Issuance Date:July 16, 2014Effective Date:September 1, 2014Expiration Date:August 31, 2019

# WATER TREATMENT PLANT GENERAL PERMIT

# NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM WASTE DISCHARGE GENERAL PERMIT for Water Treatment Plants

State of Washington Department of Ecology Olympia, Washington 98504-7600

In compliance with the provisions of The State of Washington Water Pollution Control Law Chapter 90.48 Revised Code of Washington and The Federal Water Pollution Control Act (The Clean Water Act) Title 33 United States Code, Section 1251 et seq.

Until this permit expires, is modified, or revoked, Permittees that have properly obtained coverage under this permit are hereby authorized to discharge in accordance with the Special and General Conditions contained herein.

Heather R. Bartlett, Manager Water Quality Program Washington State Department of Ecology

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# SUMMARY OF REQUIRED SUBMITTALS

Refer to the Special and General Conditions of this permit for additional submittal requirements.

Permit Section	Submittal	Frequency	First Submittal Date
S-6.3.3	Discharge Monitoring Report (a)	Monthly	October 15, 2014
S-3.1	Operations and Maintenance Manual (a)	Once	January 1, 2015
S-3.2	Solid Waste Control Plan (a)	Once	January 1, 2015
S-3.3	Stormwater Pollution Prevention Plan (a) (b)	Once	January 1, 2015
S-3.4	Spill Contingency Plan (a)	Once	January 1, 2015
G-2.6	Application for Permit Renewal (a)	Once per permit cycle	March 1, 2019
S-3.1	Operations and Maintenance Manual Update (a)	As necessary	
S-3.2	Solid Waste Control Plan Update (a)	As necessary	
S-3.3	Stormwater Pollution Prevention Plan Update (a)	As necessary	
S-3.4	Spill Contingency Plan Update (a)	As necessary	
S-6.2.1	Notification of Non-Compliance	As necessary	
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G-2.7	Notification of Spills or Other Discharges	As necessary	
G-2.10	Other Information	As necessary	
G-4.2	Signature Authorization	As necessary	
G-4.11	Notice of Permit Transfer	As necessary	

(a) Electronic submittal is required via the Permittee's SecureAccess Washington account at <u>https://secureaccess.wa.gov/ecy/wqwebportal/</u>. More information is available at <u>http://www.ecy.wa.gov/programs/wq/permits/paris/portal.html</u>.

(b) Submission of a Stormwater Pollution Prevention Plan is required by only those Permittees that discharge stormwater associated with industrial activity at their sites to surface water or to a separate stormwater sewer system.

# SPECIAL CONDITIONS

# S-1 PERMIT COVERAGE

# S-1.1 Activities, Discharges, and Facilities that require this Permit

This general permit covers all water treatment plants (WTPs) that discharge backwash effluent to surface water and that meet all of the following criteria:

- 1. Produce potable water or "industrial" water (primary treatment/settled water) where the treatment and distribution of water is the primary function of the facility.
- 2. Have an actual production rate equal to or greater than 35,000 gallons per day of treated product water (finished water) as determined on an average monthly basis. "Actual production rate" is the amount of finished water that a treatment facility actually produces on any given day. To calculate the value of the actual production rate on an average monthly basis, add the value of each daily production rate during a calendar month, and divide the sum by the total number of days in the month. The Washington State Department of Ecology (Ecology) reserves the right to determine that permit coverage is needed for facilities with actual production rates less than 35,000 gallons per day in order to protect water quality.
- 3. The wastewater discharge is from water treatment filtration processes (filter backwash, sedimentation/pre-sedimentation basin washdown, sedimentation/clarification, or filter-to-waste).
- 4. The water treatment works are not part of a larger, permitted facility, such as a pulp and paper mill.

#### S-1.2 Discharges Authorized under this Permit

#### S-1.2.1 Process Wastewater

Beginning on the effective date of this permit, all WTP facilities covered under the WTP general permit effective in September 2009 and that reapplied by March 1, 2014, are authorized to discharge filter backwash water associated with finished water production to surface waters of the State subject to the limits identified in this permit.

#### S-1.2.2 Non-Routine and Unanticipated Wastewater

Non-routine and unanticipated wastewater consists of process wastewater not identified in Special Condition S-1.2.1 (Process Wastewater), not routinely discharged, and not anticipated at the time of permit application, such as waters used to pressure-test storage tanks or fire water systems or of leaks from drinking water systems.

This reissued general permit authorizes non-routine and unanticipated discharges under certain conditions. The Permittee must characterize the non-routine wastewater for pollutants and examine the opportunities for reuse. Prior to discharging the non-routine wastewater, the Permittee must obtain approval from Ecology on a case-by-case basis.

Any discharges not specified in Special Condition S-1.2.1 (Process Wastewater) must be addressed in accordance with the terms and conditions of this section.

- 1. Beginning on the effective date of this permit, prior to any discharge of non-routine and unanticipated wastewater, the Permittee must contact Ecology and provide the following information at a minimum:
  - (a) The proposed discharge location.
  - (b) The nature of the activity that will generate the discharge.
  - (c) Any alternatives to the discharge, such as reuse, storage, or recycling of the water.
  - (d) The total volume of water it expects to discharge.
  - (e) The results of the chemical analysis of the water.
  - (f) The date of the proposed discharge.
  - (g) The expected rate of discharge, in gallons per minute.
- 2. The Permittee must analyze the wastewater for all parameters with effluent limits in this permit and must report the results as required by Special Condition S-5 (Monitoring Requirements), along with any other parameter deemed necessary by Ecology, using the methods and quantitation levels specified by Ecology.
- 3. Depending on the nature and extent of pollutants in the wastewater and any opportunities for reuse, Ecology may:
  - Authorize the facility to discharge the wastewater.
  - Require the facility to treat the wastewater.
  - Require the facility to reuse the wastewater.

All discharges must comply with the effluent limits established in Special Condition S-2 (Limits and Standards); water quality standards; and any other limits imposed by Ecology.

4. The discharge may not proceed until Ecology has reviewed the Permittee's request and has authorized the discharge by Administrative Order. Once approved and if the proposed discharge is to a municipal storm drain, the Permittee must obtain prior approval from the municipality and notify it when it plans to discharge.

#### S-1.3 Covered Geographic Area

The geographic area covered by this general permit is the entire State of Washington.

# S-1.4 Activities, Discharges, and Facilities Excluded from Coverage under this Permit

Discharges to surface water of wastewaters produced from ion exchange, reverse osmosis, or slow sand filtration water treatment processes are excluded from coverage under this permit and may be required to apply for an individual permit.

Discharges of wastewater from water treatment filtration processes to publicly-owned treatment works are excluded from coverage under this permit.

Discharges of wastewater from water treatment filtration processes to the land are excluded from coverage under this permit only if that discharged wastewater has no potential, during all weather conditions, to runoff or overflow into surface water. The operator of a facility that discharges such wastewater to the land must inform the appropriate Ecology Regional Office, identified in Special Condition S-6.2.1 (Notification of Non-Compliance) so that Ecology may determine whether that facility must apply for coverage under an individual State waste discharge permit to ensure that waters of the State (both underground and surface) are protected from degradation.

Ecology may require facilities that meet the requirements of Special Condition S-1.1 (Activities, Discharges, and Facilities that Require this Permit) but cannot meet the water quality requirements of Special Condition S-2.2 (Discharge Limits) to apply for an individual permit. Such facilities with coverage under this general permit will retain permit coverage until the effective date of the individual permit.

# S-2 LIMITS AND STANDARDS

#### S-2.1 Compliance with Standards

The Permittee must comply with the technology- and water quality-based effluent limits and standards described in this Condition. Ecology has based these limits, as described in the accompanying Fact Sheet, on either:

- Technology-based limits, after considering the monitoring data reported by the WTP Permittees from 2009 through 2013, and the expected implementation of all known, available, and reasonable methods of prevention, control, and treatment (AKART); or
- Surface water quality criteria for the protection of human health and aquatic biota, after accounting for a mixing zone consistent with Chapter 173-201A WAC. The resultant fresh water mixing zones were:

<u>Acute exposure</u>: 30 feet downstream from the point of discharge with an effluent unit volume no greater than 2.5 percent of the receiving water unit volume.

<u>Chronic exposure</u>: 300 feet downstream from the point of discharge with an effluent unit volume no greater than 25 percent of the receiving water unit volume.

# S-2.2 Discharge Limits

The Permittee must comply with effluent limits for settleable solids, pH, and total residual chlorine. While the discharge limits for settleable solids and pH will remain constant for the entire 5-year term of this permit, the discharge limits for total residual chlorine will decrease for existing Permittees after the first year (September 2014 through August 2015). Existing Permittees will thereby have sufficient time to adjust their treatment processes, if necessary, to achieve the smaller daily limit during the remaining 4 years of the term of this permit (September 2015 through August 2019).

EFFLUENT LIMITS			
Parameter	Effective Term	Average Monthly Discharge Limit (a)	Maximum Daily Discharge Limit (b)
Settleable Solids	Sept 2014 – Aug 2019	0.1 mL/L	0.2 mL/L
Total Residual Chlorine	Sept 2014 – Aug 2015	0.07 mg/L	0.15 mg/L
Total Residual Chlorine	Sept 2015 – Aug 2019	Not applicable	0.07 mg/L
Parameter	Effective Term	Daily Minimum	Daily Maximum
pH (c)	Sept 2014 – Aug 2019	6.0 S.U.	9.0 S.U.

(a) The average monthly discharge limit is defined as the greatest average of daily discharges allowed for a calendar month, calculated as the sum of all the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. Where only one sample is measured in a month, its value may not exceed the monthly average.

- (b) The maximum daily discharge limit is defined as the greatest daily discharge allowed during a calendar day. Except for pH, if a parameter is measured more than once within a single calendar day, the daily discharge is the arithmetic average of the values from that single day.
- (c) The averaging of pH values is not allowed.

# S-2.3 Impaired Water Bodies and TMDL Requirements

The Permittee must comply with any applicable total maximum daily load (TMDL) determination that is completed and accepted by the U.S. Environmental Protection Agency (EPA) as of either the effective date of this permit or the effective date of facility coverage under this permit, whichever is later.

If the Permittee discharges to a water body listed as impaired per the 303(d) list approved by the U.S. EPA on December 21, 2012, the Permittee must monitor for the listed pollutant(s) unless it demonstrates that the listed pollutant(s) is not present in its discharge. The applicable listing of impairment is the listing that is final as of the effective date of this permit or the effective date of facility coverage under this permit, whichever is later. Ecology will set the monitoring schedule by administrative order.

1. A new facility may not cause or contribute to an exceedance of the listed pollutant(s).

2. An existing facility that has the potential to cause or contribute to impairment of a listed water body must demonstrate that its discharge will cause no increase in the pollutant(s) of concern, identify steps that it can take to reduce the discharge of those pollutant(s), and incrementally implement those steps. Ecology will either set the schedule for meeting this requirement with an administrative order or require an individual permit for the facility.

# S-3 PLANNING REQUIREMENTS

### S-3.1 Operations and Maintenance Manual

The Permittee must prepare an operations and maintenance (O&M) manual in accordance with WAC 173-240-150. New facilities must submit their O&M manual within 30 days of receiving coverage under this permit. Existing facilities must consider any necessary updates and submit their updated O&M manual no later than **January 1, 2015**. The Permittee must submit its O&M manual to Ecology electronically, in a portable document format (pdf), via the Permittee's SecureAccess Washington account at <u>https://secureaccess.wa.gov/ecy/wqwebportal/</u>. More information is available at the "Water Quality Permitting Portal" at <u>http://www.ecy.wa.gov/programs/wq/permits/paris/portal.html</u>.

The O&M manual must identify the main water treatment processes employed by the facility and document the procedures for operating and maintaining the wastewater treatment and discharge systems (e.g., the filter backflush systems). At a minimum the O&M manual must include:

- 1. Maintenance schedule and procedures for treatment and discharge systems.
- 2. Monitoring necessary to assure proper functioning of treatment and discharge systems.
- 3. Emergency shut down and containment procedures in the event of uncontrolled discharge due to plant maintenance activities, severe stormwater events, start ups or shut downs, or other causes.

The Permittee must update the O&M manual as necessary to reflect changes in the water treatment processes and procedures and must keep the manual on site and available for inspection by Ecology.

# S-3.2 Solid Waste Control Plan

The Permittee must maintain a solid waste control plan. New facilities must submit their solid waste control plan within 30 days of receiving coverage under this permit. Existing facilities must submit their updated solid waste control plan by **January 1, 2015**. The Permittee must submit its solid waste control plan to Ecology electronically, in a portable document format (pdf), via the Permittee's SecureAccess Washington account at

https://secureaccess.wa.gov/ecy/wqwebportal/. More information is available at the "Water Quality Permitting Portal" at http://www.ecy.wa.gov/programs/wq/permits/paris/portal.html.

The plan must include, at a minimum, a description of the solid waste, identification of the source of the solid waste, the generation rate of the solid waste, and identification of the disposal methods of the solid waste. The plan must comply with any applicable requirements of the jurisdictional health department and any local requirements for a solid waste permit. The Permittee must update the plan as necessary to reflect changes in solid waste handling and disposal and keep the plan on site and available for inspection by Ecology.

# S-3.3 Stormwater Pollution Prevention Plan

Permittees that discharge stormwater associated with industrial activity from their sites to surface water or to a separate stormwater sewer system must prepare a stormwater pollution prevention plan (SWPPP). New facilities must submit their SWPPP before receiving coverage under this permit and complete or implement all best management practices (BMPs) prior to producing the authorized discharge. Existing facilities must update their SWPPP and submit it to Ecology by **January 1, 2015**. The Permittee must submit its SWPPP to Ecology electronically, in a portable document format (pdf), via the Permittee's SecureAccess Washington account at <a href="https://secureaccess.wa.gov/ecy/wqwebportal/">https://secureaccess.wa.gov/ecy/wqwebportal/</a>. More information is available at the "Water Quality Permitting Portal" at <a href="https://www.ecy.wa.gov/programs/wq/permits/paris/portal.html">https://www.ecy.wa.gov/programs/wq/permits/paris/portal.html</a>.

Existing facilities must implement operational or source control BMPs within the first 6 months following the effective date of this permit and complete treatment BMPs, if required, within the first year following the effective date of this permit.

- 1. The SWPPP must include the following:
  - (a) Assessment and description of existing and potential pollutant sources.
  - (b) Description of the operational BMPs.
  - (c) Description of selected source-control BMPs.
  - (d) When necessary, a description of the erosion and sediment control BMPs.
  - (e) When necessary, a description of the treatment BMPs.
  - (f) Implementation schedule.
- 2. The descriptions of BMPs must include the following:
  - (a) <u>Operational Source Control BMPs</u>: Operational BMPs are common to all facilities and include at the minimum:
    - i. Responsible Party: Identification by name or position the person responsible for stormwater management.
    - ii. Good Housekeeping: Listing of ongoing maintenance and cleanup activities, as appropriate, of areas that may contribute pollutants to stormwater discharges.
    - iii. Preventive Maintenance: Schedule for inspection and maintenance of the stormwater drainage and treatment systems (if any) and plant equipment and systems that could fail and result in contamination of stormwater.

- (b) <u>Structural Source Control BMPs</u>: Source control BMPs eliminate or minimize the exposure of stormwater to pollutants.
- (c) <u>Treatment BMPs</u>: Treatment BMPs reduce the amount of pollutants in stormwater and maintain compliance with water quality standards.
- (d) <u>Erosion and Sediment Control BMPs</u>: Erosion and sediment control BMPs prevent soil erosion. The SWPPP must identify the locations on site with the potential for soil erosion that could contaminate stormwater.

The Permittee must update the SWPPP as necessary to reflect changes in potential pollutant sources and BMPs and must keep the plan on site and available for inspection by Ecology.

#### S-3.4 Other Spill Contingency Plan

The Permittee must have, maintain, and implement a spill plan for preventing the accidental release of pollutants to State waters and for minimizing damages if such a spill occurs. New facilities must submit their spill plan within 30 days of receiving coverage under this permit. Existing facilities must submit their updated spill plan by **January 1, 2015**. The Permittee must submit its updated spill plan to Ecology electronically, in a portable document format (pdf), via the Permittee's SecureAccess Washington account at

<u>https://secureaccess.wa.gov/ecy/wqwebportal/</u>. More information is available at the "Water Quality Permitting Portal" at <u>http://www.ecy.wa.gov/programs/wq/permits/paris/portal.html</u>.

At a minimum, the plan must include the following:

- 1. Documentation of the procedures the Permittee will employ for the prevention, containment, and control of spills or unplanned discharges of the following:
  - (a) Oil and petroleum products.
  - (b) Materials which, when spilled or otherwise released into the environment, are designated dangerous waste or extremely hazardous waste by the procedures set forth in WAC 173-303-070.
  - (c) Other materials that may become pollutants or cause pollution upon reaching waters of the State, such as untreated hyper-chlorinated water.
- 2. A description of the reporting system that will alert responsible managers and legal authorities in the event of a spill.
- 3. A description of the preventive measures and facilities that prevent, contain, or treat spills (including an overall facility plot showing drainage patterns).
- 4. A list of all oil and chemicals used, processed, or stored at the facility that may be spilled into State waters.

For the purpose of meeting this requirement, plans and manuals, or portions thereof, required by 33 CFR 154; 40 CFR 109; 40 CFR 110; 40 CFR Part 112; the Federal Oil Pollution Act of 1990, Chapter 173-181; and contingency plans required by Chapter 173-303 WAC may be included by reference as long as they are available on site.

The Permittee must review the plan at least annually and update it as necessary. The reviewer must initial and date the plan and note any updates to the plan to keep it current. This plan must be kept on site and be available for inspection by Ecology.

# S-4 OPERATIONAL REQUIREMENTS

# S-4.1 Operation and Maintenance

The Permittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed to achieve compliance with this permit. Where design criteria have been established, the Permittee may not allow flows or waste loadings to exceed approved design criteria or approved revisions thereto.

Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that the Permittee installs only when their operation is necessary to achieve compliance with this permit.

# S-4.2 Operational Restrictions

#### S-4.2.1 Bypass Prohibition and Procedures

Bypass, which is the intentional diversion of a wastestream from any portion of a treatment facility, is prohibited, and Ecology may take enforcement action against a Permittee for bypass unless one of the following three circumstances is applicable.

1. Bypass for Essential Maintenance without the Potential to Cause Violation of Permit Limits or Conditions.

Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limits or other Conditions of this permit, or adversely impact public health as determined by Ecology prior to the bypass. The Permittee shall submit prior notice, if possible, at least 10 days before the date of the bypass.

2. Bypass which is Unavoidable, Unanticipated, and Results in Non-Compliance with this Permit. This bypass is permitted only if:

Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass; and

There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment downtime (but not if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance), or transport of untreated wastes to another treatment facility; and

Ecology is properly notified of the bypass as required in General Condition G-2.7 (Notification of Non-Compliance).

3. Bypass which is Anticipated and has the Potential to Result in Non-Compliance with this Permit.

For probable construction bypasses, the need to bypass is to be identified as early in the planning process as possible. Analyses of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing, and of the cost-effectiveness of alternatives, including comparative resource damage assessment, must be considered during preparation of the engineering report or facilities plan and plans and specifications and must be included to the extent practical. In cases where the probable need to bypass is determined early, continued analysis is necessary up to and including the construction period in an effort to minimize or eliminate the bypass.

Ecology will consider the following factors prior to issuing an administrative order for this type bypass:

- (a) Whether the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
- (b) Whether feasible alternatives to the bypass exist, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
- (c) Whether the bypass is planned and scheduled to minimize adverse effects on the public and the environment.

After consideration of the above factors, the anticipated adverse effects of the proposed bypass, and any other relevant factors, Ecology will approve or deny the request. The public must be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to bypass will be by administrative order issued by Ecology under Chapter 90.48 RCW.

#### S-4.2.2 Application of Products

Any addition of chemicals to treat the wastewater (discharge) must comply with manufacturers' recommendations and be administered only at a rate appropriate for treatment. The addition of excessive quantities of treatment chemicals to the wastewater is prohibited. The use of treatment chemicals that will result in a water quality violation in the receiving water is prohibited.

# S-4.2.3 Solid Waste Management

The Permittee must handle and dispose of all solid waste in such a manner as to prevent its entry into waters of the State, either ground water or surface water.

### S-4.2.4 Spill Prevention and Control

The Permittee must prevent or control pollutant discharges from site runoff, spillage and leaks, sludge and waste disposal, and materials handling and storage.

# S-5 MONITORING REQUIREMENTS

# S-5.1 Monitoring Objectives

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored discharge or pollutant, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions affecting effluent quality. Monitoring must occur at intervals sufficiently frequent to yield data that reasonably characterize the nature of the monitored discharge or pollutant.

Ecology may require by administrative order monitoring of intake water, influent to treatment facilities, internal waste streams, and/or receiving waters to verify compliance with net discharge limits or removal requirements, to verify the maintenance of proper waste treatment or control practices, or to determine the effects of the discharge on the waters and sediments of the State.

# S-5.2 Sampling Procedures

#### S-5.2.1 Event Criteria, Frequency, and Timing

Permittees must monitor the wastewater (discharge) in accordance with the testing schedule appropriate for their facilities, based on the design maximum production capacity of product water (drinking and industrial water) and the source of the raw source water (surface water or ground water). The "design maximum production capacity" is the amount of finished water that a treatment facility is designed to produce at peak output and 24-hour production. For the purpose of determining whether the source of raw water is surface water or ground water, Ecology will use the same classification method as the Washington State Department of Health (DoH), which additionally specifies a third source of raw water: "ground water under the direct influence of surface water" (GWI). Potential GWI sources are defined as all infiltration galleries, Ranney wells, springs, and wells less than 50 feet deep located within 200 feet of surface water. Ecology will consider these sources the same as surface water unless the DoH designates a specific source at a particular WTP as ground water.

WTP facilities are divided into two monitoring groups as follows:

- **Group 1:** Facilities designed to produce less than 4 million gallons per day (gpd) <u>or</u> use only ground water for their source water. Group 1 facilities must follow testing schedule A below.
- **Group 2:** Facilities designed to produce 4 million gallons per day or more <u>and</u> treat surface water or GWI. Group 2 facilities must follow testing schedule B below.

	< 4 Million gpd	$\geq$ 4 Million gpd
Surface Water / GWI	Group 1	Group 2
Ground Water	Group 1	Group 1

Parameter	Analytical Method (Accuracy)	Detection Limit	Quantitation Level	Sampling Frequency	Sample Type
Settleable Solids	SM 2540F – Imhoff Cone (±0.1 mL/L or ±1.0%)	0.1 mL/L	0.1 mL/L	Monthly	Grab
рН	SM 4500-H <sup>+</sup> B – Meter ( $\pm$ 0.02 standard units)	NA	NA	Monthly	Grab
Total Residual Chlorine	SM 4500 Cl G – Photometer ( <u>+</u> 0.01 mg/L)	0.01 mg/L	0.02 mg/L	Monthly	Grab
Turbidity	EPA 180.1 – Nephelometric ( <u>+</u> 0.5 NTU <u>+</u> 1.0%)	0.1 NTU	0.5 NTU	Monthly	Grab
Total Arsenic	EPA 200.8 – ICP/MS ( <u>+</u> 0.1 μg/L)	0.1 µg/L	0.5 µg/L	Monthly Third year only	Grab
Dissolved Arsenic	EPA 200.8 – ICP/MS ( <u>+</u> 0.1 μg/L)	0.1 µg/L	0.5 µg/L	Monthly Third year only	Grab
Total Daily Volume of Discharge	Meter or Estimate ( <u>+</u> 30 gallons)	10 gallons per event	10 gallons per event	Daily Year 1: If available Years 2-5: Required	NA
Total Daily Number of Discharge Events	Count	Count	Count	Daily Year 1: If available Years 2-5: Required	NA

#### **Testing Schedule A: Monitoring Methods and Frequency for Group 1 WTP Facilities**

Parameter	Analytical Method (Accuracy)	Detection Limit	Quantitation Level	Sampling Frequency	Sample Type
Settleable Solids	SM 2540F – Imhoff Cone ( <u>+0.1 mL/L or +1.0%</u> )	0.1 mL/L	0.1 mL/L	Weekly	Grab
рН	SM 4500-H <sup>+</sup> B – Meter ( $\pm$ 0.02 standard units)	NA	NA	Weekly	Grab
Total Residual Chlorine	SM 4500 Cl G – Photometer ( <u>+</u> 0.01 mg/L)	0.01 mg/L	0.02 mg/L	Weekly	Grab
Turbidity	EPA 180.1 – Nephelometric ( <u>+</u> 0.5 NTU <u>+</u> 1.0%)	0.1 NTU	0.5 NTU	Weekly	Grab
Total Arsenic	EPA 200.8 – ICP/MS ( <u>+</u> 0.1 μg/L)	0.1 µg/L	0.5 µg/L	Monthly Third year only	Grab
Dissolved Arsenic	EPA 200.8 – ICP/MS ( <u>+</u> 0.1 μg/L)	0.1 µg/L	0.5 µg/L	Monthly Third year only	Grab
Total Daily Volume of Discharge	Meter or Estimate ( <u>+</u> 30 gallons)	10 gallons per event	10 gallons per event	Daily Year 1: If available Years 2-5: Required	NA
Total Daily Number of Discharge Events	Count	Count	Count	Daily Year 1: If available Years 2-5: Required	NA

**Testing Schedule B: Monitoring Methods and Frequency for Group 2 WTP Facilities** 

Analytical methods are from "Methods for Chemical Analysis of Water and Wastes," U.S. EPA, Environmental Monitoring Systems Laboratory – Cincinnati, EPA-600/4-020, Revised March 1983 and 1979; and "Precision and Recovery Statements for Methods for Measuring Metals," Appendix D of 40 CFR Part 136.

(a) <u>Detection Limit</u>:

The minimum concentration of an analyte that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero as determined by the procedure given in 40 CFR Part 136, Appendix B.

- (b) <u>Quantitation Level</u>: (also known as minimum level of quantitation)
  - (1) The lowest level at which the entire analytical system must give a recognizable signal and acceptable calibration point for the analyte. It is equivalent to the concentration of the lowest calibration standard, assuming that the laboratory has used all method-specified sample weights, volumes, and cleanup procedures. The quantitation level is calculated by multiplying the method detection limit by 3.18 and rounding the result to the number nearest to (1, 2, or 5) x 10<sup>n</sup>, where n is an integer. (64 FR 30417)
  - (2) The smallest detectable concentration of analyte greater than the method detection limit where the accuracy (precision & bias) achieves the objectives of the intended purpose. (Report of the Federal Advisory Committee on Detection and Quantitation Approaches and Uses in Clean Water Act Programs, Submitted to the U.S. EPA December 2007.)

The first monitoring period begins on the effective date of this permit.

During the first year of this permit term, i.e., from September 2014 through August 2015, Permittees must report the total daily volume of their discharge and the total daily number of discharge events only if that information is readily available. Beginning in the second year of this permit term, i.e., beginning in September 2015, all Permittees must monitor for and report these two flow parameters. Monitoring for total and dissolved arsenic is required for only the 12 monitoring periods of the third year of this permit term, i.e., from September 2016 through August 2017 for existing and covered Permittees, or for the first 12 months of coverage for new Permittees whose coverage begins after September 2016.

Based on the results of arsenic monitoring, Ecology may modify this permit by extending the term when monitoring for arsenic is required; adding one or more effluent limits for arsenic or other parameters; adding monitoring requirements for other parameters; adding monitoring requirements for other environmental matrices, such as raw water sources and receiving waters; or changing the activities, discharges, and facilities that require this permit or are excluded from coverage under this permit.

# S-5.2.2 Field Documentation

For each measurement or sample taken, the Permittee must record the following information:

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

# S-5.2.3 Location

The Permittee must conduct all monitoring as close to the point of discharge to surface water (end of pipe) as is reasonably possible.

# S-5.2.4 Sampling Methods

Sampling methods used to meet the monitoring requirements specified in this permit must conform to the latest revision of the "Guidelines Establishing Test Procedures for the Analysis of Pollutants" contained in 40 CFR Part 136, (or as applicable in 40 CFR subchapters N [Parts 400-471] or O [Parts 501-503]) unless otherwise specified in this permit. Ecology may specify alternative methods only for parameters without limits or without a U.S. EPA-approved test method in 40 CFR Part 136. Sampling must yield samples representative of the wastewater discharged by the Permittee.

# S-5.3 Analytical Procedures

# S-5.3.1 Laboratory Accreditation

All monitoring data required by Ecology must be prepared by a laboratory registered or accredited under the provisions of Chapter 173-50 WAC, "Accreditation of Environmental Laboratories." Flow, temperature, settleable solids, specific conductance, pH, turbidity, and internal process control parameters are exempt from this requirement, except that specific

conductance, pH, and turbidity must be accredited if the laboratory must otherwise be registered or accredited. An accredited laboratory must provide arsenic and chlorine data.

# S-5.3.2 Laboratory Documentation

All laboratory reports providing monitoring data must include the following information: sampling date, sample location, date of analysis, parameter name, CAS number, analytical method/number, method detection limit (MDL), laboratory reporting limit or practical quantitation level (PQL), reporting units, and concentration detected. Analytical results from samples sent to a contract laboratory must also include information on the chain of custody, QA/QC results, and documentation of accreditation for each parameter.

# S-5.3.3 Laboratory Methods

The Permittee must analyze all wastewater samples for the parameters and using the methods, MDLs, and PQLs specified in Special Conditions S-5.2.1 (Event Criteria, Frequency, and Timing) and S-5.2.4 (Sampling Methods) unless:

- Another permit condition specifies other methods, MDLs, or PQLs; or
- The method used produces measureable results in the sample, and the U.S. EPA has listed it as an EPA-approved method in 40 CFR Part 136.

The analyses must also include any other parameter deemed necessary by Ecology. If the Permittee uses an alternative method, not specified in the permit and allowed as above, it must report the test method, MDL, and PQL on the discharge monitoring report or other required report. If the Permittee is unable to obtain the required MDL or PQL in its effluent due to matrix effects, the Permittee must submit a matrix-specific MDL and PQL to Ecology along with appropriate laboratory documentation.

# S-5.4 Supporting Documentation

The Permittee must maintain supporting documentation for all field and laboratory measurements and any calculations used to determine the total daily volume of discharges and total daily number of discharge events.

# S-6 REPORTING AND RECORDKEEPING REQUIREMENTS

# S-6.1 Permit-Required Submittals

Unless otherwise specified in this permit, the Permittee must use the on-line "Water Quality Permitting Portal" at <u>http://www.ecy.wa.gov/programs/wq/permits/paris/portal.html</u> to submit all permit-required reports by the specified due dates. Where another condition of this permit requires submission of hardcopy paper documentation, the Permittee must ensure that the submission is postmarked or received by Ecology no later than the specified due date. The

Permittee must submit hardcopy paper documentation to the water quality permit coordinator at the appropriate address provided in Special Condition S-6.2.1 (Notification of Non-Compliance).

# S-6.2 Notification and Posting Requirements

# S-6.2.1 Notification of Non-Compliance

In the event that the Permittee fails to comply with any of the terms and conditions of this permit, or in the event of a spill or other discharge not authorized by this permit, such that the resulting non-compliance may threaten human health or the environment, the Permittee must:

- 1. Immediately take action to stop, contain, and cleanup unauthorized discharges and otherwise stop the non-compliance, correct the problem, and minimize any adverse impacts to waters of the State.
- 2. Immediately notify Ecology of a spill by calling the appropriate regional Emergency Response Tracking System (ERTS) phone number and the regional permit administrator. The phone numbers are provided below:

Ecology Central Regional Office Water Quality Program 15 West Yakima Avenue, Suite 200 Yakima, WA 98902-33887 509-575-2490 TDY: 711 or 1-800-833-6341	<b>Counties</b> Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, and Yakima
Ecology Eastern Regional Office Water Quality Program North 4601 Monroe Spokane, WA 99205-1295 509-329-3400 TDY: 711 or 1-800-833-6341	<b>Counties</b> Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, and Whitman
Ecology Northwest Regional Office Water Quality Program 3190 - 160th Avenue SE Bellevue, WA 98008-5452 (425) 649-7000 TDY: 711 or 1-800-833-6341	<b>Counties</b> Island, King, Kitsap, San Juan, Skagit, Snohomish, and Whatcom

- 3. Notify the Ecology regional permit administrator of any other non-compliance, including any unanticipated bypass and/or upset that exceeds any effluent limit in the permit, orally within 24 hours from the time the Permittee becomes aware of the non-compliance.
- 4. If applicable, repeat the sampling and analysis that identified the non-compliance, and submit the results to Ecology within 5 days of becoming aware of the non-compliance.
- 5. Submit a detailed written report to Ecology at the appropriate address provided in Step 2 above within 5 days of the time the Permittee becomes aware of the non-compliance. The report must include all of the following information, at a minimum:
  - (a) A description of the nature and cause of the non-compliance, including the quantity and quality of any unauthorized discharges.
  - (b) The period of non-compliance, including the beginning and ending dates and times of the non-compliance, or if the Permittee has not yet corrected the non-compliance, the anticipated date and time when the Permittee will return to compliance.
  - (c) The results of any additional sampling and analyses.
  - (d) A description of the corrective action taken or planned by the Permittee.
  - (e) Steps the Permittee has taken or plans to take to reduce, eliminate, and prevent a recurrence of the non-compliance.
  - (f) Any other pertinent information.
- 6. Ecology may temporarily waive the written report required in Step 5, above, on a caseby-case basis upon written request if it has received a timely oral report, but in no case for more than 30 days after the Permittee becomes aware of the non-compliance.

Reportable failures of compliance include, but are not limited to:

- 1. Any bypass that exceeds any effluent limit in this permit.
- 2. Any upset that exceeds any effluent limit in this permit.
- 3. Any exceedance of a maximum daily discharge limit for any of the pollutants listed in Special Condition S-2 (Limits and Standards).

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with any of the terms and conditions of this permit or from any resulting liability for failure to comply.

# S-6.2.2 Notification of an Anticipated Bypass

The Permittee must notify Ecology at least 30 days before the planned date of any bypass which is anticipated and has the potential to result in non-compliance with this permit. The notice must contain: (1) A description of the bypass and its cause; (2) An analysis of all known alternatives that would eliminate, reduce, or mitigate the need for bypassing; (3) A cost-effectiveness analysis of alternatives including comparative resource damage assessment; (4) The minimum and maximum duration of the bypass under each alternative; (5) A recommendation for the preferred alternative for conducting the bypass; (6) The projected date of bypass initiation; (7) A statement of compliance with SEPA; (8) A request for modification of water quality standards as provided for in WAC 173-201A-410, if an exceedance of any water quality standard is anticipated; and (9) Steps taken or planned to reduce, eliminate, and prevent recurrence of the bypass.

### S-6.2.3 Notification of a Change in Covered Activities

The Permittee must report to Ecology any facility expansion, production increase, or significant process modification that may cause a new or increased discharge of pollutants that may cause either an exceedance of an effluent limit or a discharge beyond that reported in the original application for coverage. This report must be in the form of a new application or a supplement to the original application.

Significant process changes include a substantially increased discharge of pollutants or a change in the nature of the discharge of pollutants, including:

- A wastewater discharge increase of 25% more than the previous permit covered;
- A new source of raw water that requires different treatment processes, consequently altering the characteristics of the discharged wastewater; or
- A change or addition of treatment to remove a substance not previously removed, consequently altering the characteristics of the discharged wastewater.

#### S-6.3 Required Reports

#### S-6.3.1 Additional Monitoring by Permittee

If the Permittee monitors any pollutant more frequently than required by Special Condition S-5 (Monitoring Requirements) of this permit, then the Permittee must include the results of such monitoring in the calculation and reporting of the data submitted in the Permittee's discharge monitoring report.

#### S-6.3.2 Bypasses

The Permittee must report bypasses to Ecology as described in Special Condition S-4.2.1 (Bypass Prohibition and Procedures).

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#### S-6.3.3 Discharge Monitoring Report (DMR)

The Permittee must submit a DMR each calendar month, whether or not a discharge occurred. If the facility did not discharge during a given monitoring period, the Permittee must submit a completed DMR with "No Discharge" entered as the DMR Reporting Code. Submission of DMRs must be completed by no later than the 15th day of the month following the completed monitoring period.

Permittees must sign up for and submit monitoring data through the Ecology WebDMR program via the Permittee's SecureAccess Washington account, which is accessible at <u>https://secureaccess.wa.gov/ecy/wqwebportal/</u>. More information is available at the "Water Quality Permitting Portal" at <u>http://www.ecy.wa.gov/programs/wq/permits/paris/portal.html</u> and at "About WQWebDMR" at <u>http://www.ecy.wa.gov/programs/wq/permits/paris/webdmr.html</u>.

Permittees unable to submit electronically (e.g., those who do not have an Internet connection) must contact the Ecology water treatment plant permit administrator at the locations provided in General Condition G-2.7 (Notification of Non-Compliance) to request a waiver and obtain instructions on how to obtain a hardcopy paper DMR. Permittees with waivers must submit hardcopy paper DMRs to be received by Ecology no later than the 15th day of the month following the completed monitoring period.

All DMRs must contain the following information:

- 1. Include data for each of the parameters for which monitoring is required by Special Condition S-5 (Monitoring Requirements) and as required by the DMR entry screen or hardcopy paper form. Report a value for each day sampling occurred and for the monthly values.
- 2. If the Permittee did not discharge wastewater during a given monitoring period, enter the "no discharge" reporting code.
- 3. Record onto the DMR those analytical values reported as "less than the detection limit" by entering "<" followed by the numeric value of the detection limit (e.g., < 2.0). If the method used did not achieve the detection limit or quantitation level identified in Special Condition S-5.2.1 (Event Criteria, Frequency, and Timing), report the actual detection limit and quantitation level in the DMR comments section or other location provided.
- 4. Report the analytical test method actually used in the DMR comments section or other location provided if the laboratory used an alternative method not specified in the permit and as allowed in Special Condition S-5.2.1 (Event Criteria, Frequency, and Timing).
- 5. Calculate average and total values (unless otherwise specified in the permit) using:
  - (a) For all quantitative results measured at levels equal to or greater than the agencyrequired detection limit value: The reported numeric value.

- (b) For results reported at less than the detection limit numerically (e.g., <0.01 mg/L or not detected <u>with</u> a specified detection limit value): One-half the reported detection limit value.
- (c) For results reported as less than the detection limit non-numerically (e.g., ND or not detected) and <u>without</u> a specified detection limit value,
  - i. If the same parameter was detected in another sample from the same monitoring point for the reporting period: One-half the detection limit value reported for the other sample.
  - ii. If the same parameter was not detected in another sample from the same monitoring point for the reporting period: Zero.
- 6. Submit an electronic copy of the laboratory report as an attachment using the link for "About WQWebDMR" or as a paper copy along with the hardcopy paper DMR form. Laboratory reports must include a record of the chain of custody, QA/QC results, and documentation of accreditation for each parameter.

# S-6.4 Record Retention

The Permittee must retain records of all monitoring information resulting from any monitoring activity required as a condition of the application for or as a condition of coverage under this permit for a minimum of 5 years. Such information must include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. The Permittee must extend this period of retention during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by Ecology.

The Permittee must keep a copy of this permit at the facility and make it available upon request to Ecology inspectors.

# S-7 PERMIT ADMINISTRATION

# S-7.1 Application for Coverage

S-7.1.1 Who May Apply for Coverage

New facilities or facilities currently operating without permit coverage that qualify under Special Condition S-1 (Permit Coverage) must apply for coverage under this general permit.

S-7.1.2 How to Obtain Coverage

An applicant must submit to Ecology a completed and signed application for coverage (an electronic notice of intent, or eNOI) specifically prescribed by Ecology for this general permit.

All such applications for coverage must be submitted within 180 days prior to commencement of the activity which may result in the discharge of any pollutant to waters of the State.

All applications for coverage under this permit must:

- 1. Contain sufficient information necessary for adequate program implementation;
- 2. Contain the legal name and address of the owner or operator, the facility name and address, type of facility and discharges, and the receiving water bodies;
- 3. Bear a certification of correctness;
- 4. Be signed by a responsible person, as identified in General Condition G-4.2 (Certification and Signature Requirements); and
- 5. Include any other information that Ecology deems relevant.

### S-7.1.3 Public Notice

All new applicants for this permit and any existing Permittee that plans a significant process change, as described in Special Condition S-6.3.2 (Notification of a Change in Covered Activities), must cause notice to be circulated within the geographical area of the proposed discharge and certify this fact to Ecology. Such notice must:

- 1. Be published twice, with at least a 1-week interval between, in the newspaper of greatest general circulation within the county in which the discharge is proposed to occur;
- 2. Be circulated by any other method as Ecology may direct; and
- 3. Contain, at a minimum, the following:
  - (a) The name, address, and location of the facility requesting coverage under this permit;
  - (b) The applicant's activities or operations that result in a discharge;
  - (c) The name of the general permit under which coverage is requested; and
  - (d) The following statement: "Any person desiring to present their views to Ecology regarding this application may do so in writing, within 30 days of the last date of publication of this notice. Comments should be submitted to Ecology. Any person interested in Ecology's action on this application may notify Ecology of their interest within 30 days of the last date of publication of this notice."

# S-7.1.4 Proof of Compliance with SEPA

All new applicants must submit to Ecology, along with an application for coverage, proof and certification that their facility has met all applicable requirements of the State Environmental Policy Act (SEPA) under Chapter 197-11 WAC.

# **GENERAL CONDITIONS**

# G-1 OPERATION AND MAINTENANCE

#### G-1.1 Activities and Discharges Authorized by this Permit

All activities and discharges authorized by this permit must be consistent with the terms and conditions of this permit. The Permittee is at all times responsible for continuous compliance with the terms and conditions of this permit. The discharge of any pollutant more frequently than or at a concentration or amount in excess of that authorized by this permit constitutes a violation of the terms and conditions of this permit.

### G-1.2 Discharges from Activities Not Covered by this Permit

The discharge of pollutants resulting from activities not covered under this permit for which the discharger has requested coverage is a violation of this permit.

### G-1.3 Maintaining Compliance if Treatment System Fails

The Permittee, in order to maintain compliance with this permit, must control production and all discharges such that, in the event of reduction, loss, failure, or bypass of any portion of the treatment system, the Permittee maintains compliance with this permit until the treatment system is fully restored or an alternate method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment system is reduced, lost, or fails.

#### G-1.4 Removed Substances

The Permittee must not allow collected screenings, grit, solids, sludges, or other pollutants removed in the course of treatment or control of the wastewater and/or stormwater covered by this permit to be resuspended or reintroduced to the storm sewer system or to waters of the State.

# G-1.5 Upset

An upset is an exceptional incident in which an unintentional and temporary non-compliance with technology-based permit effluent limits occurs due to factors beyond the reasonable control of the Permittee. An upset does not include non-compliance to the extent caused by operational error, improperly designed treatment facilities, inadequate storage or treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for non-compliance with such technology-based permit effluent limits if the requirements of this paragraph are met. No determination made during administrative review of claims that non-compliance was caused by upset, and before an action for non-compliance, is a final administrative action, subject to judicial review. A Permittee who wishes to establish the affirmative defense of upset must

demonstrate, through properly signed contemporaneous operating logs or other relevant evidence, that:

- 1. An upset occurred, and that the Permittee can identify the cause(s) of the upset;
- 2. The permitted facility was being properly operated at the time of the upset;
- 3. The Permittee submitted notice of the upset as required in Special Condition S-6 (Reporting and Recordkeeping Requirements) of this permit; and
- 4. The Permittee complied with any remedial measures required under this permit.

In any enforcement proceeding, the Permittee seeking to establish the occurrence of an upset has the burden of proof.

# G-2 OTHER DUTIES AND RESPONSIBILITIES

# G-2.1 Additional Monitoring Requirements

Ecology may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

# G-2.2 Compliance with Other Laws and Regulations

Nothing in this permit excuses the Permittee from any requirement for compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

The Permittee must comply with effluent standards and prohibitions for toxic pollutants established under Section 307(a) of the Clean Water Act, the Resource Conservation and Recovery Act (Public Law 95.190), the Hazardous Waste Management Act (Chapter 70.105 RCW), the Solid Waste Management–Reduction and Recycling Act (Chapter 70.95 RCW), and all other applicable requirements of 40 CFR 122.41 and 122.42 within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

# G-2.3 Duty to Comply with this Permit

The Permittee must comply with all Conditions of this permit. Any permit non-compliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

# G-2.4 Duty to Mitigate

The Permittee must take all reasonable steps to minimize or prevent any discharge, use, or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

# G-2.5 Duty to Provide Information

The Permittee must provide to Ecology, within a reasonable time, all information that Ecology may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee must also provide to Ecology, upon request, copies of records required to be kept by this permit.

# G-2.6 Duty to Reapply

If the Permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the Permittee must reapply for coverage under this permit (or under an individual permit) at least 180 days prior to the specified expiration date of this permit. An expired general permit and coverage under the general permit continue in force and effect until Ecology issues a new general permit (or a new individual permit) or until Ecology cancels the general permit. Coverage under this permit continues for only those Permittees who reapply for coverage.

# G-2.7 Notification of Spills and Other Discharges

If the Permittee has knowledge of a discharge or spill that could constitute a threat to human health, welfare, or the environment, the Permittee must:

- 1. Take appropriate action to correct or minimize the threat to human health, welfare, and the environment.
- 2. Notify the Ecology regional office and other appropriate spill response authorities immediately, but in no case later than within 24 hours of obtaining that knowledge.
- 3. Immediately report spills or other discharges which might cause bacterial contamination of marine waters to the Ecology regional office and to the Department of Health, Shellfish Program.
- 4. Immediately report spills or discharges of oils or hazardous substances to the Ecology regional office and to the Washington Emergency Management Division.

The relevant 24-hour phone numbers are:

- Department of Ecology Northwest Regional Office (425) 649-7000
- Department of Ecology Southwest Regional Office (360) 407-6300
- Department of Ecology Central Regional Office (509) 575-2490
- Department of Ecology Eastern Regional Office (509) 329-3400

- Washington Emergency Management Division (800) 258-5990
- Department of Health Shellfish Program (360) 789-8962

# G-2.8 Plan Review Required

Prior to constructing or modifying any wastewater control facilities, the Permittee must provide all engineering reports and detailed plans and specifications to Ecology for approval in accordance with Chapter 173-240 WAC. Submission of engineering reports, plans, and specifications must occur in accordance with a compliance schedule issued by Ecology or at least 30 days before the time approval is desired. Construction and operation of the facilities must occur in accordance with the approved plans.

# G-2.9 Prohibited Discharges

Discharge of pollutants by the Permittee to waters of the State are prohibited except as authorized through coverage under this permit.

This permit does not authorize any person to discharge any of the following:

- 1. Any radiological, chemical, or biological warfare agent or high-level radioactive waste into waters of the State.
- 2. Any pollutants that the Secretary of the Army acting through the Chief, Corps of Engineers, finds would substantially impair anchorage and navigation.
- 3. Any pollutant that the U.S. EPA, not having waived its right to object pursuant to Section 402(e) of the Clean Water Act, has objected to in writing pursuant to Section 402(d) of the Clean Water Act.
- Any pollutant in conflict with plans or amendment thereto approved pursuant to Section 208(b) of the Clean Water Act.
- 5. Any pollutant subject to a toxic pollutant discharge prohibition under Section 307 of the Clean Water Act.
- 6. Any dangerous waste, as defined in the dangerous waste regulations, Chapter 173-303 WAC, into a subsurface disposal system, such as a well or drainfield.

# G-2.10 Reporting Other Information

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to Ecology, the Permittee must promptly submit such facts or information.

# G-3 ENFORCEMENT AND PENALTIES

# G-3.1 Enforcement

Ecology, with the assistance of the attorney general, may sue in courts of competent jurisdiction to enjoin any threatened or continuing violation of this permit or the Conditions thereof without the necessity of a prior revocation of coverage under this permit. Any violation of the terms and conditions of this permit, the state Water Pollution Control Act, or the federal Clean Water Act are subject to the enforcement sanctions, direct and indirect, as provided for in WAC 173-226-250.

# G-3.2 Penalties for Tampering

Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, by imprisonment for not more than 2 years per violation, or by both fine and imprisonment. If a conviction of a person is for a violation committed after a first conviction of such person under this Condition, punishment shall be a fine of not more than \$20,000 per day of violation, by imprisonment of not more than 4 years, or by both fine and imprisonment.

Any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance, shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, by imprisonment for not more than 6 months per violation, or by both fine and imprisonment.

# G-3.3 Penalties for Violating Permit Conditions

Any person who is found guilty of willfully violating the terms and conditions of this permit is guilty of a crime and, upon conviction thereof, may be punished by a fine of up to \$10,000 and costs of prosecution, by imprisonment, or by both fine and imprisonment, in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of this permit may incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to \$10,000 for every such violation. Each and every such violation is a separate and distinct offense, and in the case of a continuing violation, every day's continuance may be deemed a separate and distinct violation.

# G-3.4 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege.

# G-3.5 Right of Inspection and Entry

The Permittee must allow Ecology or its authorized representative, upon the presentation of credentials and such other documents as may be required by law, at reasonable times, for the purpose of inspecting and investigating (a) Conditions relating to the pollution or the possible pollution of any waters of the State, or (b) Actual or suspected violations of water quality standards, effluent standards or limits, or the terms and conditions of this permit:

- 1. To enter upon the premises, public or private, in which an effluent source or discharge is located or where any records must be kept under the terms and conditions of this permit.
- 2. To have access to and to copy at reasonable cost any records that must be kept under the terms and conditions of this permit.
- 3. To investigate, inspect, or monitor any facility, operation, or practice regulated by or required under this permit, including:
  - (a) Postings.
  - (b) Collection, control, treatment, pollution management, and discharge facilities.
  - (c) Monitoring equipment or methods.
- 4. To sample or monitor any discharge, internal waste stream, substances, or parameters at any location, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

"Reasonable times" includes regular business hours and any other times when Ecology suspects the occurrence or evidence of a violation requiring immediate inspection.

# G-4 PERMIT MANAGEMENT AND COORDINATION

#### G-4.1 Appeal

Any person may appeal the terms and conditions of this general permit, as they apply to the appropriate class of dischargers, within 30 days of issuance of this general permit, in accordance with Chapter 43.21B RCW and Chapter 173-226 WAC.

Any person may appeal the terms and conditions of this general permit, as they apply to an individual discharger, within 30 days of the effective date of coverage of that discharger, in accordance with Chapter 43.21B RCW. Consideration of an appeal of general permit coverage of an individual discharger is limited to the general permit's applicability or inapplicability to that individual discharger.

The appeal of general permit coverage of an individual discharger does not affect any other dischargers covered under this general permit. If the terms and conditions of this general permit

are found to be inapplicable to any individual discharger(s), the matter shall be remanded to Ecology for consideration of issuance of an individual permit or permits.

# G-4.2 Certification and Signature Requirements

The Permittee must sign and certify as correct all applications, reports, or information that it provides to Ecology. The person who provides such signature and certification must be any of the following:

- 1. In the case of corporations, a responsible corporate officer who may be:
  - (a) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function or any other person who performs similar policy- or decision-making functions for the corporation; or
  - (b) The manager of one or more manufacturing, production, or operating facilities, provided:
    - i. The manager is authorized to make management decisions which govern the operation of the permitted facility or activity, including having the explicit or implicit duties of making major capital investment recommendations and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations;
    - ii. The manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and
    - iii. Where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- 2. In the case of a partnership, a general partner.
- 3. In the case of a sole proprietorship, the proprietor.
- 4. In the case of a municipal, state, or other public facility or activity, either a principal executive officer or ranking elected official.
- 5. A duly authorized representative of a person identified among items 1 through 4 of this Condition. A person is a duly authorized representative only if:
  - (a) A person identified among items 1 through 4 of this Condition makes the authorization in writing and submits it to Ecology; and
  - (b) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity or a position having overall

responsibility for environmental matters for the Permittee. A duly authorized representative may thus be either a named individual or any individual occupying a named position.

If an authorization under item 5 of this Condition is no longer accurate because a different individual or position has responsibility for the overall operation of the facility or activity, the Permittee must provide to Ecology a new authorization satisfying the requirements of this Condition prior to or together with any applications, reports, or information to be signed by an authorized representative.

Any person signing a document under this Condition must make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

# G-4.3 Dates of Coverage under this Permit

Unless Ecology responds in writing to a Notice of Intent application for coverage under this general permit, coverage of a discharger under this general permit will automatically commence on the latter of the following:

- 1. The effective date of this general permit.
- 2. The 31st day following the end of the 30-day comment period following the issuance of the final general permit, as required in WAC 173-226-130(4).
- 3. The 31st day following receipt by Ecology of that discharger's completed Notice of Intent application for coverage under this general permit.
- 4. The coverage date specified in this general permit.

When a Permittee has made a timely and sufficient application for the renewal of coverage under this permit prior to its expiration, this permit remains in effect and enforceable until Ecology:

- 1. Denies the application;
- 2. Issues a replacement permit; or
- 3. Cancels the expired permit.

Coverage under an expired general permit for Permittees who fail to submit a timely and sufficient application expires on the expiration date of the general permit.

# G-4.4 Severability

The provisions of this permit are severable, and if any provision of this permit, or application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this permit are not affected thereby.

# G-4.5 Payment of Fees

The Permittee must provide payment of fees associated with this permit as assessed by Ecology pursuant to Chapter 173-224 WAC until the permit is either terminated or revoked.

# G-4.6 Termination of Coverage upon Issuance of an Individual Permit

When an NPDES waste discharge individual permit is issued to a discharger otherwise subject to this general permit, the applicability of this general permit to that Permittee is automatically terminated on the effective date of the individual permit.

# G-4.7 Reporting a Cause for Modification or Revocation

The Permittee must provide a new application or information supplemental to the previous application whenever:

- 1. The Permittee anticipates a significant change to the permitted activity or in the quantity or type of discharge authorized by this permit; or
- 2. The Permittee knows, or has reason to believe, that any activity has occurred or will occur which would constitute cause for modification or revocation pursuant to 40 CFR 122.62.

A significant change includes, but is not limited to, any facility expansion, production increase, or process modification that would change the nature or increase the quantity of pollutants discharged such as to cause either non-compliance with effluent limits or discharges beyond those reported in the previous application for coverage. The Permittee must provide its plans, supplemental information, or new application for coverage to Ecology at least 60 days prior to any proposed changes. This reporting to Ecology does not relieve the Permittee of the duty to comply with the existing permit until it is modified or reissued.

# G-4.8 Request to be Excluded from Coverage under this Permit

Any discharger authorized by this general permit may request to be excluded from coverage under this general permit by applying for an individual permit. Such discharger must provide to Ecology an application as described in WAC 173-220-040 or WAC 173-216-070, whichever is applicable, with reasons supporting the request for exclusion from coverage under this permit. These reasons must fully document how an individual permit will apply to the applicant in a way that this general permit cannot.

Ecology may require the applicant to provide information to support the request for exclusion from coverage under this general permit. Ecology will either issue an individual permit or deny the request with a statement explaining the reason for the denial.

# G-4.9 Modification, Revocation, and Termination of this General Permit

Ecology may modify, revoke and reissue, or terminate this permit during its term for cause in accordance with the provisions of Chapter 173-226 WAC. Grounds for modification, revocation and reissuance, or termination include, but are not limited to, any of the following:

- 1. A change in the technology or practices for control or abatement of pollutants applicable to the category of dischargers covered under this permit.
- 2. Promulgation of effluent limit standards or guidelines pursuant to the Clean Water Act or Chapter 90.48 RCW for the category of dischargers covered under this permit.
- 3. Approval by Ecology of a water quality management plan containing requirements applicable to the category of dischargers covered under this permit.
- 4. Receipt of information that indicates that cumulative effects on the environment from dischargers covered under this permit are unacceptable.
- 5. Establishment by the U.S. Environmental Protection Agency of a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) under Section 307(a) of the Clean Water Act for a toxic pollutant which is more stringent than any limit upon such pollutant in this permit.

In the event that a material change occurs in the condition of the waters of the State, Ecology may, by appropriate order, modify permit Conditions or specify additional Conditions in permits previously issued.

The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated non-compliance does not stay any permit Condition.

#### G-4.10 Termination of Coverage under this Permit

Ecology may revoke coverage for any discharger under this permit for cause in accordance with Chapter 173-226 WAC. The discharger has 30 days during which to respond to any notification from Ecology of termination of coverage under this permit before coverage under this permit is automatically revoked. Cases where coverage may be terminated include, but are not limited to, any of the following:

1. Violation of any term or condition of this permit.

- 2. Failure or refusal of the Permittee to comply with an interim or final requirement contained in this permit or submitted as part of its application for coverage under this permit.
- 3. Misrepresentation or failure to disclose fully all relevant facts when applying for and obtaining coverage under this permit.
- 4. A material change in the quantity or type of waste disposed or in any other condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.
- 5. A determination that the permitted activity endangers human health or the environment or contributes to a water quality standard violation.
- 6. Incorporation of an approved local pretreatment program into a municipality's permit.
- 7. Failure of the Permittee to satisfy the public notice requirements of WAC 173-226-130(5) when applicable.
- 8. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090 and General Condition G-3.5 (Right of Inspection and Entry).
- 9. Nonpayment of permit fees or penalties assessed pursuant to RCW 90.48.465 and Chapter 173-224 WAC.

Ecology may require any discharger, whether or not already covered under this general permit, to apply for and obtain coverage under an individual permit or another more appropriate general permit.

Permittees whose coverage has been revoked for cause according to WAC 173-226-240 may request temporary coverage under this permit during the time an individual permit is being developed, provided that the request is made within 90 days from the time of revocation and is submitted along with a complete individual permit application.

# G-4.11 Transfer of Permit Coverage

Coverage under this permit is not transferable to any person except after notice to Ecology.

In the event of any change in control or ownership of the facility or activity from which the authorized discharge emanates, the Permittee must notify the succeeding owner or controller of the existence of this permit by letter, and provide a copy of that letter to Ecology.

A Permittee may transfer coverage under this permit to a succeeding owner or operator of the facility or activity producing the discharge, including owners or operators of lots or parcels within a common plan of development or sale, by:

- 1. Preparing a written agreement, signed by both the current Permittee and the new discharger, that specifies the proposed date of the transfer of coverage, responsibility, and liability for this permit; and
- 2. Submitting to Ecology a copy of that written and signed agreement at least 30 days prior to the proposed transfer date; and

#### Provided that:

Ecology does not notify the current Permittee and the new discharger by the proposed transfer date of its intent to modify, to revoke and reissue, or to terminate permit coverage. If Ecology does not notify the current Permittee and the new discharger, the transfer of permit coverage is effective on the date specified in the written agreement between the current Permittee and the new discharger.

When a current Permittee of a construction stormwater discharge site transfers control or ownership of a portion of that permitted site to another person, the current Permittee must also submit an updated application for coverage to Ecology indicating the acreage remaining after the transfer.

Upon consent of the Permittee, Ecology may transfer coverage under this permit to a succeeding Permittee by a minor modification in accordance with 40 CFR 122.63(d) to identify the new Permittee and incorporate such other requirements as Ecology may deem necessary.

Acronym	Meaning
AKART	All known, available, and reasonable methods of prevention, control, and treatment
BMP	Best management practice
CAS	Chemical Abstract Service
CFR	Code of Federal Regulations
CWA	Clean Water Act
DoH	Washington State Department of Health
DMR	Discharge monitoring report
Ecology	Washington State Department of Ecology
eNOI	Electronic notice of intent
EPA	Environmental Protection Agency
ERTS	Emergency Response Tracking System
GWI	Ground water under the direct influence of surface water
MDL	Method detection limit
NPDES	National Pollutant Discharge Elimination System
O&M	Operations and maintenance
pdf	Portable document format
PQL	Practical quantitation level
QA/QC	Quality assurance and quality control
RCW	Revised Code of Washington State
SEPA	State Environmental Policy Act, RCW 43.21C
SWPPP	Stormwater pollution prevention plan
TMDL	Total maximum daily load
U.S.	United States
USC	United States Code
WAC	Washington Administrative Code
WTP	Water treatment plant

# Appendix A. Acronyms and Units of Measure

Unit of Measure	Meaning
gpd	Gallons per day
μg/L	Micrograms per liter
mg/L	Milligrams per liter
mL/L	Milliliters per liter
NTU	Nephelometric turbidity units
S.U.	Standard units

# **Appendix B. Definitions**

#### 303(d) List

The list of water bodies in Washington State that do not meet the water quality standards specified in Chapter 173-201A WAC. The Washington State Department of Ecology (Ecology) prepares and the U.S. Environmental Protection Agency approves this list periodically (every 2 years). The list is posted on the Ecology web site at http://www.acy.wa.gov/programs/wg/303d/2008/index.html

http://www.ecy.wa.gov/programs/wq/303d/2008/index.html.

#### Action

Any human project or activity.

#### Activity

A discernible set of related actions or processes conducted within a facility, operation, or site that may cause a discharge of pollutants. Examples include, but are not limited to, construction; manufacturing; production or use of raw materials, products, or wastes; transportation; and cleanup or treatment of machinery, structures, land, or water.

#### **Acute Toxicity**

The adverse effects of a substance or a combination of substances on an organism that result either from a single exposure or from multiple exposures in a short period of time (usually from 48 to 96 hours).

# All known, available, and reasonable methods of prevention, control, and treatment (AKART)

A technology-based approach of decision making for limiting pollutants from discharges. AKART represents the most current methodology for preventing, controlling, and abating pollution that can be installed or used at a reasonable cost.

#### **Application for coverage**

A formal request for coverage under this general permit using the paper or electronic form developed by the Washington State Department of Ecology for that purpose.

#### Average monthly discharge limit (same as Average monthly effluent limit)

The greatest average of daily discharges allowed for a calendar month. To calculate the value of the actual average monthly discharge for comparison with the limit, add the value of each daily discharge measured during a calendar month, and divide this sum by the total number of daily discharges measured.

#### Average monthly effluent limit (same as Average monthly discharge limit)

The greatest average of daily discharges allowed for a calendar month. To calculate the value of the actual average monthly discharge for comparison with the limit, add the value of each daily discharge measured during a calendar month, and divide this sum by the total number of daily discharges measured.

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#### Background

The biological, chemical, physical, and radiological conditions that exist in the absence of any influences from outside an area potentially influenced by a specific activity.

#### Best management practice (BMP)

Activity, prohibition, maintenance procedure, or other physical, structural, and/or managerial practice to prevent or reduce pollution of and other adverse impacts to the waters of Washington State. BMPs include treatment systems, operating schedules and procedures, and practices used singularly or in combination to control plant site runoff, spillage or leaks, sludge or waste disposal, and drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

#### **Bypass**

The diversion of stormwater or a wastestream from any portion of a treatment facility. A bypass may be intentional or unintentional.

#### **Calendar Day**

A period of 24 consecutive hours starting at 12:01 A.M. and ending at the following 12:00 P.M. (midnight).

#### Carcinogen

Any substance or agent that produces or tends to produce cancer in humans. The term carcinogen applies to substances on the U.S. Environmental Protection Agency lists of A (known human) and B (probable human) carcinogens, and any substance which causes a significant increased incidence of benign or malignant tumors in a single, well conducted animal bioassay, consistent with the weight of evidence approach specified in the U.S. Environmental Protection Agency Guidelines for Carcinogenic Risk Assessment.

#### Chlorine

A chemical used to disinfect wastewaters of pathogens harmful to human health. Chlorine is extremely toxic to aquatic life.

#### **Chronic toxicity**

The adverse effects of a substance or combination of substances on an organism that result from exposure over a relatively long time, often 1/10 of an organism's lifespan or more. Chronic toxicity may affect survival, reproduction or growth rates, or other health-related conditions.

#### Clean Water Act (CWA)

The primary federal law in the United States governing water pollution and that includes goals for eliminating releases of large amounts of toxic substances into water, eliminating additional water pollution by 1985, and ensuring that surface waters will meet standards necessary for human sports and recreation by 1983. (Federal Water Pollution Control Act, Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, 97-117, and 100-4; USC 1251, et seq.)

#### Color

The optical density at the visual wavelength of maximum absorption, relative to distilled water. One hundred percent transmittance is equivalent to zero optical density. The analytical procedure for measuring this parameter is typically Standard Methods for the Examination of Water and Wastewater, Method 204.

#### **Compliance schedule**

A schedule of remedial measures that includes an enforceable sequence of actions or operations leading to compliance with an effluent or other limit, prohibition, or standard.

#### Contaminant

Any biological, chemical, physical, or radiological substance that does not occur naturally in a given environmental medium or that occurs at concentrations greater than those in the natural or background conditions.

#### Control

- 1. To direct, oversee, supervise, manage, perform, or give instruction about any decision, action, or operation of the specific facility, site, field, wastestream, or other object "under control."
- 2. The partial removal or complete eradication of native plants, non-native non-noxious plants, algae, noxious or quarantine-list weeds, or other nonnative invasive organisms from a water body. The purpose of control activities may be to protect some of the beneficial uses of a water body, such as swimming, boating, water skiing, fishing access, etc. The goal may be to maintain some native aquatic vegetation for habitat, while accomplishing some removal for beneficial use protection. Control activities may include the application of chemical(s) to all or part of a water body.

#### Conveyance

A mechanism for transporting water, wastewater, or stormwater from one location to another location, including, but not limited to, gutters, ditches, pipes, and/or channels.

#### Criteria

The numeric values and the narrative standards that represent contaminant concentrations which are not to be exceeded in the receiving environmental media (surface water, ground water, sediment) to protect beneficial uses.

#### **Daily discharge**

The amount of a pollutant discharged during any 24-hour period that reasonably represents a calendar day for purposes of sampling. For pollutants with limits expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged during the day. For pollutants with limits expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant throughout the day.

#### **Dangerous waste**

Any discarded, useless, unwanted, or abandoned nonradioactive substances, including but not limited to certain pesticides, or any residues or containers of such substances which are disposed of in such quantity or concentration as to pose a substantial present or potential hazard to human

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health, wildlife, or the environment because such wastes or constituents or combinations of such wastes: (1) Have short-lived, toxic properties that may cause death, injury, or illness or have mutagenic, teratogenic, or carcinogenic properties; or (2) Are corrosive, explosive, flammable, or may generate pressure through decomposition or other means. The exact definition of dangerous waste is provided at WAC 173-303-040.

#### **Detection limit**

The minimum observed result such that the lower  $100(1-\alpha)$  percent confidence limit of the result is greater than the mean of the method blanks.

### Detention

The temporary collection of water into a storage device or pond, with the subsequent release of that water either at a rate slower than the collection rate or after a specified time period has passed since the time of collection. The purposes of detention include, but are not limited to, improving the quality of the water released and reducing or smoothing the mass flow rate of its discharge over time.

# **Detention pond**

Man-made structure constructed specifically to collect and manage stormwater. Detention ponds are generally dry until a significant storm event and subsequently gradually release the accumulated stormwater through an outlet.

### **Dilution factor (DF)**

A measure of the amount of mixing of effluent and receiving water that occurs at the mixing zone boundary, expressed as the inverse of the effluent fraction. For example, a dilution factor of 16 means that, assuming complete mixing at the mixing zone boundary, the effluent comprises 6.25 percent by volume, and the receiving water comprises 93.75 percent by volume of the mixture of effluent and receiving water [DF = 1/(6.25/100) = 16].

#### Discharge (the noun form is the same as Effluent)

To release or add material to waters of the State, including via surface runoff.

# **Discharge limit (same as Effluent limit)**

Any restriction, including schedules of compliance, established by the local government, the Washington State Department of Ecology, or the U.S. Environmental Protection Agency on quantities, rates, and/or concentrations of biological, chemical, physical, radiological, and/or other characteristics of material discharged into any site including, but not limited to, waters of the State of Washington.

# Discharge monitoring report (DMR)

A report submitted periodically (usually monthly or quarterly) by a Permittee to the Washington State Department of Ecology that provides the results of effluent monitoring tests conducted by or on the behalf of the Permittee.

#### Discharger

An owner or operator of any facility, operation, or activity subject to regulation under Chapter 90.48 of the Revised Code of Washington State or the federal Clean Water Act.

#### **Domestic wastewater**

Waste and wastewater containing human wastes, including kitchen, bath, and laundry wastes from residences, buildings, industrial establishments, or other places, together with such ground-water infiltration or surface waters as may be present.

#### **Effluent (same as the noun form of Discharge)**

Material (usually an aqueous liquid) released to waters of the State, including via surface runoff.

#### **Effluent limit (same as Discharge limit)**

Any restriction, including schedules of compliance, established by the local government, the Washington State Department of Ecology, or the U.S. Environmental Protection Agency on quantities, rates, and/or concentrations of biological, chemical, physical, radiological, and/or other characteristics of material discharged into any site including, but not limited to, waters of the State of Washington.

#### Entity (same as Party)

Any person or organization, including, but not limited to, cities, counties, municipalities, Indian tribes, public utility districts, public health districts, port authorities, mosquito control districts, special purpose districts, irrigation districts, state and local agencies, companies, firms, corporations, partnerships, associations, consortia, joint ventures, estates, industries, commercial pesticide applicators, licensed pesticide applicators, and any other commercial, private, public, governmental, or non-governmental organizations, or their legal representatives, agents, or assignees.

#### Erosion

The detachment and movement of soil or rock fragments and the wearing away of the land surface by precipitation, running water, ice, wind, or other geological agents, including processes such as gravitational creep.

#### Erosion and sediment control best management practices (ESC BMPs)

Best management practices (BMPs) intended to prevent erosion, sedimentation, or the release of sediment-laden water from the site. Examples include preserving natural vegetation, seeding, mulching and matting, and installation of plastic covering, filter fences, sediment traps, or ponds. (synonymous with stabilization and structural BMPs)

#### Facility (same as Operation)

The physical premises (including the land and appurtenances thereto) owned or operated by a Permittee from which wastewater or stormwater is discharged subject to regulation under the National Pollutant Discharge Elimination System program.

#### **Fact Sheet**

A document prepared by the Washington State Department of Ecology and issued with every permit which summarizes the general activities of the Permittee, explains the reasoning behind the Conditions of the permit, and tells how the public may comment.

#### Federal Water Pollution Control Act (FWPCA) (same as Clean Water Act)

The primary federal law in the United States governing water pollution and that includes goals for eliminating releases of large amounts of toxic substances into water, eliminating additional water pollution by 1985, and ensuring that surface waters will meet standards necessary for human sports and recreation by 1983. (Clean Water Act, Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, 97-117, and 100-4; USC 1251, et seq.)

#### **General permit**

A single permit that covers multiple characteristically similar dischargers of a point source category within a designated geographical area, in lieu of many individual permits that are specifically tailored and issued separately to each discharger.

#### Ground water (same as Underground water)

The water located in a saturated zone or stratum beneath the surface of the land or below a surface water body. Ground water is a water of the State and includes interflow, which is a type of perched water, and water in all other saturated soil pore spaces and rock interstices, whether perched, seasonal, or artificial. Although underground water within the vadose zone (unsaturated zone) also is a type of ground water, the Washington State ground water quality standards do not specifically protect soil pore water or soil moisture located in the vadose zone.

#### Hardness

The amount of calcium and magnesium salts present in water, typically expressed as milligrams of calcium carbonate per liter. The analytical procedure for determining this amount is typically Standard Methods for the Examination of Water and Wastewater, Method 314.

#### Hazardous waste

That waste designated by 40 CFR Part 261, and regulated by the U.S. Environmental Protection Agency.

#### Individual permit

A permit that covers only a single point source, discharger, or facility.

#### Interflow

Underground water derived directly from rainfall or snowmelt that percolates into the shallow soil, travels a relatively short distance laterally through the soil near the land surface, and subsequently seeps either: (1) Back onto the land surface where it may evaporate, mix with runoff, or discharge to a surface water body, or (2) Below the surface into a surface water body. The presence and amount of interflow is a function of the soil system depth, permeability, and water-holding capacity.

#### Jurisdiction

- 1. The practical authority granted to a formally constituted legal body to deal with and make pronouncements on legal matters and, by implication, to administer justice within a defined area of responsibility.
- 2. The geographical area or subject-matter to which such practical authority applies.

#### Load allocation (LA)

Within the context of a total maximum daily load, that portion of the loading capacity of a pollutant entering a water body attributed to: (1) Existing or future nonpoint sources of pollution (i.e., all sources not covered by a National Pollutant Discharge Elimination System permit); and (2) Natural background sources. Wherever possible, nonpoint source loads and natural loads should be distinguished. LA does not include reserves for future growth or a margin of safety.

#### Loading capacity

The greatest amount of pollutant that a water body can receive and still meet water quality standards.

#### Method detection limit (MDL)

Minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, and is determined from analysis of a sample in a given matrix containing the analyte. The MDL (or simply "detection limit") is the smallest measured amount or concentration of analyte in a sample that gives rise to a Type I error tolerance of alpha under the null hypothesis that the true amount or concentration of analyte in the sample is equal to that of a blank. (The alternative hypothesis is that the true amount or concentration of analyte is greater than that of a blank).

#### Mixing zone (same as Dilution zone)

That portion of a water body adjacent to an effluent discharge point where mixing dilutes the effluent with the receiving water. The water within this zone need not meet numeric water quality criteria, but must allow passage of aquatic organisms and not upset the ecological balance of the receiving water. The permit specifies the mixing area or volume fraction of the receiving water surrounding the discharge point.

#### Monthly average

The sum of all daily measurements obtained during a calendar month divided by the number of days measured during that month (arithmetic mean).

#### Municipality

A political unit incorporated for local self-government, such as a city, town, borough, county, parish, district, association, or other public body (including an intermunicipal agency of two or more of the foregoing entities) created by or pursuant to state law; an authorized Indian tribe or tribal organization; or a designated and approved management agency under Section 208 of the Clean Water Act. Municipalities include special districts created under state law, such as a water district, sewer district, sanitary district, utility district, drainage district, or similar entity.

#### National Pollutant Discharge Elimination System (NPDES)

The federal wastewater permitting system for discharges of pollutants from point sources to the navigable waters of the United States authorized under Section 402 of the Clean Water Act. The U.S. Environmental Protection Agency has authorized the State of Washington to issue and administer NPDES permits for non-federal point sources within the State.

#### **Nonpoint source**

A source from which pollutants may enter waters of the State that is not readily discernible, such as any dispersed land-based or water-based activities including, but not limited to, atmospheric deposition; surface water runoff from agricultural lands, urban areas, or forest lands; subsurface or underground sources; or discharges from boats or marine vessels not otherwise regulated under the National Pollutant Discharge Elimination System program.

#### **Operation (same as Facility)**

The physical premises (including the land and appurtenances thereto) owned or operated by a Permittee from which wastewater or stormwater is discharged subject to regulation under the National Pollutant Discharge Elimination System program.

#### **Operational source control best management practice (Operational source control BMP)**

The schedule of activities, prohibition of practices, maintenance procedures, employee training, good housekeeping, and other managerial best management practices to prevent or reduce the pollution of waters of the State.

#### Organism

Any individual life form: an animal, plant, fungus, protistan, or moneran.

#### Outfall

The location of a point source where a discharge leaves a facility, site, or municipal separate storm sewer system and flows into waters of the State. Outfalls do not include open conveyances connecting two municipal separate storm sewers; or pipes, tunnels, or other conveyances which connect segments of the same stream or other waters of the State and are used to convey waters of the State (e.g., culverts).

#### Party (same as Entity)

Any person or organization, including, but not limited to, cities, counties, municipalities, Indian tribes, public utility districts, public health districts, port authorities, mosquito control districts, special purpose districts, irrigation districts, state and local agencies, companies, firms, corporations, partnerships, associations, consortia, joint ventures, estates, industries, commercial pesticide applicators, licensed pesticide applicators, and any other commercial, private, public, governmental, or non-governmental organizations, or their legal representatives, agents, or assignees.

#### Permeable

Porous; capable of allowing liquids or gases to pass through.

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#### Permit

An authorization, license, or equivalent control document issued by a formally constituted legal body, such as the Washington State Department of Ecology, to a facility, activity, or entity to treat, store, dispose, or discharge materials or wastes, specifying the waste treatment and control requirements and waste discharge conditions. Unless the context requires differently, "permit" refers to individual and general permits authorized under the National Pollutant Discharge Elimination System program.

#### Permittee

The entity who receives notice of coverage under this general permit.

#### Person

Any individual or organization, including, but not limited to, cities, counties, municipalities, Indian tribes, public utility districts, public health districts, port authorities, mosquito control districts, special purpose districts, irrigation districts, state and local agencies, companies, firms, corporations, partnerships, associations, consortia, joint ventures, estates, industries, commercial pesticide applicators, licensed pesticide applicators, and any other commercial, private, public, governmental, or non-governmental organizations, or their legal representatives, agents, or assignees.

#### pН

A measure of the acidity or alkalinity of water. A pH of 7.0 is defined as neutral. Large variations above or below 7.0 are harmful to most aquatic life. Mathematically, pH is the negative logarithm of the activity of the hydronium ion (often expressed as the negative logarithm of the molar concentration of the hydrogen ion). The analytical procedure for determining this amount is typically Standard Methods for the Examination of Water and Wastewater, Method 423.

#### **Point source**

Any discernible, confined, and discrete conveyance from which pollutants are or may be discharged to surface waters of the State, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel, or other floating craft. Point source does not include agricultural stormwater discharges and return flows from irrigated agriculture. See 40 CFR 122.3 for exclusions.

#### **Pollutant (in water)**

Any discharged substance or pathogenic organism that would: (1) Alter the biological, chemical, physical, radiological, or thermal properties of any water of the State, or (2) Would be likely to create a nuisance or render such water harmful, detrimental, or injurious (a) to the public health, safety, or welfare, (b) to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or (c) to any animal or plant life, either terrestrial or aquatic, either directly from the environment or indirectly by ingestion through the food chain.

Pollutants may include, but are not limited to, the following: solid waste, incinerator residue, garbage, sewage, sewage sludge, filter backwash, munitions, chemical wastes, biological

materials, radioactive materials, heat, wrecked or discarded equipment, dredged spoil, rock, sand, cellar dirt, and other industrial, municipal, and agricultural wastes.

Pollutant does not mean: (1) Sewage from marine vessels or a discharge incidental to the normal operation of a vessel of the Armed Forces, within the meaning of Section 312 of the Clean Water Act (CWA); (2) Dredged or fill material discharged in accordance with a permit issued under Section 404 of the CWA; or (3) Water, gas, or other material which is injected into a well to facilitate production of oil or gas, or water derived in association with oil or gas production and disposed of in a well, if the well used either to facilitate production or for disposal is approved by authority of the Washington State Department of Ecology (Ecology), and if Ecology determines that such injection or disposal will not result in the degradation of ground-water or surface water resources.

#### **Pollution (of water)**

The man-made or man-induced contamination or other alteration of the biological, chemical, physical, or radiological properties of any water of the State, including change in temperature, taste, odor, color, or turbidity of the water; or such discharge of any solid, liquid, gaseous, or other substance into any water of the State that will, or is likely to, create a nuisance or render such water harmful, detrimental, or injurious to: (1) The public health, safety, or welfare; (2) Domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses; or (3) Any animal or plant life, either terrestrial or aquatic, either directly from the environment or indirectly by ingestion through the food chain.

#### Pretreatment

The reduction of the amount or concentration of pollutants, elimination of pollutants, or alteration of the nature of pollutant properties to a less harmful state prior to or in lieu of discharging wastewater to a treatment plant. This reduction or alteration may be obtained by biological, chemical, or physical processes, by process changes, or by other means, except by diluting the pollutants.

#### **Publicly-owned treatment works (POTW)**

- 1. A sewage treatment plant and its collection system that is owned by a municipality, the State of Washington, or the federal government. A POTW includes the sewers, pipes and other conveyances that convey wastewater to the treatment plant, and any devices and systems used in the storage, treatment, recycling, and reclamation of municipal sewage or industrial wastes of a liquid nature.
- 2. The municipality or other entity that has jurisdiction over the indirect discharges to and the discharges from the treatment works.

#### **Putrescible waste**

Solid waste that contains material capable of being decomposed by micro-organisms.

#### Quantitation level (QL)

The lowest level at which the entire analytical system must give a recognizable signal and acceptable calibration point for the analyte. The QL is equivalent to the concentration of the lowest calibration standard, assuming that all method-specified sample weights, volumes, and

Final Water Treatment Plant General Permit Page B-10 of B-16 cleanup procedures have been employed. The QL may be calculated by multiplying the method detection limit (MDL) by 3.18 and rounding the result to the number nearest to  $(1, 2, \text{ or } 5) \times 10n$ , where n is an integer.

#### **Receiving water**

The water body at the point of discharge, whether that discharge is through a point source or via sheet flow. If the discharge is to a stormwater conveyance system, either surface or subsurface, the receiving water is the water body to which the stormwater conveyance system discharges. Systems designed for ground-water drainage, redirecting stream natural flows, or conveyance of irrigation water/return flows that coincidentally convey stormwater, are considered the receiving water. Receiving waters may also be ground water to which surface runoff is directed by infiltration.

#### **Representative (sample)**

A sample that yields data that accurately characterizes the nature of a discharge or other sampled matrix for the parameters of concern. A representative sample should account for the factors that contribute to the variability of the parameters, such as the quantity of the discharge, the date and time of the sampling event, and whether the particular sampling location or associated physical events may affect the material sampled. Combining grab samples collected from multiple outfalls from a designated area of the facility during a certain time range to create a flow-weighted composite sample may be required to obtain a representative sample.

A random sample may not be a representative sample. Representative sampling schemes should vary based on the population distribution and variability. For a relatively constant discharge, a grab sample is representative. For a discharge that varies greatly over time or space, a grab sample would likely not be representative.

#### Runoff

Water derived directly from rainfall or snowmelt that travels across the land surface and discharges: (1) To water bodies either directly or through a constructed collection and conveyance system, or (2) To the subsurface through a constructed collection and conveyance system.

#### Sanitary sewer

A sewer designed to convey domestic wastewater.

#### Saturated zone

The subsurficial zone in which all soil pore spaces and rock interstices are completely filled with ground water. Saturated zones include aquifers, whether or not they produce a significant yield, areas of perched ground water, and interflow.

#### Sediment

The fragmented material that originates from the weathering and erosion of rocks, unconsolidated deposits, or unpaved yards; and is suspended in, transported by, or deposited by water.

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#### Sedimentation

The deposition or formation of sediment.

#### Settleable solids

The material that settles out of suspension within a certain timespan measured volumetrically. The analytical procedure for determining this amount is typically Standard Methods for the Examination of Water and Wastewater, Method 209E.

#### Site

- 1. The land or water area where any facility, operation, or activity is physically located or conducted, including any adjacent land or buffer areas used in connection with such facility, operation, or activity.
- 2. The land or water area receiving any effluent discharged from any facility, operation, or activity.

#### Solid waste

All putrescible, nonputrescible, solid, and semisolid waste. Examples of solid waste are: garbage, rubbish, ashes, industrial wastes, swill, demolition and construction wastes, abandoned vehicles or parts thereof, discarded commodities, sludge from wastewater treatment plants and septic tanks, woodwaste, contaminated soils, contaminated dredged material, dangerous waste, and problem wastes.

#### Source control best management practice (Source control BMP)

Best management practice intended to prevent or reduce the release of pollutants. Two types of source control BMPs exist: (1) Structural, which include physical, structural, or mechanical devices or facilities (e.g., roofs covering storage and working areas); and (2) Operational, which include management of activities that are sources of pollutants (e.g., directing wash water and similar discharges to the sanitary sewer or a dead-end sump).

#### State

The State of Washington.

#### **State Environmental Policy Act (SEPA)**

The Washington State law intended to prevent or eliminate damage to the environment that requires State and local agencies to consider the likely environmental consequences of development proposals prior to their approval (Chapter 43.21C RCW, as implemented through Chapter 197-11 WAC).

#### Stormwater

Water derived directly from rainfall or snowmelt that either: (1) Travels across the land surface and discharges to water bodies either directly or through a collection and conveyance system; or (2) Percolates into the shallow soil, travels laterally through the soil near the land surface, and subsequently seeps back onto the land surface where it mixes with runoff or discharges to a surface water body. (Same as Runoff plus Interflow)

#### Stormwater Management Manual (SWMM)

The two technical manuals published by the Washington State Department of Ecology (Ecology) for use by local governments that describe stormwater management techniques and contain descriptions of and design criteria for best management practices to prevent, control, or treat pollutants in stormwater. One of the manuals applies to sites in eastern Washington (SWMMEW), and the other to sites in western Washington (SWMMWW). Ecology periodically updates the two manuals.

#### Stormwater pollution prevention plan (SWPPP)

The written plan that describes the measures to be employed at a facility to identify, prevent, and control the contamination of point source discharges of stormwater.

#### Substantial

Of considerable size, quality, value, degree, amount, extent, or importance.

#### Surface water

Lakes, rivers, ponds, streams, inland waters, wetlands, marine waters, estuaries, and all other fresh or brackish waters and water courses, plus drainages to those water bodies. Surface waters do not include hatchery ponds, raceways, pollution abatement ponds, and wetlands constructed solely for wastewater treatment.

#### Surface waters of the State of Washington

All waters within the geographic boundaries of the State of Washington defined as "waters of the United States" in 40 CFR 122.2, and all waters defined as "waters of the state" in RCW 90.48.020 excluding underground waters. These include lakes, rivers, ponds, streams, inland waters, wetlands, marine waters, estuaries, and all other fresh or brackish waters and water courses, within the jurisdiction of the State of Washington, plus drainages to those water bodies. Surface waters of the State do not include hatchery ponds, raceways, pollution abatement ponds, and wetlands constructed solely for wastewater treatment.

#### Technology-based discharge limit (same as Technology-based effluent limit)

A permit limit that is based on the ability of a treatment method to reduce the amount (e.g., concentration) of a pollutant.

#### Technology-based effluent limit (same as Technology-based discharge limit)

A permit limit that is based on the ability of a treatment method to reduce the amount (e.g., concentration) of a pollutant.

#### Total maximum daily load (TMDL)

- 1. An estimate of the maximum amount of a pollutant that a specific impaired water body or water-body segment can receive in a day and still be protective of its designated beneficial uses, i.e., meet water quality standards. The TMDL must incorporate seasonal variation, include a margin of safety, and account for all of the point and nonpoint sources that contributed to the impairment of the specific water body.
- 2. A water cleanup plan and a mechanism for establishing water quality-based controls on all point and nonpoint sources of pollutants within a watershed basin, sub-basin, or hydrographic

Final Water Treatment Plant General Permit Page B-13 of B-16 segment associated with a specific impaired water body. Percentages of the TMDL of a single pollutant are allocated to the various pollutant sources as waste load allocations for point sources and load allocations for nonpoint sources and background. A TMDL becomes effective after the U.S. Environmental Protection Agency has reviewed and approved it.

#### **Total residual chlorine**

The amount of chlorine remaining in water or wastewater, which is equivalent to the sum of the combined residual chlorine (non-reactive) and the free residual chlorine (reactive). The analytical procedure for determining this amount is typically Standard Methods for the Examination of Water and Wastewater, Method 408.

#### Toxic

Causing death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunctions in reproduction), or physical deformations in any organism or its offspring upon exposure, ingestion, inhalation, or assimilation.

#### Treat

- 1. To apply an algaecide, herbicide, or other control product to the water, vegetation, or soil to control or kill algae, vegetation, insects, or some other pest or target species, or to remove or inactivate bioavailable phosphorus.
- 2. To remove a pollutant from wastewater or to perform some other manipulation of wastewater to reduce or control the adverse effects of a pollutant therein.

#### Treatment

- 1. The application of an algaecide, herbicide, or other control product to the water, vegetation, or soil to control or kill algae, vegetation, insects, or some other pest or target species, or to remove or inactivate bioavailable phosphorus.
- 2. The removal of a pollutant from wastewater or some other manipulation of wastewater to reduce or control the adverse effects of a pollutant therein.

#### **Treatment best management practice (Treatment BMP)**

Best management practice intended to remove pollutants from wastewater, such as detention ponds, oil/water separators, biofiltration, and constructed wetlands.

#### Turbidity

The optical property of water that causes light to be scattered and absorbed rather than transmitted in a straight line. Turbidity in water is caused by suspended matter, such as clay, silt, finely divided organic and inorganic matter, soluble colored organic compounds, and plankton and other microscopic organisms. Turbidity is a measure of water clarity using a calibrated turbidimeter according to the analytical procedure described typically by Standard Methods for the Examination of Water and Wastewater, Method 214A.

#### Upset

An exceptional incident in which an unintentional and temporary non-compliance with technology-based, permit effluent limits occurs due to factors beyond the reasonable control of the permittee. An upset does not include non-compliance to the extent caused by operational

Final Water Treatment Plant General Permit Page B-14 of B-16 error, improperly designed treatment facilities, inadequate storage or treatment facilities, lack of preventive maintenance, or careless or improper operation.

#### Vadose zone

The subsurficial zone where soil pore spaces and rock interstices are typically occupied at least partially by air. The vadose zone may extend from the surface of the ground down to the top of the water table, i.e., the top of the saturated zone, whether perched or not.

#### Waste

Any discarded, abandoned, unwanted, or unrecovered material, except the following are not waste materials for the purposes of this permit: (1) Discharges into the ground or ground water of return flow, unaltered except for temperature, from a ground-water heat pump used for space heating or cooling, provided that such discharges do not have significant potential, either individually, or collectively, to affect ground-water quality or uses; and (2) Discharges of stormwater that are not contaminated or potentially contaminated by industrial or commercial sources.

#### Water quality (WQ)

The biological, chemical, physical, and radiological characteristics of water, usually with respect to its suitability for a particular purpose.

#### Water quality-based discharge limit (same as Water quality-based effluent limit)

A limit on the concentration of an effluent parameter that is intended to prevent the concentration of that parameter from exceeding its water quality criterion after it is discharged into a receiving water. The limit may include a dilution factor if all known, available, and reasonable methods of prevention, control, and treatment have been accomplished and other restrictions are met.

#### Water quality-based effluent limit (same as Water quality-based discharge limit)

A limit on the concentration of an effluent parameter that is intended to prevent the concentration of that parameter from exceeding its water quality criterion after it is discharged into a receiving water. The limit may include a dilution factor if all known, available, and reasonable methods of prevention, control, and treatment have been accomplished and other restrictions are met.

#### Waters of the State of Washington

All waters within the geographic boundaries of the State of Washington defined as "waters of the United States" in 40 CFR 122.2, and all waters defined as "waters of the state" in RCW 90.48.020. These waters of the State include lakes, rivers, ponds, streams, inland waters, wetlands, marine waters, estuaries, underground waters, and all other fresh or brackish waters and water courses within the jurisdiction of the State of Washington, plus drainages to those waters.

#### Waters of the United States

All waters within the geographic boundaries of the State of Washington defined as "waters of the United States" in 40 CFR 122.

#### Well

A bored, drilled, or driven shaft, or dug hole whose depth is greater than the largest surface dimension.

#### Wetland

Any area that is inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Jurisdictional wetlands are wetlands that have been identified as such by local, state, or federal agencies. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from non-wetlands intentionally created from non-wetlands intentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from non-wetlands intentionally created from non-wetlands intentionally created from non-wetlands intentionally created from non-wetland areas to mitigate the conversion of wetlands.