Construction Stormwater General Permit

Stormwater Pollution Prevention Plan (SWPPP)

for

Jennings Park Substation

Prepared for:
The Washington State Department of Ecology
Northwest Regional Office
3190 – 160th Avenue SE
Bellevue, WA 98008

Prepared for:
City of Marysville
501 Delta Avenue
Marysville, WA 98270
360-363-8000

Permittee / Owner	Developer	Operator / Contractor
Public Utility District No. 1 of Snohomish County	Public Utility District No. 1 of Snohomish County	TBD

19622 Tjerne Pl SE Monroe, WA 98272

Certified Erosion and Sediment Control Lead (CESCL)

Name	Organization	Contact Phone Number
Will Blanchard	Public Utility District No. 1 of Snohomish County	425-783-4303
CESCL No.	**Certification Exp. Date**	
ECO-3-8092215	8/9/2025	

SWPPP Prepared By

Name	Organization	Contact Phone Number
Will Blanchard	Public Utility District No. 1 of Snohomish County	425-783-4303

SWPPP Preparation Date

1/23/2023

Project Construction Dates

Activity / Phase	Start Date	End Date
Site Construction	June 2023	Feburary 2023

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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
CO_2	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:	Jennings Park Substation
Street/Location:	7808 47th ave NE
City:	Marysville
State:	WA
Zip Code:	98270
Subdivision:	N/A
Receiving waterbody:	N/A (infiltrates)

1.1 Existing Conditions

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

Total acreage:	3.38
Disturbed acreage:	3.0
Existing structures:	None
Landscape topography:	Flat
Drainage patterns:	Water generated on site infiltrates on site. There exists some run-on from the parcel neighboring to the south; this also infiltrates on site.
Existing Vegetation:	Part of the site was previously developed; the building which was there has been removed. The undeveloped portion of the site consists of grass and brush.
Critical Areas (wetlands, streams, high erosion risk, steep or difficult to stabilize slopes):	There are no critical areas on site.

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

N/A - infiltration

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

Table 1 – Summary of Site Pollutant Constituents

Constituent (Pollutant)	Location	Depth	Concentration
None Known			

1.2 Proposed Construction Activities

Description of site development (example: subdivision):

Electrical substation.

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

Over excavation of on-site soils and replacement with imported structural fill. Work also includes, grading, storm drainage, electrical conduits, below-grade vaults, cast-in-place concrete foundations for electrical equipment, below-grade ground grid system, fencing, crushed rock surfacing, soil amendment, landscape planting and irrigation.

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

The project site is a flat undeveloped lot which is underlain by permeable sand. The water generated on site infiltrates on site. There is some run-on from the neighboring parcel to the south; this run-on also infiltrates on site.

Completed construction of the project allows for void storage and infiltration into the native soils below. In the developed condition; the stormwater generated as a part of this project will infiltrate on site.

The existing drainage pattern will be unchanged.

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

Crushed rock surfacing for the station yard, shared access driveway. Asphalt paved driveway for the substation limited access driveway. Topsoil and compost amendment of landscape areas including plantings and mulch surfacing.

Contaminated Site Information:

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

Contaminated soil and/or groundwater was not observed during subsurface exploration. There are no proposed activities; however, if contaminated soils and/or groundwater are suspected during excavation, the contractor shall promptly notify the District for further evaluation.

2 Construction Stormwater Best Management Practices (BMPs)

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 or local agency 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

To protect adjacent properties and to reduce the area of soil exposed to construction, the limits of construction will be clearly marked before land-disturbing activities begin. 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. In general, natural vegetation and native topsoil shall be retained in an undisturbed state to the maximum extent practicable.

High visibility fence and/or high visibility silt fencing will be staked along the limits of clearing. The clearing limits are identified on the plans, and will be staked in by survey.

List and describe BMPs:	High Visibility Plastic or Metal Fence (BMP C103)
Installation Schedules:	Prior to any land disturbing activities
Inspection and Maintenance plan:	Refer to BMP Detail in Appendix B
Responsibility:	Site Contractor (Permittee)

2.1.2 Element 2: Establish Construction Access

Construction access or activities occurring on unpaved areas shall be minimized, yet where necessary, access points shall be stabilized to minimize the tracking of sediment onto public roads, and wheel washing, street sweeping, and street cleaning shall be employed to prevent sediment from entering state waters. All wash wastewater shall be controlled on site.

If sediment is tracked off site, clean the affected roadway thoroughly at the end of each day, or more frequently as necessary (for example, during wet weather). Remove sediment from roads by sweeping.

The contractor shall construct a construction entrance off Tjerne Pl. A significant portion of the site is flat and should be suitable for construction parking.

List and describe BMPs:	Stabilized Construction Entrance (BMP C105)
Installation Schedules:	Prior to any land disturbing activities
Inspection and Maintenance plan:	Refer to BMP Details in Appendix B
Responsibility:	Site Contractor (Permittee)

2.1.3 Element 3: Control Flow Rates

In order to protect the properties and waterways downstream of the project site, stormwater discharges from the site shall be controlled. An increase in stormwater runoff velocity and peak flow rates are not expected as a result of the proposed construction activity.

The site is currently vegitatated with grass, scattered trees and brush. There is a shared access maintenance road and a graveled area from an abandoned parking lot. Subsurface soils consist of recessional outwash deposits; typical Marysville sand. These soil are well drained, stratified to massive outwash sand, some fine gravel and some areas of silt and clay. The geotechnical report assigned an infiltration rate of 18-inches an hour to these native soils; thus the stormwater will infiltrate into the underlying soils once passing through the the voids within the previous imported fill material.

Surface water generated by the paved maintainance driveway will be conveyed to biocells where it will soak into the underlying soils.

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

Post construction the biocells between the paved maintenance driveways will be utilized due to the high ground water level to maintain a desirable grade and meet the 3-ft of separation between the bottom of facility and groundwater level.

List and describe BMPs:	Straw Wattles (BMP C235)
Installation Schedules:	Prior to any land disturbing activities
Inspection and Maintenance plan:	Refer to BMP Details in Appendix B
Responsibility:	Site Contractor (Permittee)

2.1.4 Element 4: Install Sediment Controls

Wattles will be utilized should grading operations produce any areas where runoff needs to be slowed, sediment confined and flow distributed.

In addition, sediment will be removed from paved areas in and adjacent to construction work areas manually or using mechanical sweepers, as needed, to minimize tracking of sediments on vehicle tires away from the site and to minimize wash off of sediments from adjacent streets in runoff.

Sediment laden water shall be discharged into on-site, relatively level, vegetated areas and allowed to soak into the native soils.

List and describe BMPs:	Storm Drain Inlet Protection (BMP C220) Silt Fence (BMP C233) Straw Wattles (BMP C235)
Installation Schedules:	Prior to any land disturbing activities
Inspection and Maintenance plan:	Refer to BMP Details in Appendix B
Responsibility:	Site Contractor (Permittee)

Element 5: Stabilize Soils

Exposed and unworked soils shall be stabilized with the application of effective BMPs to prevent erosion throughout the life of the project.

The project site is located west of the Cascade Mountain Crest. As such, no soils shall remain exposed and unworked for more than 7 days during the dry season (May 1 to September 30) and 2 days during the wet season (October 1 to April 30). Regardless of the time of year, all soils shall be stabilized at the end of the shift before a holiday or weekend if needed based on weather forecasts.

In general, cut and fill slopes will be stabilized as soon as possible and soil stockpiles will be temporarily covered with plastic sheeting. All stockpiled soils shall be stabilized from erosion, protected with sediment trapping measures, and where possible, be located away from storm drain inlets, waterways, and drainage channels.

When feasible, minimize the amount of soil exposed during construction.

The station yard and driveway shall be stabilized with early application of gravel base.

Following site grading, landscape areas outside the gravel areas shall be stabilized with topsoil amended into the existing soil, then mantled with coarse compost and mulch.

At the end of construction activities hydroseed will be applied to all areas where the natural vegetation has been disturbed.

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

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: June 2023 End of earth disturbing construction: December 2023. Final stabilization: March 2024.

Will you construct during the wet season?
☒ Yes ☐ No

List and describe BMPs: Mulching (BMP C121)
Plastic Covering (BMP C123)
Topsoiling / Composting (BMP C125)
Surface Roughening (BMP C130)
Dust Control (BMP C140)
Temporary and Permanent Seeding (BMP C120)
Early application of gravel base on areas to be graveled

Installation Schedules: The end of a shift and before a holiday or weekend, and as needed based on weather forecasts

Inspection and Maintenance plan: Refer to BMP Details in Appendix B

Responsibility: Site Contractor (Permittee)

Element 6: Protect Slopes

All cut and fill slopes shall be protected in a manner that minimizes erosion. Stormwater at the top of the over-excavation shall be diverted away from the slopes. Final site grade will not result in significant cut or fill slopes. Fill slopes along the periphery of the station yard shall be stabilized as specified in Element #5.

Will steep slopes be present at the site during construction?
☐ Yes ☒ No, except during over-excavation and backfilling

List and describe BMPs: Straw Wattles (BMP C234)
Vegetated Strip (BMP C234)

Installation Schedules: The end of a shift and before a holiday or weekend, and as needed based on weather forecasts

Inspection and Maintenance plan: Refer to BMP Details in Appendix B

Responsibility: Site Contractor (Permittee)**Element 7: Protect Drain Inlets**

All storm drain inlets and culverts made operable during construction shall be protected to prevent unfiltered or untreated water from entering the drainage conveyance system. However, the first priority is to keep all access roads clean of sediment and keep street wash water separate from entering storm drains until treatment can be provided. Storm Drain Inlet Protection (BMP C220) will be implemented for all drainage inlets and culverts that could potentially be impacted by sediment-laden runoff on and near the project site.

List and describe BMPs: Storm Drain Inlet Protection (BMP C220)

Installation Schedules: Prior to any land disturbing activities

Inspection and Maintenance plan: Refer to BMP Details in Appendix B

Responsibility: Site Contractor (Permittee)**Element 8: Stabilize Channels and Outlets**

The existing swale which appears to be have been installed for run on conditions will be expanded, seeded and lined with a biodegradable erosion control blanket before the wet season.

2.1.9 Element 9: Control Pollutants

All pollutants, including waste materials, that occur on-site shall be handled and disposed of in a manner that does not cause contamination of stormwater. Good housekeeping and preventative measures will be taken to ensure that the site will be kept clean, well-organized, and free of debris. If required, BMPs to be implemented to control specific sources of pollutants are discussed below.

The following pollutants could potentially be present on-site:

Table 2 – Potential Pollutants

Pollutant (List pollutants and source, if applicable)
Diesel fuel – vehicles and construction equipment
Gasoline fuel – vehicles and construction equipment
Engine oil – vehicles and construction equipment
Hydraulic oil – vehicles and construction equipment
Engine coolant – vehicles and construction equipment
Concrete washout water – concrete pumper and/or mixer truck

Provide cover, containment, and protection from vandalism for all chemicals, liquid products, petroleum products, and other materials that have the potential to pose a threat to human health or the environment.

Will maintenance, fueling, and/or repair of heavy equipment and vehicles occur on-site?
☒ Yes, equipment fueling and minor equipment repair may occur ☐ No

Vehicles, construction equipment, and/or petroleum product storage/dispensing:

- All vehicles, equipment, and petroleum product storage/dispensing areas will be inspected regularly to detect any leaks or spills, and to identify maintenance needs to prevent leaks or spills.
- On-site fueling tanks and petroleum product storage containers shall include secondary containment.
- Spill prevention measures, such as drip pans, will be used when conducting minor maintenance and repair of vehicles or equipment. Major repairs and maintenance shall be performed off-site.
- In order to perform emergency repairs on-site, temporary plastic will be placed beneath and, if raining, over the vehicle.
- Contaminated surfaces shall be cleaned immediately following any discharge or spill incident. Spills shall be report to the District Environmental Affairs Department immediately.

Will wheel wash or tire bath system BMPs be used during construction?
☐ Yes ☒ No, not anticipated

Will pH-modifying sources be present on-site?
☒ Yes ☐ No

Table 3 – pH-Modifying Sources

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

Concrete pumping and mixer washout water resulting from concrete work will be prevented from entering the waters of the State by implementing the following BMPs.

List and describe BMPs:	Concrete Handling (BMP C151) Concrete Washout Area (BMP C154)
Installation Schedules:	Prior to concrete pouring
Inspection and Maintenance plan:	Refer to BMP Details in Appendix B
Responsibility:	Site Contractor (Permittee)

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. Excess concrete must be returned to the plant for recycling if there are no 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, not applicable

We are not constructing buildings, roads or bridge foundations; however the site is highly pervious; we anticipate infiltrating groundwater from excavations on site. The grounding system installation may include grounding wells and water generated from those would be disposed of in this same manner.

2.1.10 Element 10: Control Dewatering

All dewatering water from open cut excavation, tunneling, foundation work, trench, or underground electrical vaults shall be discharged into a controlled conveyance system prior to discharge to a controlled area for infiltration.

Clean, non-turbid dewatering water may be disposed of as described above or may be discharged and allowed to flow through a vegetated strip prior to entering the existing drainage private system to the west.

Highly turbid dewatering water from soils known or suspected to be contaminated, or from use of construction equipment, will require additional monitoring and treatment as required for the specific pollutants based on the receiving waters into which the discharge is occurring. Such monitoring is the responsibility of the contractor.

The dewatering of soils known to be free of contamination will trigger BMPs to trap sediment and reduce turbidity. At a minimum, geotextile fabric socks/bags/cells will be used to filter this material.

Table 4 – Dewatering BMPs

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

List and describe BMPs: See Table 4 above

Installation Schedules: Prior to any land disturbing activities and/or discharge

Inspection and Maintenance plan: Refer to BMP Details in Appendix B

Responsibility: Site Contractor (Permittee)

2.1.11 Element 11: Maintain BMPs

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).*

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.

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.

Table 5 – Management

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

Table 6 – BMP Implementation Schedule

Phase of Construction Project	Stormwater BMPs	Date	Wet/Dry Season
[Insert construction activity]	[Insert BMP]	[MM/YYYY]	[Insert Season]
Mobilize		6/2023	Dry
Locate utilities		6/2023	Dry
Mark limits of disturbance	C103	6/2023	Dry
Install ESC BMPs	C200, C220, C233, C235, C240	7/2023	Dry
Install drainage outside station		8/2023	Dry
Over-excavate and bench slope, construct gravel subgrade	Table 4, C140, C200	6-9/2023	Dry
Install drainage inside station		10/2023	Dry
Install conduit and vaults		8-10/2023	Dry/Wet

Construct cast-in-place concrete foundations	C151, C154	11/2023	Wet
Install ground grid		10/2023	Wet
Install station fencing		10/2023	Wet
Landscaping/Irrigation		10/2023	Wet
Final grading	C130	12/2023	Wet
Surface yard with crushed rock		12/2023	Wet
Pave Driveway		12/2023	Wet
Apply hydroseed to disturbed areas on site		10/2022	Wet

2.1.13 Element 13: Protect Low Impact Development (LID) BMPs

Biocells are going to be installed as part of this project. Post construction; access to the substation specific parcel will be limited to District personnel and future construction events.

3 Pollution Prevention Team

Table 7 – Team Information

Title	Name(s)	Phone Number
Certified Erosion and Sediment Control Lead (CESCL)	Will Blanchard, P.E. (Snohomish PUD)	425-783-4303
Resident Engineer	Will Blanchard, P.E. (Snohomish PUD)	425-783-4303
Non-Emergency Owner Contact	Bob Anderson, P.E. (Snohomish PUD)	425-783-5576
Monitoring Personnel	Will Blanchard, P.E. (Snohomish PUD)	425-783-4303

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

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.

Discharge from the site is not anticipated, however the south west corner of the site is most likely to hold water for inspection and sampling, if desired.

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 City requirements. Sampling will be conducted at all discharge points at least once per calendar week.

Method for sampling turbidity:

Table 8 – Turbidity Sampling Method

☒	Turbidity Meter/Turbidimeter (required for disturbances 5 acres or greater in size)
☐	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/nerts_online/CRO_nerts_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/nerts_online/ERO_nerts_online.html
    - **Northwest Region** (King, Kitsap, Island, San Juan, Skagit, Snohomish, Whatcom): (425) 649-7000 or http://www.ecy.wa.gov/programs/spills/forms/nerts_online/NWRO_nerts_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/nerts_online/SWRO_nerts_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 (CO_2) sparging (liquid or dry ice).
3. Written approval will be obtained from Ecology prior to the use of chemical treatment other than CO_2 sparging or dry ice.

Method for sampling pH:

Construction activity does not involve greater than 1000 cubic yards of concrete, the addition of additional recycled concrete, or engineered soils; therefore, pH sampling is not required.

Table 9 – pH Sampling Method

☐	pH meter
☐	pH test kit
☐	Wide range pH indicator paper

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

5.1 303(d) Listed Waterbodies

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

☐ Yes ☒ No

List the impairment(s):

5.2 TMDL Waterbodies

Waste Load Allocation for CWSGP discharges:

N/A

List and describe BMPs:

N/A

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

6 Reporting and Record Keeping

6.1 Record Keeping

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.

A. Site Map

B. BMP Detail

C. Correspondence

D. Site Inspection Form

E. Construction Stormwater General Permit (CSWGP)

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

G. Contaminated Site Information

H. Engineering Calculations

Appendix A

Site Map

See Contract Drawings S-135-K4

Appendix B

BMP Detail

- *High Visibility Plastic or Metal Fence (BMP C103)*
- *Stabilized Construction Entrance (BMP C105)*
- *Construction Road/Parking Area Stabilization (BMP C107)*
- *Mulching (BMP C121)*
- *Plastic Covering (BMP C123)*
- *Topsoiling / Composting (BMP C125)*
- *Surface Roughening (BMP C130)*
- *Dust Control (BMP C140)*
- *Materials on Hand (BMP C150)*
- *Concrete Handling (BMP C151)*
- *Concrete Washout Area (BMP C154)*
- *Certified Erosion and Sediment Control Lead (BMP C160)*
- *Scheduling (BMP C162)*
- *Interceptor Dike and Swale (BMP C200)*
- *Channel Lining (BMP C202)*
- *Sediment Trap (BMP C240)*
- *Storm Drain Inlet Protection (BMP C220)*
- *Silt Fence (BMP C233)*
- *Wattles (BMP C235)*

Appendix C

Correspondence

No correspondence as of SWPPP preparation date

Appendix D

Site Inspection Form

Appendix E

Construction Stormwater General Permit (CSWGP)

N/A

Appendix F

303(d) List Waterbodies / TMDL Waterbodies Information

No discharge to 303(d) waterbody

Appendix G

Contaminated Site Information

N/A – no known contamination on-site

Appendix H

Engineering Calculations