

Issuance Date: XX,XX,20XX
Effective Date: XX,XX,20XX
Expiration Date: XX,XX,20XX

National Pollutant Discharge Elimination System Waste Discharge Permit No. WA0020702

State of Washington
DEPARTMENT OF ECOLOGY
Northwest Regional Office
15700 Dayton Avenue N
Shoreline, WA 98133-9716

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 1342 et seq.

City of Langley
P.O. Box 366
Langley, WA 98260

is authorized to discharge in accordance with the Special and General Conditions that follow.

Plant Location: Langley Wastewater Treatment Plant 4999 Coles Road Langley, WA 98260 Island County	Receiving Water: Puget Sound – Saratoga Passage
Treatment Type: Sequencing batch reactor (activated sludge)	

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Northwest Regional Office
Washington State Department of Ecology

DRAFT

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Summary of Permit Report Submittals

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

Table 1: Summary of Permit Report Submittals

Permit Section	Submittal	Frequency	First Submittal Date
S3.A	Discharge Monitoring Report (DMR)	Monthly	<u>XX/XX/20XX</u>
S3.A	Discharge Monitoring Report (DMR)	Quarterly	<u>XX/XX/20XX</u>
S3.F	Reporting Permit Violations	As necessary	
S4.B	Plans for Maintaining Adequate Capacity	As necessary	
S4.D	Notification of New or Altered Sources	As necessary	
S4.E	Infiltration/Inflow Evaluation	1/permit cycle	<u>XX/XX/20XX</u>
S5.F	Bypass Notification	As necessary	
S5.G	Operations and Maintenance Manual Update	As necessary	
S6.B.4	Notify Ecology when Industrial Users violate discharge prohibitions	As necessary	
S6.C.2	Notify Ecology of any proposed discharger which may be a SIU	As necessary	
S8	Outfall Evaluation	1/permit cycle	<u>XX/XX/20XX</u>
S9	Nitrogen Optimization Plan	1/permit cycle	<u>XX/XX/20XX</u>
S10	AKART Analysis	1/permit cycle	<u>XX/XX/20XX</u>
S11	Application for Permit Renewal	1/permit cycle	<u>XX/XX/20XX</u>
G1	Notice of Change in Authorization	As necessary	
G4	Reporting Planned Changes	As necessary	
G5	Engineering Report for Construction or Modification Activities	As necessary	
G7	Notice of Permit Transfer	As necessary	
G10	Duty to Provide Information	As necessary	
G20	Compliance Schedules	As necessary	
G21	Contract Submittal	As necessary	

Special Conditions

S1. Discharge limits

S1.A. Effluent limits

All discharges and activities authorized by this permit must comply with the terms and conditions of this permit.

The discharge of any of the following pollutants more frequently than, or at a level in excess of that identified and authorized by this permit violates the terms and conditions of this permit.

Beginning on the effective date of this permit, the Permittee may discharge treated domestic wastewater to the Puget Sound – Saratoga Passage at the permitted location subject to compliance with the following limits:

Table 2: Effluent Limits: Outfall 001

Effluent Limits: Outfall 001		
Latitude 48.04389 Longitude -122.40917		
Parameter	Average Monthly ^a	Average Weekly ^b
Biochemical Oxygen Demand (5-day) (BOD ₅)	30 milligrams/liter (mg/L) 38 pounds/day (lbs/day) 85% removal of influent BOD ₅	45 mg/L 56 lbs/day
Total Suspended Solids (TSS)	30 mg/L 38 lbs/day 85% removal of influent TSS	45 mg/L 56 lbs/day
Total Residual Chlorine	0.5 mg/L	0.75mg/L
Parameter	Minimum	Maximum
pH	6.0 standard units	9.0 standard units
Parameter	Monthly Geometric Mean	Weekly Geometric Mean
Fecal Coliform Bacteria ^c	200/100 milliliter (mL)	400/100 mL
a	Average monthly effluent limit means the highest allowable average of daily discharges over a calendar month. To calculate the discharge value to compare to the limit, you add the value of each daily discharge measured during a calendar month and divide this sum by the total number of daily discharges measured. See footnote c for fecal coliform calculations.	
b	Average weekly discharge limit means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges' measured during that week. See footnote c for fecal coliform calculations.	
c	Ecology provides directions to calculate the monthly and the weekly geometric mean in publication No. 04-10-020, Information Manual for Treatment Plant Operators available at: https://apps.ecology.wa.gov/publications/SummaryPages/0410020.html	

S1.B. Mixing zone authorization

Mixing zone for Outfall 001

The following paragraphs define the maximum boundaries of the mixing zones:

Chronic mixing zone

The mixing zone is an oval around the discharge ports that is 523.5 feet long by 480 feet wide. The mixing zone extends from the bottom to the top of the water column. The concentration of pollutants at the edge of the chronic zone must meet chronic aquatic life criteria and human health criteria.

Acute mixing zone

The mixing zone is an oval around the discharge ports that is 91.5 feet long by 48 feet wide. The mixing zone extends from the bottom to the top of the water column. The concentration of pollutants at the edge of the acute zone must meet acute aquatic life criteria and human health criteria.

Table 3: Available Dilution (dilution factor)

Criteria	Factor
Acute Aquatic Life Criteria	133
Chronic Aquatic Life Criteria	203
Human Health Criteria – Carcinogen	203
Human Health Criteria - Non-carcinogen	203

S2. Monitoring requirements

S2.A. Monitoring schedule

The Permittee must monitor in accordance with the following schedule and the requirements specified in **Appendix A**.

Table 4: Wastewater Influent

Wastewater influent means the raw sewage from the collection system into the treatment facility. Sample the wastewater entering the headworks of the treatment plant excluding any side-stream returns from inside the plant.

Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type
Flow	Million Gallons per day (MGD)	Continuous ^a	Metered/Recorded
Biochemical Oxygen Demand (BOD ₅)	mg/L	1/week	24-Hour Composite ^b
BOD ₅	lbs/day	1/week	Calculated ^c
Total Suspended Solids (TSS)	mg/L	1/week	24-Hour Composite ^b
TSS	lbs/day	1/week	Calculated ^c

a	Continuous means uninterrupted except for brief lengths of time for calibration, power failure, or unanticipated equipment repair or maintenance. The time interval for the associated data logger must be no greater than 30 minutes. The Permittee must sample daily when continuous monitoring is not possible.
b	24-Hour Composite means a series of individual samples collected over a 24-hour period into a single container, and analyzed as one sample.
c	Calculated means figured concurrently with the respective sample using the following formula: Concentration (in mg/L) X Flow (in MGD) X Conversion Factor (8.34) = lbs/day

Table 5: Final Wastewater Effluent

Final Wastewater Effluent means wastewater exiting the last treatment process or operation. Typically, this is after or at the exit from the chlorine contact chamber or other disinfection process. The Permittee may take effluent samples for the BOD₅ analysis before or after the disinfection process. If taken after, the Permittee must dechlorinate and reseed the sample.

Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type
Flow	MGD	Continuous ^a	Metered/Recorded
BOD ₅	mg/L	1/week	24-Hour Composite ^b
BOD ₅	lbs/day ^c	1/week	Calculated
BOD ₅	% removal ^d	1/month	Calculated
TSS	mg/L	1/week	24-Hour Composite ^b
TSS	lbs/day ^c	1/week	Calculated
TSS	% removal ^d	1/month	Calculated
Total Residual Chlorine	mg/L	5/week	Grab ^e
Fecal Coliform	Organisms/100 mL ^f	1/week	Grab ^e
Temperature ^g	Degrees Celsius	1/week	Measurement
pH	Standard Units	5/week	Grab ^e

a	Continuous means uninterrupted except for brief lengths of time for calibration, power failure, or unanticipated equipment repair or maintenance.
b	24-Hour Composite means a series of individual samples collected over a 24-hour period into a single container, and analyzed as one sample.
c	Calculated means figured concurrently with the respective sample, using the following formula: Concentration (in mg/L) X Flow (in MGD) X Conversion Factor (8.34) = lbs/day
d	$\% \text{ removal} = \frac{\text{Influent concentration (mg/L)} - \text{Effluent concentration (mg/L)}}{\text{Influent concentration (mg/L)}} \times 100$ <p>Calculate the percent (%) removal of BOD₅ and TSS using the above equation.</p>

e	Grab means an individual sample collected over a 15-minute, or less, period.
f	Report a numerical value for fecal coliforms following the procedures in Ecology's Information Manual for Wastewater Treatment Plant Operators , Publication Number 04-10-020 available at https://apps.ecology.wa.gov/publications/documents/0410020.pdf . Do not report a result as too numerous to count (TNTC).
g	Temperature grab sampling must occur when the effluent is at or near its daily maximum temperature, which usually occurs in the late afternoon. If measuring temperature continuously, the Permittee must determine and report a daily maximum from half-hour measurements in a 24-hour period. Continuous monitoring instruments must achieve an accuracy of 0.2 degrees C and the Permittee must verify accuracy annually.

Table 6: Influent Nutrient Characterization – Wastewater Influent

The Permittee must collect total ammonia, nitrate plus nitrite, and TKN samples during the same sampling event.

Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type
Total Ammonia	mg/L as N	1/month ^a	24-Hour Composite ^b
Nitrate plus Nitrite Nitrogen	mg/L as N	1/month ^a	24-Hour Composite ^b
Total Kjeldahl Nitrogen (TKN)	mg/L as N	1/month ^a	24-Hour Composite ^b
^a	1/month means one (1) time during each month		
^b	24-Hour Composite means a series of individual samples collected over a 24-hour period into a single container, and analyzed as one sample.		

Table 7: Effluent Nutrient Characterization – Final Wastewater Effluent

The total ammonia and nitrate plus nitrite samples must be taken during the same sampling event.

Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type
Total Ammonia	mg/L as N	1/month ^a	24-Hour Composite ^b
Nitrate plus Nitrite Nitrogen	mg/L as N	1/month ^a	24-Hour Composite ^b
Total Kjeldahl Nitrogen (TKN)	mg/L as N	1/month ^a	24-Hour Composite ^b
Total Inorganic Nitrogen ^c	mg/L as N	1/month ^a	Calculated
Total Inorganic Nitrogen ^d	lbs/day	1/month ^a	Calculated
Monthly Total Inorganic Nitrogen ^e	Lbs	1/month ^a	Calculated
Cumulative Total Inorganic Nitrogen, year to date ^f	Lbs	1/month ^a	Calculated

a	1/month means one (1) time during each month
b	24-Hour Composite means a series of individual samples collected over a 24-hour period into a single container, and analyzed as one sample.
c	TIN (mg/L) as N = Total Ammonia (mg/L as N) + Nitrate plus Nitrite (mg/L as N)
d	Calculate mass concurrently with the respective concentration of a sample, using the following formula: Concentration (in mg/L) X daily flow (in MGD) X Conversion Factor (8.34) = lbs/day
e	Calculate the monthly average total inorganic nitrogen load (lbs as N) using the following equation: $\text{Monthly average TIN load (lbs as N)} = \left(\left(\sum \text{Calculated TIN loads} \left(\frac{\text{lbs}}{\text{day as N}} \right) \right) / \text{number of samples} \right) \times \text{number of days in the calendar month}$
f	Calculate the Cumulative Total Inorganic Nitrogen (lbs) using the following equation: Cumulative Total (lbs) = Previous Cumulative Total + Current Monthly Total

Table 8: Permit Renewal Application Requirements – Final Wastewater Effluent

Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type
Dissolved Oxygen	mg/L	Quarterly in the last year ^b	Grab ^a
Oil and Grease	mg/L	Quarterly in the last year ^b	Grab ^a
Total Phosphorus	mg/L as P	Quarterly in the last year ^b	24-Hour Composite ^c
Total Dissolved Solids	mg/L	Quarterly in the last year ^b	24-Hour Composite ^c
Total Hardness	mg/L as CaCO ₃	Quarterly in the last year ^b	24-Hour Composite ^c
a	Grab means an individual sample collected over a 15 minute, or less, period.		
b	Quarterly sampling periods are January through March, April through June, July through September, and October through December. The Permittee must begin quarterly monitoring for the quarter beginning on 1/1/XX 4/1/XX 7/1/XX 10/1/XX and submit results by 4/15/XX, 7/15/XX, 10/15/XX, 1/15/XX.		
c	24-Hour Composite means a series of individual samples collected over a 24-hour period into a single container, and analyzed as one sample.		

S2.B. Sampling and analytical procedures

Samples and measurements taken to meet the requirements of this permit must represent the volume and nature of the monitored parameters, including representative sampling of any

unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions affecting effluent quality.

Sampling and analytical 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 subchapter N](#) [Parts 400–471] or [40 CFR subchapter O](#) [Parts 501-503]) unless otherwise specified in this permit. Ecology may only specify alternative methods for parameters without limits and for those parameters without an EPA approved test method in [40 CFR Part 136](#).

S2.C. Flow measurement and continuous monitoring devices

The Permittee must:

1. Select and use appropriate flow measurement, field measurement and continuous monitoring devices and methods consistent with accepted scientific practices.
2. Install, calibrate, and maintain these devices to ensure the accuracy of the measurements is consistent with the accepted industry standard, the manufacturer’s recommendation, and approved O&M manual procedures for the device and the wastestream.
3. Maintain calibration records for at least three years.

S2.D. Laboratory accreditation

The Permittee must ensure that all monitoring data required by Ecology for permit specified parameters is prepared by a laboratory registered or accredited under the provisions of [chapter 173-50 WAC, Accreditation of Environmental Laboratories](#). Flow, temperature, settleable solids, conductivity, pH, and internal process control parameters are exempt from this requirement. The Permittee must obtain accreditation for conductivity and pH if it must receive accreditation or registration for other parameters.

S3. Reporting and recording requirements

The Permittee must monitor and report in accordance with the following conditions. Falsification of information submitted to Ecology is a violation of the terms and conditions of this permit.

S3.A. Discharge monitoring reports

The first monitoring period begins on the effective date of the permit (unless otherwise specified). The Permittee must:

1. Summarize, report, and submit monitoring data obtained during each monitoring period on the electronic discharge monitoring report (DMR) form provided by Ecology within the Water Quality Permitting Portal. Include data for each of the parameters tabulated in Special Condition S2 and as required by the form. Report a value for each day sampling occurred (unless specifically exempted in the permit) and for the summary values (when applicable) included on the electronic form.

2. Ensure that DMRs are electronically submitted no later than the dates specified below, unless otherwise specified in this permit.
3. The Permittee must also submit an electronic copy of the laboratory report as an attachment using WQWebDMR. The contract laboratory reports must also include information on the chain of custody, QA/QC results, and documentation of accreditation for the parameter
4. Submit DMRs for parameters with the monitoring frequencies specified in S2 (monthly, quarterly, annual, etc.) at the reporting schedule identified below. The Permittee must:
 - a. Submit **monthly** DMRs by the 15th day of the following month.
 - b. Submit **quarterly** DMRs, unless otherwise specified in the permit, by the 15th day of the month following the monitoring period. Quarterly sampling periods are January through March, April through June, July through September, and October through December.
The Permittee must submit the first quarterly DMR on ____ for the quarter beginning on 1/1/20XX 4/1/20XX 7/1/20XX 10/1/20XX.
5. Enter the “No Discharge” reporting code for an entire DMR, for a specific monitoring point, or for a specific parameter as appropriate, if the Permittee did not discharge wastewater or a specific pollutant during a given monitoring period.
6. Report single analytical values below detection as “less than the detection level (DL)” by entering < followed by the numeric value of the detection level (e.g. < 2.0) on the DMR. If the method used did not meet the minimum DL and quantitation level (QL) identified in the permit, report the actual QL and DL in the comments or in the location provided.
7. Report single analytical values between the detection level (DL) and the quantitation level (QL) by entering the estimated value, the code for estimated value/below quantitation limit (j) and any additional information in the comments. Submit a copy of the laboratory report as an attachment using WQWebDMR.
8. **Not** report zero for bacteria monitoring. Report as required by the laboratory method.
9. Calculate and report an arithmetic average value for each day for bacteria if multiple samples were taken in one day.
10. Calculate the geometric mean values for bacteria (unless otherwise specified in the permit) using:
 - a. The reported numeric value for all bacteria samples measured above the detection value except when it took multiple samples in one day. If the Permittee takes multiple samples in one day it must use the arithmetic average for the day in the geometric mean calculation.
 - b. The detection value for those samples measured below detection.
11. Report the test method used for analysis in the comments if the laboratory used an alternative method not specified in the permit and as allowed in Appendix A.

12. Calculate average values and calculated total values (unless otherwise specified in the permit) using:

- a. The reported numeric value for all parameters measured between the detection value and the quantitation value for the sample analysis.
- b. One-half the detection value (for values reported below detection) if the lab detected the parameter in another sample from the same monitoring point for the reporting period.
- c. Zero (for values reported below detection) if the lab did not detect the parameter in another sample for the reporting period.

S3.B. Permit Submittals and Schedules

The Permittee must use the Water Quality Permitting Portal – Permit Submittals application (unless otherwise specified in the permit) to submit all other written permit-required reports by the date specified in the permit.

When another permit condition requires submittal of a paper (hard-copy) report, the Permittee must ensure that it is postmarked or received by Ecology no later than the dates specified by this permit. Send these paper reports to Ecology at:

Water Quality Permit Coordinator
Department of Ecology
Northwest Regional Office
15700 Dayton Avenue N
Shoreline, WA 98133-9716

S3.C. Records retention

The Permittee must retain records of all monitoring information for a minimum of three (3) 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.

S3.D. Recording of results

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 analyses.

S3.E. Additional monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by Special Condition S2 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 DMR unless otherwise specified by Special Condition S2.

S3.F. Reporting permit violations

The Permittee must take the following actions when it violates or is unable to comply with any permit condition:

1. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the noncompliance and correct the problem.
2. If applicable, immediately repeat sampling and analysis. Submit the results of any repeat sampling to Ecology within thirty (30) days of sampling.

a. Immediate reporting

The Permittee must immediately report to Ecology and the Department of Health, Shellfish Program, and the Island County Health Department (at the numbers listed below), all:

- Failures of the disinfection system.
- Collection system overflows.
- Plant bypasses discharging to marine surface waters.
- Any other failures of the sewage system (pipe breaks, etc.).

Northwest Regional Office	206-594-0000
Department of Health, Shellfish Program	360-236-3330 (business hours) 360-789-8962 (after business hours)
Island County Health Department	360-679-7350 (business hours) 360-914-1452 (after hours)

b. Twenty-four-hour reporting

The Permittee must report the following occurrences of noncompliance by telephone, to Ecology at the telephone numbers listed above, within 24 hours from the time the Permittee becomes aware of any of the following circumstances:

1. Any noncompliance that may endanger health or the environment, unless previously reported under immediate reporting requirements.
2. Any unanticipated bypass that causes an exceedance of any effluent limit in the permit (See Part S5.F., "Bypass Procedures").

3. Any upset that causes an exceedance of an effluent limit in the permit (See G.15, "Upset").
4. Any violation of a maximum daily or instantaneous maximum discharge limit for any of the pollutants in Section S1.A of this permit.
5. Any overflow prior to the treatment works, whether or not such overflow endangers health or the environment or exceeds any effluent limit in the permit.

c. Report within five days

The Permittee must also submit a written report within five days of the time that the Permittee becomes aware of any reportable event under subparts a or b, above. The report must contain:

1. A description of the noncompliance and its cause.
2. The period of noncompliance, including exact dates and times.
3. The estimated time the Permittee expects the noncompliance to continue if not yet corrected.
4. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
5. If the noncompliance involves an overflow prior to the treatment works, an estimate of the quantity (in gallons) of untreated overflow.

d. Waiver of written reports

Ecology may waive the written report required in subpart c, above, on a case-by-case basis upon request if the Permittee has submitted a timely oral report.

e. All other permit violation reporting

The Permittee must report all permit violations, which do not require immediate or within 24 hours reporting, when it submits monitoring reports for S3.A ("Reporting"). The reports must contain the information listed in subpart c, above. Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

S3.G. Other reporting

a. Spills of Oil or Hazardous Materials

The Permittee must report a spill of oil or hazardous materials in accordance with the requirements of [RCW 90.56.280](#) and [chapter 173-303-145 WAC](#). You can obtain further instructions on [How to Report a Spill](#) at: <https://ecology.wa.gov/About-us/Get-involved/Report-an-environmental-issue/Report-a-spill>

b. Failure to submit relevant or correct facts

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, it must submit such facts or information promptly.

S3.H. Maintaining a copy of this permit

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

S4. Facility loading

S4.A. Design criteria

The flows or waste loads for the permitted facility must not exceed the following design criteria:

Table 9 — Design criteria

Flow	Unit
Maximum Month Design Flow (MMDF)	0.15 MGD
BOD ₅ Influent Loading for Maximum Month	425 lbs/day
TSS Influent Loading for Maximum Month	425 lbs/day

S4.B. Plans for maintaining adequate capacity

a. Conditions triggering plan submittal

The Permittee must submit a plan and a schedule for continuing to maintain capacity to Ecology when:

1. The actual flow or waste load reaches 85 percent of any one of the design criteria in S4.A for three consecutive months.
2. The projected plant flow or loading would reach design capacity within five years.

b. Plan and schedule content

The plan and schedule must identify the actions necessary to maintain adequate capacity for the expected population growth and to meet the limits and requirements of the permit. The Permittee must consider the following topics and actions in its plan.

1. Analysis of the present design and proposed process modifications
2. Reduction or elimination of excessive infiltration and inflow of uncontaminated ground and surface water into the sewer system
3. Limits on future sewer extensions or connections or additional waste loads

4. Modification or expansion of facilities
5. Reduction of industrial or commercial flows or waste loads

Engineering documents associated with the plan must meet the requirements of [WAC 173-240-060](#), "Engineering Report," and be approved by Ecology prior to any construction.

S4.C. Duty to mitigate

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

S4.D. Notification of new or altered sources

1. The Permittee must submit written notice to Ecology whenever any new discharge or a substantial change in volume or character of an existing discharge into the wastewater treatment plant is proposed which:
 - a. Would interfere with the operation of, or exceed the design capacity of, any portion of the wastewater treatment plant.
 - b. Is not part of an approved general sewer plan or approved plans and specifications.
 - c. Is subject to pretreatment standards under [40 CFR Part 403](#) and [Section 307\(b\) of the Clean Water Act](#).
2. This notice must include an evaluation of the wastewater treatment plant's ability to adequately transport and treat the added flow and/or waste load, the quality and volume of effluent to be discharged to the treatment plant, and the anticipated impact on the Permittee's effluent [\[40 CFR 122.42 \(b\)\]](#).

S4.E. Infiltration and inflow evaluation

1. The Permittee must conduct an infiltration and inflow evaluation. Refer to the U.S. [EPA publication, I/I Analysis and Project Certification, available as Publication No. 97-03](#) at: <https://apps.ecology.wa.gov/publications/SummaryPages/9703.html>
2. The Permittee may use monitoring records to assess measurable infiltration and inflow.
3. The Permittee must prepare a report summarizing the following,
 - a. Sewer improvement projects the City has completed since the last I/I evaluation submitted to Ecology in 2017.
 - b. A description of any rate increases or other funding obtained to continue sewer improvement projects focused on I/I reduction.
 - c. A description of any studies or inspections of the collection system to further identify leaking pipes.

- d. An analysis of influent flows during the last 5 years for wet and dry months including wet and dry months average rain, annual rain, wet and dry average flow, and annual average flow.
4. The Permittee must submit the I/I evaluation by XX (4th year of permit).

S5. Operation and maintenance

The Permittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances), which are installed to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes keeping a daily operation logbook (paper or electronic), adequate laboratory controls, and appropriate quality assurance procedures. This provision of the permit requires the Permittee to operate backup or auxiliary facilities or similar systems only when the operation is necessary to achieve compliance with the conditions of this permit.

S5.A. Certified operator

This permitted facility must be operated by an operator certified by the state of Washington for at least a Class II plant. This operator must be in responsible charge of the day-to-day operation of the wastewater treatment plant. An operator certified for at least a Class I plant must be in charge during all regularly scheduled shifts. The Permittee must notify Ecology when the operator in charge at the facility changes. It must provide the new operator's name and certification level and provide the name of the operator leaving the facility.

S5.B. Operation and maintenance program

The Permittee must:

1. Institute an adequate operation and maintenance program for the entire sewage system.
2. Keep maintenance records on all major electrical and mechanical components of the treatment plant, as well as the sewage system and pumping stations. Such records must clearly specify the frequency and type of maintenance recommended by the manufacturer and must show the frequency and type of maintenance performed.
3. Make maintenance records available for inspection at all times.

S5.C. Short-term reduction

The Permittee must schedule any facility maintenance, which might require interruption of wastewater treatment and degrade effluent quality, during non-critical water quality periods and carry this maintenance out according to the approved O&M manual or as otherwise approved by Ecology.

If a Permittee contemplates a reduction in the level of treatment that would cause a violation of permit discharge limits on a short-term basis for any reason, and such reduction cannot be avoided, the Permittee must:

1. Give written notification to Ecology, if possible, thirty (30) days prior to such activities.

2. Detail the reasons for, length of time of, and the potential effects of the reduced level of treatment.

This notification does not relieve the Permittee of its obligations under this permit.

S5.D. Electrical power failure

The Permittee must ensure that adequate safeguards prevent the discharge of untreated wastes or wastes not treated in accordance with the requirements of this permit during electrical power failure at the treatment plant and/or sewage lift stations. Adequate safeguards include, but are not limited to, alternate power sources, standby generator(s), or retention of inadequately treated wastes.

The Permittee must maintain Reliability Class II (EPA 430-99-74-001) at the wastewater treatment plant. Reliability Class II requires a backup power source sufficient to operate all vital components and critical lighting and ventilation during peak wastewater flow conditions. Vital components used to support the secondary processes (i.e., mechanical aerators or aeration basin air compressors) need not be operable to full levels of treatment, but must be sufficient to maintain the biota.

S5.E. Prevent connection of inflow

The Permittee must strictly enforce its sewer ordinances and not allow the connection of inflow (roof drains, foundation drains, etc.) to the sanitary sewer system.

S5.F. Bypass procedures

A bypass is the intentional diversion of waste streams from any portion of a treatment facility. This permit prohibits all bypasses except when the bypass is for essential maintenance, as authorized in special condition S5.F.1, or is approved by Ecology as an anticipated bypass following the procedures in S5.F.2.

1. Bypass for essential maintenance without the potential to cause violation of permit limits or conditions.

This permit allows bypasses for essential maintenance of the treatment system when necessary to ensure efficient operation of the system. The Permittee may bypass the treatment system for essential maintenance only if doing so does not cause violations of effluent limits. The Permittee is not required to notify Ecology when bypassing for essential maintenance. However the Permittee must comply with the monitoring requirements specified in special condition S2.B.

2. Anticipated bypasses for non-essential maintenance

Ecology may approve an anticipated bypass under the conditions listed below. This permit prohibits any anticipated bypass that is not approved through the following process.

- a. If a bypass is for non-essential maintenance, the Permittee must notify Ecology, if possible, at least ten (10) days before the planned date of bypass. The notice must contain:

- A description of the bypass and the reason the bypass is necessary.
- An analysis of all known alternatives which would eliminate, reduce, or mitigate the potential impacts from the proposed bypass.
- A cost-effectiveness analysis of alternatives.
- The minimum and maximum duration of bypass under each alternative.
- A recommendation as to the preferred alternative for conducting the bypass.
- The projected date of bypass initiation.
- A statement of compliance with SEPA.
- 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.
- Details of the steps taken or planned to reduce, eliminate, and prevent recurrence of the bypass.

b. For probable construction bypasses, the Permittee must notify Ecology of the need to bypass as early in the planning process as possible. The Permittee must consider the analysis required above during the project planning and design process. The project-specific engineering report as well as the plans and specifications must include details of probable construction bypasses to the extent practical. In cases where the Permittee determines the probable need to bypass early, the Permittee must continue to analyze conditions up to and including the construction period in an effort to minimize or eliminate the bypass.

c. Ecology will determine if the Permittee has met the conditions of special condition S5.F.2 a and b and consider the following prior to issuing a determination letter, an administrative order, or a permit modification as appropriate for an anticipated bypass:

- If the Permittee planned and scheduled the bypass to minimize adverse effects on the public and the environment.
- If the 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.
- If 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 downtime, but not if the Permittee should have installed adequate backup equipment in the exercise of

reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance.

- Transport of untreated wastes to another treatment facility.

S5.G. Operations and maintenance (O&M) manual

a. O&M manual submittal and requirements

The Permittee must:

1. Review the O&M Manual at least annually.
2. Submit to Ecology for review and approval substantial changes or updates to the O&M Manual, including substantial changes from significant nutrient process optimization.
3. Keep the approved O&M Manual at the permitted facility.
4. Follow the instructions and procedures of this manual.

b. O&M manual components

In addition to the requirements of [WAC 173-240-080\(1\) through \(5\)](#), the O&M Manual must be consistent with the guidance in Table G1-3 in the [Criteria for Sewage Works Design \(Orange Book\) 2008](#). The O&M Manual must include:

1. Emergency procedures for cleanup in the event of wastewater system upset or failure.
2. A review of system components which if failed could pollute surface water or could impact human health. Provide a procedure for a routine schedule of checking the function of these components.
3. Wastewater system maintenance procedures that contribute to the generation of process wastewater.
4. Reporting protocols for submitting reports to Ecology to comply with the reporting requirements in the discharge permit.
5. Any directions to maintenance staff when cleaning or maintaining other equipment or performing other tasks which are necessary to protect the operation of the wastewater system (for example, defining maximum allowable discharge rate for draining a tank, blocking all floor drains before beginning the overhaul of a stationary engine).
6. The treatment plant process control monitoring schedule.
7. Minimum staffing adequate to operate and maintain the treatment processes and carry out compliance monitoring required by the permit.

S6. Pretreatment

S6.A. General requirements

The Permittee must work with Ecology to ensure that all commercial and industrial users of the publicly owned treatment works (POTW) comply with the pretreatment regulations in [40 CFR Part 403](#) and any additional regulations that the Environmental Protection Agency (U.S. EPA) may promulgate under [Section 307\(b\) \(pretreatment\) and 308 \(reporting\) of the Federal Clean Water Act](#).

S6.B. Duty to enforce discharge prohibitions

1. Under federal regulations ([40 CFR 403.5\(a\) and \(b\)](#)), the Permittee must not authorize or knowingly allow the discharge of any pollutants into its POTW which may be reasonably expected to cause pass through or interference, or which otherwise violate general or specific discharge prohibitions contained in [40 CFR Part 403.5](#) or [WAC 173-216-060](#).
2. The Permittee must not authorize or knowingly allow the introduction of any of the following into their treatment works:
 - a. Pollutants which create a fire or explosion hazard in the POTW (including, but not limited to waste streams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in [40 CFR 261.21](#)).
 - b. Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, or greater than 11.0 standard units, unless the works are specifically designed to accommodate such discharges.
 - c. Solid or viscous pollutants in amounts that could cause obstruction to the flow in sewers or otherwise interfere with the operation of the POTW.
 - d. Any pollutant, including oxygen-demanding pollutants, (BOD₅, etc.) released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the POTW.
 - e. Petroleum oil, non-biodegradable cutting oil, or products of mineral origin in amounts that will cause interference or pass through.
 - f. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity which may cause acute worker health and safety problems.
 - g. Heat in amounts that will inhibit biological activity in the POTW resulting in interference but in no case heat in such quantities such that the temperature at the POTW headworks exceeds 40 degrees Centigrade (104 degrees Fahrenheit) unless Ecology, upon request of the Permittee, approves, in writing, alternate temperature limits.
 - h. Any trucked or hauled pollutants, except at discharge points designated by the Permittee.

- i. Wastewaters prohibited to be discharged to the POTW by the Dangerous Waste Regulations ([chapter 173-303 WAC](#)), unless authorized under the Domestic Sewage Exclusion ([WAC 173-303-071](#)).
3. The Permittee must also not allow the following discharges to the POTW unless approved in writing by Ecology:
 - a. Noncontact cooling water in significant volumes.
 - b. Stormwater and other direct inflow sources.
 - c. Wastewaters significantly affecting system hydraulic loading, which do not require treatment, or would not be afforded a significant degree of treatment by the system.
4. The Permittee must notify Ecology if any industrial user violates the prohibitions listed in this section (S6.B), and initiate enforcement action to promptly curtail any such discharge.

S6.C. Wastewater discharge permit required

The Permittee must:

1. Establish a process for authorizing non-domestic wastewater discharges that ensures all SIUs in all tributary areas meet the applicable state waste discharge permit (SWDP) requirements in accordance with chapter 90.48 RCW and chapter [173-216 WAC](#).
2. Immediately notify Ecology of any proposed discharge of wastewater from a source, which may be a significant industrial user (SIU) [see fact sheet definitions or refer to [40 CFR 403.3\(v\)\(i\)\(ii\)](#)].
3. Require all SIUs to obtain a SWDP from Ecology prior to accepting their non-domestic wastewater, or require proof that Ecology has determined they do not require a permit.
4. Require the documentation as described in S6.C.3 at the earliest practicable date as a condition of continuing to accept non-domestic wastewater discharges from a previously undiscovered, currently discharging and unpermitted SIU.
5. Require sources of non-domestic wastewater, which do not qualify as SIUs but merit a degree of oversight, to apply for a SWDP and provide it a copy of the application and any Ecology responses.
6. Keep all records documenting that its users have met the requirements of S6.C.

S6.D. Identification and reporting of existing, new, and proposed industrial users

1. The Permittee must take continuous, routine measures to identify all existing, new, and proposed significant industrial users (SIUs) and potential significant industrial users (PSIUs) discharging or proposing to discharge to the Permittee's sewer system (see **Appendix C** of the fact sheet for definitions).
2. Within 30 days of becoming aware of an unpermitted existing, new, or proposed industrial user who may be a SIU, the Permittee must notify such user by registered mail that, if

classified as an SIU, they must apply to Ecology and obtain a State Waste Discharge Permit. The Permittee must send a copy of this notification letter to Ecology within this same 30-day period.

3. The Permittee must also notify all Potential SIUs (PSIUs), as they are identified, that if their classification should change to an SIU, they must apply to Ecology for a State Waste Discharge Permit within 30 days of such change.

S7. Solid wastes

S7.A. Solid waste handling

The Permittee must handle and dispose of all solid waste material in such a manner as to prevent its entry into state ground or surface water.

S7.B. Leachate

The Permittee must not allow leachate from its solid waste material to enter state waters without providing all known, available, and reasonable methods of treatment, nor allow such leachate to cause violations of the State Surface Water Quality Standards, [Chapter 173-201A WAC](#), or the State Ground Water Quality Standards, [Chapter 173-200 WAC](#). The Permittee must apply for a permit or permit modification as may be required for such discharges to state ground or surface waters.

S8. Outfall evaluation

The Permittee must inspect the submerged portion of the outfall line and diffuser to document its integrity and continued function. If conditions allow for a photographic verification, the Permittee must include such verification in the report. By [Insert Date](#), the Permittee must submit the inspection report to Ecology through the Water Quality Permitting Portal – Permit Submittals application. The Permittee must submit hard-copies of any video files to Ecology as required by Permit Condition S3.B. The Portal does not support submittal of video files.

The inspector must at minimum:

- Assess the physical condition of the outfall pipe, diffuser, and associated couplings.
- Determine the extent of sediment accumulation in the vicinity of the diffuser.
- Ensure diffuser ports are free of obstructions and are allowing uniform flow.
- Confirm physical location (latitude/longitude) and depth (at MLLW) of the diffuser section of the outfall.
- Assess physical condition of the submarine line.
- Assess physical condition of anchors used to secure the submarine line.

If excessive corrosion or leaks are found in the outfall pipe, the City must take corrective actions to fix these issues.

S9. Nitrogen Optimization Plan and Report

The Permittee must develop, implement, and maintain a Nitrogen Optimization Plan to evaluate and implement operational strategies for maximizing nitrogen removal from the existing treatment plant during the permit term. The Permittee must document their actions taken and apply an adaptive management approach at the WWTP.

Any significant process optimization must be reflected in an update to the standard operating procedures in the Permittee's Operation and Maintenance manual as required by permit Section S5.G.

S9.A. Nitrogen Optimization Plan

The Nitrogen Optimization Plan must include the following components:

1. Treatment Process Performance Assessment

The Permittee must assess the nitrogen removal potential of the current treatment process and have the ability to evaluate optimization strategies prior to implementation.

- a. Evaluation. The Permittee shall develop a treatment process assessment method for purposes of evaluating optimization approaches during the permit term.
 - i. Evaluate current (pre-optimization) process performance. Determine the empirical TIN removal rate for the WWTP.
 - ii. Develop an initial assessment approach to evaluate possible optimization strategies at the WWTP prior to and after implementation.
 - iii. Determine the optimization goal for the WWTP and apply the assessment. Develop and document a prioritized list of optimization strategies capable of achieving the optimization goal for each WWTP owned and operated by the Permittee. Update this list as necessary to continuously maintain a selection of strategies for achieving each optimization goal identified.
 - iv. The Permittee may exclude from the initial selection any optimization strategy considered but found to exceed a reasonable implementation cost or timeframe that exceeds one year. Documentation must include an explanation of the rationale and financial criteria used for the exclusion determination.

- b. Initial Selection. By December 31, 2022 identify at least one optimization strategy for implementation.

Document the expected % TIN removal for the optimization strategy prior to implementation. Identify a performance metric to evaluate results. TIN % removal, or a calculated reduction in effluent load or concentration may be used as a performance metric.

2. Optimization Implementation

The Permittee must document implementation of the selected optimization strategy (from S9.A.1.b) as it is applied to the existing treatment process during the reporting period. The

Permittee must document all adaptive management following initial implementation through the permit term.

- a. Strategy Implementation. Describe how the selected strategy was implemented during the reporting period, following permit coverage. Including:
 - i. Initial implementation costs and costs to operate and maintain the optimization strategy.
 - ii. Length of time for full implementation, including start date.
 - iii. Anticipated and unanticipated challenges
 - iv. Any impacts to the overall treatment performance as a result of process changes
- b. Load Evaluation. The Permittee shall review effluent data collected during the reporting period to determine whether TIN loads are increasing.
 - i. Using all applicable monitoring data, determine the facility's annual average TIN concentration and load for each year during the reporting period.
 - ii. Determine the treatment plant's TIN removal rate at the end of each year. Compare the removal rate with the pre-optimization rate identified in S9.A.1.a.i.
- c. Strategy Assessment. Quantify the results of the implemented strategy and compare to the performance metric identified in S9.A.1.b.

If the performance metric was not met and/or the TIN loading increased, apply adaptive management, re-evaluate the optimization strategies and the metric to identify the reason. Select a new optimization strategy for implementation and/or revise the performance metric. Document any updates to the implementation schedule and overall plan.

3. Influent Nitrogen Reduction Measures/Source Control

The Permittee must develop an ongoing program to reduce influent TIN loads from septage handling practices, commercial, dense residential and industrial sources.

- a. Review non-residential sources of nitrogen and identify any possible pretreatment opportunities.
- b. Identify strategies for reducing TIN from new multi-family/dense residential developments and commercial buildings.

S9.B. Nitrogen Optimization Report

The Permittee must electronically submit a report documenting the Nitrogen Optimization Plan implementation actions by March 31, 2026. The Report consists of a questionnaire that the Permittee must complete in the Water Quality Permitting Portal – Permit Submittals application. Appendix B of this permit includes a list of the questions in this questionnaire.

S10. AKART Analysis

The Permittee must prepare and submit an approvable all known and reasonable treatment (AKART) analysis to Ecology in accordance with RCW 90.48.010 for purposes of evaluating reasonable treatment alternatives capable of reducing total inorganic nitrogen (TIN). The Permittee must submit this report by March 31, 2026.

The analysis must contain appropriate requirements as described in the following guidance (or the most recent version):

[The Criteria for Sewage Works Design \(ECY Publication No. 98-37, 2019\)](#)

[Reclaimed Water Facilities Manual: The Purple Book \(ECY Publication No. 15-10-024, 2019\)](#)

The AKART analysis must include the following elements:

1. Wastewater Characterization
 - a. Current volumes, flowrates and growth trends
 - b. Current influent and effluent quality
2. Treatment Technology Analysis
 - a. Description of current treatment processes
 - b. Identification and screening of potential treatment technologies for TIN reduction that achieves AKART for nitrogen removal
3. Economic Evaluation
 - a. Develop capital, operation and maintenance costs and net present value for each technology
 - b. Provide cost per pound of nitrogen removed
 - c. Provide details on basis for current wastewater utility rate structure, including:
 - i. How utilities allocate and recover costs from customers.
 - ii. The frequency in which rate structures are reviewed.
 - iii. The last time rates were adjusted and the reason for that adjustment.
 - d. Provide impact to current rate structure for each alternative assessed.
4. Environmental Justice (EJ) Review
 - a. Evaluate the demographics within the sewer service area to identify communities of color, Tribes, indigenous communities, and low income populations.

- b. Include an affordability assessment to identify how much overburdened communities identified in S10.4.a can afford to pay for the wastewater utility.
 - c. Propose alternative rate structures or measures that can be taken to prevent adverse effects of rate increases on populations with economic hardship identified in S10.4.a.
 - d. Provide information on how recreation and commercial opportunities may be improved for communities identified in S10.4.a as a result of the treatment improvements identified.
5. Selection of most reasonable treatment alternative
 6. Attainable implementation schedule that includes funding, design and construction of infrastructure improvement capable of achieving and maintaining AKART

S11. Application for permit renewal or modification for facility changes

The Permittee must submit an application for renewal of this permit by Insert Date at least one year prior to expiration date.

The Permittee must also submit a new application or addendum at least one hundred eighty (180) days prior to commencement of discharges, resulting from the activities listed below, which may result in permit violations. These activities include any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility.

General Conditions

G1. Signatory requirements

1. All applications submitted to Ecology must be signed and certified.
 - a. In the case of corporations, by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
 - 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
 - The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign

documents has been assigned or delegated to the manager in accordance with corporate procedures.

- b. In the case of a partnership, by a general partner.
- c. In the case of sole proprietorship, by the proprietor.
- d. In the case of a municipal, state, or other public facility, by either a principal executive officer or ranking elected official.

Applications for permits for domestic wastewater facilities that are either owned or operated by, or under contract to, a public entity shall be submitted by the public entity.

2. All reports required by this permit and other information requested by Ecology must be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described above and submitted to Ecology.
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position).
3. Changes to authorization. If an authorization under paragraph G1.2, above, is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph G1.2, above, must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.
4. Certification. Any person signing a document under this section 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 gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

G2. Right of inspection and entry

The Permittee must allow an authorized representative of Ecology, upon the presentation of credentials and such other documents as may be required by law:

1. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit.

2. To have access to and copy, at reasonable times and at reasonable cost, any records required to be kept under the terms and conditions of this permit.
3. To inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.
4. To sample or monitor, at reasonable times, any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

G3. Permit actions

This permit may be modified, revoked and reissued, or terminated either at the request of any interested person (including the Permittee) or upon Ecology's initiative. However, the permit may only be modified, revoked and reissued, or terminated for the reasons specified in 40 CFR 122.62, 40 CFR 122.64 or WAC 173-220-150 according to the procedures of 40 CFR 124.5.

1. The following are causes for terminating this permit during its term, or for denying a permit renewal application:
 - a. Violation of any permit term or condition.
 - b. Obtaining a permit by misrepresentation or failure to disclose all relevant facts.
 - c. A material change in quantity or type of waste disposal.
 - d. A determination that the permitted activity endangers human health or the environment, or contributes to water quality standards violations and can only be regulated to acceptable levels by permit modification or termination.
 - e. A change in any condition that requires either a temporary or permanent reduction, or elimination of any discharge or sludge use or disposal practice controlled by the permit.
 - f. Nonpayment of fees assessed pursuant to RCW 90.48.465.
 - g. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.
2. The following are causes for modification but not revocation and reissuance except when the Permittee requests or agrees:
 - a. A material change in the condition of the waters of the state.
 - b. New information not available at the time of permit issuance that would have justified the application of different permit conditions.
 - c. Material and substantial alterations or additions to the permitted facility or activities which occurred after this permit issuance.
 - d. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions, or requiring permit revision.
 - e. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR Part 122.62.

- f. Ecology has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statutory deadlines.
 - g. Incorporation of an approved local pretreatment program into a municipality's permit.
3. The following are causes for modification or alternatively revocation and reissuance:
- a. When cause exists for termination for reasons listed in 1.a through 1.g of this section, and Ecology determines that modification or revocation and reissuance is appropriate.
 - b. When Ecology has received notification of a proposed transfer of the permit. A permit may also be modified to reflect a transfer after the effective date of an automatic transfer (General Condition G7) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new Permittee.

G4. Reporting planned changes

The Permittee must, as soon as possible, but no later than one hundred eighty (180) days prior to the proposed changes, give notice to Ecology of planned physical alterations or additions to the permitted facility, production increases, or process modification which will result in:

- 1. The permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b).
- 2. A significant change in the nature or an increase in quantity of pollutants discharged.
- 3. A significant change in the Permittee's sludge use or disposal practices. Following such notice, and the submittal of a new application or supplement to the existing application, along with required engineering plans and reports, this permit may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation.

G5. Plan review required

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications must be submitted to Ecology for approval in accordance with chapter 173-240 WAC. Engineering reports, plans, and specifications must be submitted at least one hundred eighty (180) days prior to the planned start of construction unless a shorter time is approved by Ecology. Facilities must be constructed and operated in accordance with the approved plans.

G6. Compliance with other laws and statutes

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

G7. Transfer of this permit

In the event of any change in control or ownership of facilities from which the authorized discharge emanate, the Permittee must notify the succeeding owner or controller of the existence of this permit by letter, a copy of which must be forwarded to Ecology.

1. Transfers by Modification

Except as provided in paragraph (2) below, this permit may be transferred by the Permittee to a new owner or operator only if this permit has been modified or revoked and reissued under 40 CFR 122.62(b)(2), or a minor modification made under 40 CFR 122.63(d), to identify the new Permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

2. Automatic Transfers

This permit may be automatically transferred to a new Permittee if:

- a. The Permittee notifies Ecology at least thirty (30) days in advance of the proposed transfer date.
- b. The notice includes a written agreement between the existing and new Permittees containing a specific date transfer of permit responsibility, coverage, and liability between them.
- c. Ecology does not notify the existing Permittee and the proposed new Permittee of its intent to modify or revoke and reissue this permit. A modification under this subparagraph may also be minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the written agreement.

G8. Reduced production for compliance

The Permittee, in order to maintain compliance with its permit, must control production and/or all discharges upon reduction, loss, failure, or bypass of the treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

G9. Removed substances

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters must not be resuspended or reintroduced to the final effluent stream for discharge to state waters.

G10. Duty to provide information

The Permittee must submit to Ecology, within a reasonable time, all information which 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 submit to Ecology upon request, copies of records required to be kept by this permit.

G11. Other requirements of 40 CFR

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

G12. Additional monitoring

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

G13. Payment of fees

The Permittee must submit payment of fees associated with this permit as assessed by Ecology.

G14. Penalties for violating permit conditions

Any person who is found guilty of willfully violating the terms and conditions of this permit is deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to ten thousand dollars (\$10,000) and costs of prosecution, or by 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 a waste discharge permit may incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars (\$10,000) for every such violation.

Each and every such violation is a separate and distinct offense, and in case of a continuing violation, every day's continuance is deemed to be a separate and distinct violation.

G15. Upset

Definition – “Upset” means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limits because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limits if the requirements of the following paragraph are met.

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 S3.F.
4. The Permittee complied with any remedial measures required under S3.F of this permit.

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

G16. Property rights

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

G17. Duty to comply

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

G18. Toxic pollutants

The Permittee must comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants 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.

G19. Penalties for tampering

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two (2) years per violation, or by both. 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, or by imprisonment of not more than four (4) years, or by both.

G20. Compliance schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit must be submitted no later than fourteen (14) days following each schedule date.

G21. Service agreement review

The Permittee must submit to Ecology any proposed service agreements and proposed revisions or updates to existing agreements for the operation of any wastewater treatment facility covered by this permit. The review is to ensure consistency with chapters 90.46 and 90.48 RCW as required by RCW 70.150.040(9). In the event that Ecology does not comment within a thirty-day (30) period, the Permittee may assume consistency and proceed with the service agreement or the revised/updated service agreement.

Appendix A

List Of Pollutants With Analytical Methods, Detection Limits And Quantitation Levels

The Permittee must use the specified analytical methods, detection limits (DLs) and quantitation levels (QLs) in the following table for permit and application required monitoring unless:

- Another permit condition specifies other methods, detection levels, or quantitation levels.
- The method used produces measurable results in the sample and EPA has listed it as an EPA-approved method in 40 CFR Part 136

If the Permittee uses an alternative method, not specified in the permit and as allowed above, it must report the test method, DL, and QL on the discharge monitoring report or in the required report.

If the Permittee is unable to obtain the required DL and QL in its effluent due to matrix effects, the Permittee must submit a matrix-specific detection limit (MDL) and a quantitation limit (QL) to Ecology with appropriate laboratory documentation.

When the permit requires the Permittee to measure the base neutral compounds in the list of priority pollutants, it must measure all of the base neutral pollutants listed in the table below. The list includes EPA required base neutral priority pollutants and several additional polynuclear aromatic hydrocarbons (PAHs). The Water Quality Program added several PAHs to the list of base neutrals below from Ecology's Persistent Bioaccumulative Toxics (PBT) List. It only added those PBT parameters of interest to Appendix A that did not increase the overall cost of analysis unreasonably.

Ecology added this appendix to the permit in order to reduce the number of analytical "non-detects" in permit-required monitoring and to measure effluent concentrations near or below criteria values where possible at a reasonable cost.

The lists below include conventional pollutants (as defined in CWA section 502(6) and 40 CFR Part 122.), toxic or priority pollutants as defined in CWA section 307(a)(1) and listed in 40 CFR Part 122 Appendix D, 40 CFR Part 401.15 and 40 CFR Part 423 Appendix A), and nonconventionals. 40 CFR Part 122 Appendix D (Table V) also identifies toxic pollutants and hazardous substances which are required to be reported by dischargers if expected to be present. This permit appendix A list does not include those parameters.

Changes from 2019 version: Fecal Coliform (added SM 9221C); Enterococci (added EPA 1600); Total Coliform (removed SM 9223B).

Table 10: Conventional Pollutants

Pollutant	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L Unless specified	Quantitation Level (QL)² µg/L Unless specified
Biochemical Oxygen Demand		SM5210-B		2 mg/L
Biochemical Oxygen Demand, Soluble		SM5210-B ³		2 mg/L
Fecal Coliform		SM 9221C, 9221E SM 9222D	N/A	Specified in method sample aliquot dependent
Oil and Grease (HEM) (Hexane Extractable Material)		1664 A or B	1,400	5,000
pH		SM4500-H ⁺ B	N/A	N/A
Total Suspended Solids		SM2540-D		5 mg/L

Table 11: NonConventional Pollutants

Pollutant	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L Unless specified	Quantitation Level (QL)² µg/L Unless specified
Alkalinity, Total		SM2320-B		5 mg/L as CaCO ₃
Aluminum, Total	7429-90-5	200.8	2.0	10
Ammonia, Total (as N)		SM4500-NH ₃ -B and C/D/E/G/H		20
Barium Total	7440-39-3	200.8	0.5	2.0
BTEX (benzene +toluene + ethylbenzene + m,o,p xylenes)		EPA SW 846 8021/8260	1	2
Boron, Total	7440-42-8	200.8	2.0	10.0
Chemical Oxygen Demand		SM5220-D		10 mg/L

Pollutant	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L Unless specified	Quantitation Level (QL)² µg/L Unless specified
Chloride		SM4500-Cl B/C/D/E and SM4110 B		Sample and limit dependent
Chlorine, Total Residual		SM4500 Cl G		50.0
Cobalt, Total	7440-48-4	200.8	0.05	0.25
Color		SM2120 B/C/E		10 color units
Dissolved oxygen		SM4500-OC/OG		0.2 mg/L
E.coli		SM 9221B, 9221F, 9223B	N/A	Specified in method - sample aliquot dependent
Enterococci		EPA 1600 SM 9230B, 9230C, 9230D,	N/A	Specified in method - sample aliquot dependent
Flow		Calibrated device		
Fluoride	16984-48-8	SM4500-F E	25	100
Hardness, Total		SM2340B		200 as CaCO ₃
Iron, Total	7439-89-6	200.7	12.5	50
Magnesium, Total	7439-95-4	200.7	10	50
Manganese, Total	7439-96-5	200.8	0.1	0.5
Molybdenum, Total	7439-98-7	200.8	0.1	0.5
Nitrate + Nitrite Nitrogen (as N)		SM4500-NO ₃ -E/F/H		100
Nitrogen, Total Kjeldahl (as N)		SM4500-N _{org} B/C and SM4500NH ₃ -B/C/D/EF/G/H		300
NWTPH Dx ⁴		Ecology NWTPH Dx	250	250

Pollutant	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L Unless specified	Quantitation Level (QL)² µg/L Unless specified
NWTPH Gx ⁵		Ecology NWTPH Gx	250	250
Phosphorus, Total (as P)		SM 4500 PB followed by SM4500-PE/PF	3	10
Salinity		SM2520-B		3 practical salinity units or scale (PSU or PSS)
Settleable Solids		SM2540 -F		Sample and limit dependent
Soluble Reactive Phosphorus (as P)		SM4500-P E/F/G	3	10
Sulfate (as mg/L SO ₄)		SM4110-B		0.2 mg/L
Sulfide (as mg/L S)		SM4500-S ² F/D/G		0.2 mg/L
Sulfite (as mg/L SO ₃)		SM4500-SO3B		2 mg/L
Temperature (max. 7-day avg.)		Analog recorder or Use micro-recording devices known as thermistors		0.2° C
Tin, Total	7440-31-5	200.8	0.3	1.5
Titanium, Total	7440-32-6	200.8	0.5	2.5
Total Coliform		SM 9221B, 9222B	N/A	Specified in method - sample aliquot dependent
Total Organic Carbon		SM5310-B/C/D		1 mg/L
Total dissolved solids		SM2540 C		20 mg/L

Analytical Methods

1. **Detection level (DL)** – or detection limit means the minimum concentration of an analyte (substance) 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.
2. **Quantitation Level (QL)** – also known as Minimum Level of Quantitation (ML) – 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 lab has used all method-specified sample weights, volumes, and cleanup procedures. The QL is calculated by multiplying the MDL by 3.18 and rounding the result to the number nearest to $(1, 2, \text{ or } 5) \times 10^n$, where n is an integer. (64 FR 30417).
Also Given As: The smallest detectable concentration of analyte greater than the Detection Limit (DL) 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 US Environmental Protection Agency December 2007).
3. **Soluble Biochemical Oxygen Demand** – method note: First, filter the sample through a Millipore Nylon filter (or equivalent) - pore size of 0.45-0.50 um (prep all filters by filtering 250 ml of laboratory grade deionized water through the filter and discard). Then, analyze sample as per method 5210-B.

Appendix B

One Time Report Questions

Pursuant to Special Condition S9.B, the Permittee must submit a one-time report online using the questionnaire provided in the Water Quality Permitting Portal – Permit Submittals application. The questionnaire will require responses to the following questions.

1. Is the facility description in your current individual NPDES permit consistent with the optimization actions you have taken? If no, attach a document describing how the process has changed, or how you anticipate the process to change, and include an updated process flow diagram. (S11)
2. **Attach** a document describing your assessment process, your optimization goal, the list of prioritized optimization strategies identified, and the strategy implemented in 2022 (S9). If any optimization strategies were found to not have a reasonable implementation cost or timeframe (S9), include description of the feasibility and cost analysis that led to exclusion of any approach(es). (S9)
3. What is your pre-optimization empirical TIN removal rate? (S9)
4. Did you maintain the reassessment approach after year 1? If no, **attach** a document describing assessment revisions that occurred each year over the permit term. (S9)
5. What is your expected Tin removal with the preferred optimization strategy? (S9)
6. **Attach** a document describing optimization implementation including costs, time for full implementation, start date, challenges, and impacts to treatment performance. (S9)
7. What was the TIN removal rate observed each year during the reporting period? (S9)
8. Did your plant meet or exceed the pre-optimization empirical TIN removal rate in each year of this permit and also maintain or reduce TIN loads? If no, **attach** a document describing how you revised your optimization strategy in response to the evaluation in each of the prior permit years, and document your adaptive management steps, your assessment process, and the new optimization strategy or strategies you identified, and your updated optimization goal(s) and performance metric(s). (S9)
9. **Attach** a document describing your ongoing program to reduce influent TIN loads from septage handling practices, commercial, dense residential and industrial sources. (S9)
10. Did you submit the required AKART analysis on or before March 31, 2026? If no, **date** document was or will be provided. (S10)
11. Did you submit discharge monitoring reports according to the required schedule? If no, **attach** a document describing the missed monitoring activities and the corrective action taken. (S3, S9)
12. Are you retaining all applicable records? If no, **attach** a document describing the missing records and the corrective action taken and/or planned. (S9)
13. Did you follow non-compliance notification requirements? If no, **attach** a document describing the non-compliance and the corrective actions taken and/or planned. (S9)