is observed discharging from the site.

Consider the amount, frequency, intensity and duration of precipitation, soil characteristics, and site characteristics when selecting sediment control BMPs.

List and describe BMPs:

Installation Schedules:

Inspection and Maintenance plan:

Responsible Staff:

2.1.5 Element 5: Stabilize Soils

Describe how you will stabilize exposed and unworked soils throughout the life of the project (i.e., temporary and permanent seeding, mulching, erosion control fabrics, etc.).

Describe how you will stabilize soil stockpiles.

Describe how you will minimize the amount of soil exposed throughout the life of the project.

Describe how you will minimize the disturbance of steep slopes.

Describe how you will minimize soil compaction.

Describe how you will stabilize contaminated soil and contaminated soil stockpiles if applicable.

Exposed and unworked soils will be stabilized according to the time period set forth for dry and wet seasons, on the west or east sides of the crest of the Cascade Mountains.

Select your region's table and delete the others.

West of the Cascade Mountains Crest

| Season | Dates | Number of Days Soils Can be Left Exposed |
|-----------------------|----------------------|---|
| During the Dry Season | May 1 – September 30 | 7 days |
| During the Wet Season | October 1 – April 30 | 2 days |

East of the Cascade Mountains Crest, except the Central Basin*

| Season | Dates | Number of Days Soils Can be Left Exposed |
|-----------------------|-----------------------|---|
| During the Dry Season | July 1 – September 30 | 10 days |
| During the Wet Season | October 1 – June 30 | 5 days |

The Central Basin*, East of the Cascade Mountain Crest

| Season | Dates | Number of Days Soils Can be Left Exposed |
|-----------------------|-----------------------|---|
| During the Dry Season | July 1 – September 30 | 30 days |
| During the Wet Season | October 1 – June 30 | 15 days |

*Note: The Central Basin is defined as the portions of Eastern Washington with mean annual precipitation of less than 12 inches.

Soils must be stabilized at the end of the shift before a holiday or weekend if needed based on the weather forecast.

Anticipated project dates: Start date: End date:

Will you construct during the wet season?

Yes No

List and describe BMPs:

Installation Schedules:

Inspection and Maintenance plan:

Responsible Staff:

2.1.6 Element 6: Protect Slopes

West of the Cascade Mountains Crest

Describe how slopes will be designed, constructed, and protected to minimize erosion.

Temporary pipe slope drains must handle the peak 10-minute flow rate from a Type 1A, 10-year, 24-hour frequency storm for the developed condition. Alternatively, the 10-year, 1-hour flow rate predicted by an approved continuous runoff model, increased by a factor of 1.6, may be used.

The hydrologic analysis must use the existing land cover condition for predicting flow rates from tributary areas outside the project limits.

For tributary areas on the project site, the analysis must use the temporary or permanent project land cover condition, whichever will produce the highest flow rates.

If using the Western Washington Hydrology Model (WWHM) to predict flows, bare soil areas should be modeled as “landscaped area”.

Describe how you will reduce scouring within constructed channels that are cut down a slope.

East of the Cascade Mountain Crest

Describe how slopes will be designed, constructed, and protected to minimize erosion.

Temporary pipe slope drains must handle the expected peak flow rate from a 6-month, 3-hour storm for the developed condition, referred to as the short duration storm.

Describe how you will reduce scouring within constructed channels that are cut down a slope.

Will steep slopes be present at the site during construction?

Yes No

List and describe BMPs:

Installation Schedules:

Inspection and Maintenance plan:

Responsible Staff:

2.1.7 Element 7: Protect Drain Inlets

Describe how you will protect all operable storm drain inlets so that stormwater runoff does not enter the stormwater conveyance system.

Describe how you will remove sediment that enters the stormwater conveyance system (i.e., filtration, treatment, etc.).

Keep in mind inlet protection may function well for coarse sediment but is less effective in filtering finer particles and dissolved constituents. Inlet protection is the last component of a treatment train and protection of drain inlets include additional sediment and erosion control measures. Inlet protection devices will be cleaned (or removed and replaced), when sediment has filled the device by one third (1/3) or as specified by the manufacturer.

Inlets will be inspected weekly at a minimum and daily during storm events.

List and describe BMPs:

Installation Schedules:

Inspection and Maintenance plan:

Responsible Staff:

2.1.8 Element 8: Stabilize Channels and Outlets

Describe how you will prevent downstream erosion where site runoff is to be conveyed in channels, discharged to a stream or, discharged to a natural drainage point.

West of the Cascade Mountains Crest

On-site conveyance channels must handle the peak 10-minute flow rate from a Type 1A, 10-year, 24-hour frequency storm for the developed condition. Alternatively, the 10-year, 1-hour flow rate predicted by an approved continuous runoff model, increased by a factor of 1.6, may be used.

The hydrologic analysis must use the existing land cover condition for predicting flow rates from tributary areas outside the project limits.

For tributary areas on the project site, the analysis must use the temporary or permanent project land cover condition, whichever will produce the highest flow rates.

If using the WWHM to predict flows, bare soil areas should be modeled as “landscaped area”.

East of the Cascade Mountain Crest

On-site conveyance channels must handle the expected peak flow rate from a 6-month, 3-hour storm from the developed condition, referred to as the short duration storm.

Provide stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes, and downstream reaches, will be installed at the outlets of all conveyance systems.

List and describe BMPs:

Installation Schedules:

Inspection and Maintenance plan:

Responsible Staff:

2.1.9 Element 9: Control Pollutants

The following pollutants are anticipated to be present on-site:

Table 2 – Pollutants

| Pollutant (List pollutants and source, if applicable) |
|---|
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Describe how you will handle and dispose of all pollutants, including waste materials and demolition debris, in a manner that does not cause contamination of stormwater.

Describe how you will cover, contain, and protect from vandalism all chemicals, liquid products, petroleum products, and other polluting materials.

Describe how you will manage known contaminants to prevent their discharge with stormwater to waters of the State (i.e., treatment system, off-site disposal).

List and describe BMPs:

Installation Schedules:

Inspection and Maintenance plan:

Responsible Staff:

Will maintenance, fueling, and/or repair of heavy equipment and vehicles occur on-site?

Yes No

If yes, describe spill prevention and control measures in place while conducting maintenance, fueling, and repair of heavy equipment and vehicles.

If yes, also provide the total volume of fuel on-site and capacity of the secondary containment for each fuel tank. Secondary containment structures shall be impervious.

List and describe BMPs:

Installation Schedules:

Inspection and Maintenance plan:

Responsible Staff:

Will wheel wash or tire bath system BMPs be used during construction?

Yes No

If yes, provide disposal methods for wastewater generated by BMPs.

If discharging to the sanitary sewer, include the approval letter from your local sewer district under Correspondence in Appendix C.

List and describe BMPs:

Installation Schedules:

Inspection and Maintenance plan:

Responsible Staff:

Will pH-modifying sources be present on-site?

Yes No If yes, check the source(s).

Table 3 – pH-Modifying Sources

| | |
|--------------------------|---|
| <input type="checkbox"/> | None |
| <input type="checkbox"/> | Bulk cement |
| <input type="checkbox"/> | Cement kiln dust |
| <input type="checkbox"/> | Fly ash |
| <input type="checkbox"/> | Other cementitious materials |
| <input type="checkbox"/> | New concrete washing or curing waters |
| <input type="checkbox"/> | Waste streams generated from concrete grinding and sawing |
| <input type="checkbox"/> | Exposed aggregate processes |
| <input type="checkbox"/> | Dewatering concrete vaults |
| <input type="checkbox"/> | Concrete pumping and mixer washout waters |
| <input type="checkbox"/> | Recycled concrete |
| <input type="checkbox"/> | Recycled concrete stockpiles |
| <input type="checkbox"/> | Other (i.e., calcium lignosulfate) [please describe:] |

Describe BMPs you will use to prevent pH-modifying sources from contaminating stormwater.

List and describe BMPs:

Installation Schedules:

Inspection and Maintenance plan:

Responsible Staff:

Adjust pH of stormwater if outside the range of 6.5 to 8.5 su.

Obtain written approval from Ecology before using chemical treatment with the exception of CO₂ or dry ice to modify pH.

Concrete trucks must not be washed out onto the ground, or into storm drains, open ditches, streets, or streams. Excess concrete must not be dumped on-site, except in designated concrete washout areas with appropriate BMPs installed.

Will uncontaminated water from water-only based shaft drilling for construction of building, road, and bridge foundations be infiltrated provided the wastewater is managed in a way that prohibits discharge to surface waters?

Yes No

If yes, provide BMPs to contain the wastewater during infiltration.

Prior to infiltration, water from water- only based shaft drilling that comes into contact with curing concrete must be neutralized until pH is in the range of 6.5 to 8.5 (su).

List and describe BMPs:

Installation Schedules:

Inspection and Maintenance plan:

Responsible Staff:

2.1.10 Element 10: Control Dewatering

Describe where dewatering will occur, including source of the water to be removed. State clearly if dewatering water is contaminated or has the potential to be contaminated.

Water from foundations, vaults, and trenches with characteristics similar to stormwater runoff shall be discharged into a controlled conveyance system before discharging to a sediment trap or sediment pond. Clean dewatering water will not be routed through stormwater sediment ponds.

Only clean, non-turbid dewatering water (such as well-point groundwater) may be discharged to systems tributary to, or directly into, surface waters of the State, provided the dewatering flow does not cause erosion or flooding of receiving waters.

Describe how you will manage dewatering water to prevent the discharge of contaminants to waters of the State, including dewatering water that has comingled with stormwater (i.e., treatment system, off-site disposal).

[Insert text here]

Check treatment or disposal option for dewatering water, if applicable:

Table 4 – Dewatering BMPs

| | |
|--------------------------|---|
| <input type="checkbox"/> | Infiltration |
| <input type="checkbox"/> | Transport off-site in a vehicle (vacuum truck for legal disposal) |
| <input type="checkbox"/> | Ecology-approved on-site chemical treatment or other suitable treatment technologies |
| <input type="checkbox"/> | Sanitary or combined sewer discharge with local sewer district approval (last resort) |
| <input type="checkbox"/> | Use of sedimentation bag with discharge to ditch or swale (small volumes of localized dewatering) |

List and describe BMPs:

Installation Schedules:

Inspection and Maintenance plan:

Responsible Staff:

2.1.11 Element 11: Maintain BMPs

This section is a list of permit requirements and does not have to be filled out.

All temporary and permanent Erosion and Sediment Control (ESC) BMPs shall be maintained and repaired as needed to ensure continued performance of their intended function.

Maintenance and repair shall be conducted in accordance with each particular BMP specification (see *Volume II of the SWMMWW* or *Chapter 7 of the SWMMEW*).

Visual monitoring of all BMPs installed at the site will be conducted at least once every calendar week and within 24 hours of any stormwater or non-stormwater discharge from the site. If the site becomes inactive and is temporarily stabilized, the inspection frequency may be reduced to once every calendar month.

All temporary ESC BMPs shall be removed within 30 days after final site stabilization is achieved or after the temporary BMPs are no longer needed.

Trapped sediment shall be stabilized on-site or removed. Disturbed soil resulting from removal of either BMPs or vegetation shall be permanently stabilized.

Additionally, protection must be provided for all BMPs installed for the permanent control of stormwater from sediment and compaction. BMPs that are to remain in place following completion of construction shall be examined and restored to full operating condition. If sediment enters these BMPs during construction, the sediment shall be removed and the facility shall be returned to conditions specified in the construction documents.

2.1.12 Element 12: Manage the Project

The project will be managed based on the following principles:

- Projects will be phased to the maximum extent practicable and seasonal work limitations will be taken into account.
- Inspection and monitoring:
 - Inspection, maintenance and repair of all BMPs will occur as needed to ensure performance of their intended function.
 - Site inspections and monitoring will be conducted in accordance with Special Condition S4 of the CSWGP. Sampling locations are indicated on the Site Map. Sampling station(s) are located in accordance with applicable requirements of the CSWGP.
- Maintain an updated SWPPP.
 - The SWPPP will be updated, maintained, and implemented in accordance with Special Conditions S3, S4, and S9 of the CSWGP.

As site work progresses the SWPPP will be modified routinely to reflect changing site conditions. The SWPPP will be reviewed monthly to ensure the content is current.

Check all the management BMPs that apply at your site:

Table 5 – Management

| | |
|--------------------------|---|
| <input type="checkbox"/> | Design the project to fit the existing topography, soils, and drainage patterns |
| <input type="checkbox"/> | Emphasize erosion control rather than sediment control |
| <input type="checkbox"/> | Minimize the extent and duration of the area exposed |
| <input type="checkbox"/> | Keep runoff velocities low |
| <input type="checkbox"/> | Retain sediment on-site |
| <input type="checkbox"/> | Thoroughly monitor site and maintain all ESC measures |
| <input type="checkbox"/> | Schedule major earthwork during the dry season |
| <input type="checkbox"/> | Other (please describe) |

Optional: Fill out Table 6 by listing the BMP associated with specific construction activities. Identify the phase of the project (if applicable). To increase awareness of seasonal requirements, indicate if the activity falls within the wet or dry season.

Table 6 – BMP Implementation Schedule

| Phase of Construction Project | Stormwater BMPs | Date | Wet/Dry Season |
|--------------------------------------|------------------------|--------------|-----------------------|
| [Insert construction activity] | [Insert BMP] | [MM/DD/YYYY] | [Insert Season] |
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| Phase of Construction Project | Stormwater BMPs | Date | Wet/Dry Season |
|--------------------------------------|------------------------|--------------|-----------------------|
| [Insert construction activity] | [Insert BMP] | [MM/DD/YYYY] | [Insert Season] |
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2.1.13 Element 13: Protect Low Impact Development (LID) BMPs

Describe LIDs.

Describe how you will protect LID facilities from sedimentation, protect soils from compaction, and maintain the infiltration capabilities.

Describe how you will clean permeable pavements fouled with sediments.

Permittees must protect all Bioretention and Rain Garden facilities from sedimentation through installation and maintenance of erosion and sediment control BMPs on portions of the site that drain into the Bioretention and/or Rain Garden facilities. Restore the facilities to their fully functioning condition if they accumulate sediment during construction. Restoring the facility must include removal of sediment and any sediment-laden Bioretention/Rain Garden soils, and replacing the removed soils with soils meeting the design specification.

Permittees must maintain the infiltration capabilities of Bioretention and Rain Garden facilities by protecting against compaction by construction equipment and foot traffic. Protect completed lawn and landscaped areas from compaction due to construction equipment.

Permittees must control erosion and avoid introducing sediment from surrounding land uses onto permeable pavements. Do not allow muddy construction equipment on the base material or pavement. Do not allow sediment-laden runoff onto permeable pavements.

Permittees must clean permeable pavements fouled with sediments or no longer passing an initial infiltration test using local stormwater manual methodology or the manufacturer's procedures.

Permittees must keep all heavy equipment off existing soils under LID facilities that have been excavated to final grade to retain the infiltration rate of the soils.

3 Pollution Prevention Team

Table 7 – Team Information

| Title | Name(s) | Phone Number |
|--|--------------------------|-------------------------|
| Certified Erosion and Sediment Control Lead (CESCL) | [Insert Name] | [Insert Number] |
| Resident Engineer | | |
| Emergency Ecology Contact | | |
| Emergency Permittee/ Owner Contact | | |
| Non-Emergency Owner Contact | | |
| Monitoring Personnel | | |
| Ecology Regional Office | [Insert Regional Office] | [Insert General Number] |

4 Monitoring and Sampling Requirements

Monitoring includes visual inspection, sampling for water quality parameters of concern, and documentation of the inspection and sampling findings in a site log book. A site log book will be maintained for all on-site construction activities and will include:

- A record of the implementation of the SWPPP and other permit requirements
- Site inspections
- Stormwater sampling data

Create your own Site Inspection Form or use the Construction Stormwater Site Inspection Form found on Ecology's website.

<http://www.ecy.wa.gov/programs/wq/stormwater/construction/index.html>

File a blank form under Appendix D.

The site log book must be maintained on-site within reasonable access to the site and be made available upon request to Ecology or the local jurisdiction.

Numeric effluent limits may be required for certain discharges to 303(d) listed waterbodies. See CSWGP Special Condition S8 and Section 5 of this template.

4.1 Site Inspection

Site inspections will be conducted at least once every calendar week and within 24 hours following any discharge from the site. For sites that are temporarily stabilized and inactive, the required frequency is reduced to once per calendar month.

The discharge point(s) are indicated on the Site Map (see Appendix A) and in accordance with the applicable requirements of the CSWGP.

4.2 Stormwater Quality Sampling

4.2.1 Turbidity Sampling

Requirements include calibrated turbidity meter or transparency tube to sample site discharges for compliance with the CSWGP. Sampling will be conducted at all discharge points at least once per calendar week.

Method for sampling turbidity:

Check the analysis method you will use:

Table 8 – Turbidity Sampling Method

| | |
|--------------------------|--|
| <input type="checkbox"/> | Turbidity Meter/Turbidimeter (required for disturbances 5 acres or greater in size) |
| <input type="checkbox"/> | Transparency Tube (option for disturbances less than 1 acre and up to 5 acres in size) |

The benchmark for turbidity value is 25 nephelometric turbidity units (NTU) and a transparency less than 33 centimeters.

If the discharge's turbidity is 26 to 249 NTU or the transparency is less than 33 cm but equal to or greater than 6 cm, the following steps will be conducted:

1. Review the SWPPP for compliance with Special Condition S9. Make appropriate revisions within 7 days of the date the discharge exceeded the benchmark.
2. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible. Address the problems within 10 days of the date the discharge exceeded the benchmark. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when the Permittee requests an extension within the initial 10-day response period.
3. Document BMP implementation and maintenance in the site log book.

If the turbidity exceeds 250 NTU or the transparency is 6 cm or less at any time, the following steps will be conducted:

1. Telephone or submit an electronic report to the applicable Ecology Region's Environmental Report Tracking System (ERTS) within 24 hours.
 - **Central Region** (Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima): (509) 575-2490 or http://www.ecy.wa.gov/programs/spills/forms/nerets_online/CRO_nerets_online.html
 - **Eastern Region** (Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman): (509) 329-3400 or http://www.ecy.wa.gov/programs/spills/forms/nerets_online/ERO_nerets_online.html
 - **Northwest Region** (King, Kitsap, Island, San Juan, Skagit, Snohomish, Whatcom): (425) 649-7000 or http://www.ecy.wa.gov/programs/spills/forms/nerets_online/NWRO_nerets_online.html
 - **Southwest Region** (Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Lewis, Mason, Pacific, Pierce, Skamania, Thurston, Wahkiakum,): (360) 407-6300 or http://www.ecy.wa.gov/programs/spills/forms/nerets_online/SWRO_nerets_online.html
2. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible. Address the problems within 10 days of the date the discharge exceeded the benchmark. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when the Permittee requests an extension within the initial 10-day response period
3. Document BMP implementation and maintenance in the site log book.
4. Continue to sample discharges daily until one of the following is true:
 - Turbidity is 25 NTU (or lower).
 - Transparency is 33 cm (or greater).
 - Compliance with the water quality limit for turbidity is achieved.
 - 1 - 5 NTU over background turbidity, if background is less than 50 NTU
 - 1% - 10% over background turbidity, if background is 50 NTU or greater
 - The discharge stops or is eliminated.

4.2.2 pH Sampling

pH monitoring is required for “Significant concrete work” (i.e., greater than 1000 cubic yards poured concrete over the life of the project). The use of recycled concrete or engineered soils (soil amendments including but not limited to Portland cement-treated base [CTB], cement kiln dust [CKD] or fly ash) also requires pH monitoring.

For significant concrete work, pH sampling will start the first day concrete is poured and continue until it is cured, typically three (3) weeks after the last pour.

For engineered soils and recycled concrete, pH sampling begins when engineered soils or recycled concrete are first exposed to precipitation and continues until the area is fully stabilized.

If the measured pH is 8.5 or greater, the following measures will be taken:

1. Prevent high pH water from entering storm sewer systems or surface water.
2. Adjust or neutralize the high pH water to the range of 6.5 to 8.5 su using appropriate technology such as carbon dioxide (CO₂) sparging (liquid or dry ice).
3. Written approval will be obtained from Ecology prior to the use of chemical treatment other than CO₂ sparging or dry ice.

Method for sampling pH:

Check the analysis method you will use:

Table 9 – pH Sampling Method

| | |
|--------------------------|-------------------------------|
| <input type="checkbox"/> | pH meter |
| <input type="checkbox"/> | pH test kit |
| <input type="checkbox"/> | Wide range pH indicator paper |

5 Discharges to 303(d) or Total Maximum Daily Load (TMDL) Waterbodies

5.1 303(d) Listed Waterbodies

Circle the applicable answer, if necessary:

Is the receiving water 303(d) (Category 5) listed for turbidity, fine sediment, phosphorus, or pH?

Yes No

List the impairment(s):

If yes, discharges must comply with applicable effluent limitations in S8.C and S8.D of the CSWGP.

5.2 TMDL Waterbodies

Waste Load Allocation for CWSGP discharges:

Describe the method(s) for TMDL compliance:

List and describe BMPs:

Discharges to TMDL receiving waterbodies will meet in-stream water quality criteria at the point of discharge.

The Construction Stormwater General Permit Proposed New Discharge to an Impaired Water Body form is included in Appendix F.

6 Reporting and Record Keeping

6.1 Record Keeping

This section does not need to be filled out. It is a list of reminders for the permittee.

6.1.1 Site Log Book

A site log book will be maintained for all on-site construction activities and will include:

- A record of the implementation of the SWPPP and other permit requirements
- Site inspections
- Sample logs

6.1.2 Records Retention

Records will be retained during the life of the project and for a minimum of three (3) years following the termination of permit coverage in accordance with Special Condition S5.C of the CSWGP.

Permit documentation to be retained on-site:

- CSWGP
- Permit Coverage Letter
- SWPPP
- Site Log Book

Permit documentation will be provided within 14 days of receipt of a written request from Ecology. A copy of the SWPPP or access to the SWPPP will be provided to the public when requested in writing in accordance with Special Condition S5.G.2.b of the CSWGP.

6.1.3 Updating the SWPPP

The SWPPP will be modified if:

- Found ineffective in eliminating or significantly minimizing pollutants in stormwater discharges from the site.
- There is a change in design, construction, operation, or maintenance at the construction site that has, or could have, a significant effect on the discharge of pollutants to waters of the State.

The SWPPP will be modified within seven (7) days if inspection(s) or investigation(s) determine additional or modified BMPs are necessary for compliance. An updated timeline for BMP implementation will be prepared.

6.2 Reporting

6.2.1 Discharge Monitoring Reports

Select and retain applicable paragraph.

Cumulative soil disturbance is less than one (1) acre; therefore, Discharge Monitoring Reports (DMRs) will not be submitted to Ecology because water quality sampling is not being conducted at the site.

Or

Cumulative soil disturbance is one (1) acre or larger; therefore, Discharge Monitoring Reports (DMRs) will be submitted to Ecology monthly. If there was no discharge during a given monitoring period the DMR will be submitted as required, reporting “No Discharge”. The DMR due date is fifteen (15) days following the end of each calendar month.

DMRs will be reported online through Ecology’s WQWebDMR System.

To sign up for WQWebDMR go to:

<http://www.ecy.wa.gov/programs/wq/permits/paris/webdmr.html>

6.2.2 Notification of Noncompliance

If any of the terms and conditions of the permit is not met, and the resulting noncompliance may cause a threat to human health or the environment, the following actions will be taken:

1. Ecology will be notified within 24-hours of the failure to comply by calling the applicable Regional office ERTS phone number (Regional office numbers listed below).
2. Immediate action will be taken to prevent the discharge/pollution or otherwise stop or correct the noncompliance. If applicable, sampling and analysis of any noncompliance will be repeated immediately and the results submitted to Ecology within five (5) days of becoming aware of the violation.
3. A detailed written report describing the noncompliance will be submitted to Ecology within five (5) days, unless requested earlier by Ecology.

Specific information to be included in the noncompliance report is found in Special Condition S5.F.3 of the CSWGP.

Anytime turbidity sampling indicates turbidity is 250 NTUs or greater, or water transparency is 6 cm or less, the Ecology Regional office will be notified by phone within 24 hours of analysis as required by Special Condition S5.A of the CSWGP.

- **Central Region** at (509) 575-2490 for Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, or Yakima County

- **Eastern Region** at (509) 329-3400 for Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, or Whitman County
- **Northwest Region** at (425) 649-7000 for Island, King, Kitsap, San Juan, Skagit, Snohomish, or Whatcom County
- **Southwest Region** at (360) 407-6300 for Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Lewis, Mason, Pacific, Pierce, Skamania, Thurston, or Wahkiakum

Include the following information:

1. Your name and / Phone number
2. Permit number
3. City / County of project
4. Sample results
5. Date / Time of call
6. Date / Time of sample
7. Project name

In accordance with Special Condition S4.D.5.b of the CSWGP, the Ecology Regional office will be notified if chemical treatment other than CO₂ sparging is planned for adjustment of high pH water.

A. Site Map

The site map must meet the requirements of Special Condition S9.E of the CSWGP

B. BMP Detail

Insert BMPs specification sheets here.

Download BMPs from the Ecology Construction Stormwater website at:

<http://www.ecy.wa.gov/programs/wq/stormwater/construction/index.html>

Select Resources and Guidance to find the links to the Stormwater Manuals.

C. Correspondence

Ecology

EPA

Local Government

D. Site Inspection Form

Create your own or download Ecology's template:

<http://www.ecy.wa.gov/programs/wq/stormwater/construction/index.html>

Select Permit, Forms and Application to find the link to the Construction Stormwater Site Inspection Form.

E. Construction Stormwater General Permit (CSWGP)

Download the CSWGP:

<http://www.ecy.wa.gov/programs/wq/stormwater/construction/index.html>

F. 303(d) List Waterbodies / TMDL Waterbodies Information

Proposed New Discharge to an Impaired Water Body form

SWPPP Addendum addressing impairment

G. Contaminated Site Information

Administrative Order

Sanitary Discharge Permit

Soil Management Plan

Soil and Groundwater Reports

Maps and Figures Depicting Contamination

H. Engineering Calculations