

Issuance Date: December 2, 2019
Effective Date: January 1, 2020
Expiration Date: December 31, 2024

State Waste Discharge Permit Number ST0045510

State of Washington
DEPARTMENT OF ECOLOGY
Northwest Regional Office
3190 160th Avenue SE
Bellevue, WA 98008-5452

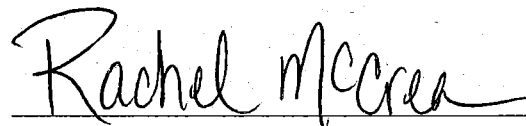
In compliance with the provisions of the
State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington, as amended,

National Food Corporation
1930 Merrill Creek Parkway, Suite A
Everett, WA 98203-5897

Hilltop Farms
2005 268th Street NW
Stanwood, WA 98292

is authorized to discharge wastewater at the following location
in accordance with the special and general conditions which follow.

<u>Facility Location:</u> 2005 – 268 th Street NW Stanwood, WA 98292	<u>Discharge Location:</u> Drain-field southwest of facility
<u>Treatment Type:</u> Aeration and membrane bio-reactor filtration	<u>Legal Description:</u> SE ¼, SE ¼, SW ¼, Sec. 23, T 32 N, R 4 E
<u>Industry Type:</u> Egg Processing	<u>SIC Code:</u> 5144 <u>NAICS Code:</u> 424440



Rachel McCrea
Water Quality Section Manager
Northwest Regional Office
Washington State Department of Ecology

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Summary of Permit Report Submittals

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

Permit Section	Submittal	Frequency	First Submittal Date
S3.A	Discharge Monitoring Report	Monthly	February 28, 2020
S3.A	Discharge Monitoring Report	Bi-monthly	March 28, 2022
S3.A	Discharge Monitoring Report	Semiannually	July 28, 2020
S3.A	Discharge Monitoring Report	Annually	January 28, 2023
S3.E	Reporting Permit Violations	As necessary	
S3.F	Other Reporting	As necessary	
S4.A	Operations and Maintenance Manual	1/permit cycle	April 1, 2020
S4.B	Reporting Bypasses	As necessary	
S5.C	Solid Waste Control Plan	1/permit cycle	June 1, 2020
S6	Application for Permit Renewal	1/permit cycle	October 1, 2024
S7	Non-Routine Discharge Report	As necessary	
S10	Groundwater Monitoring Evaluation	1/permit cycle	July 1, 2020
S11	Groundwater Monitoring Wells	As necessary	
G1	Notice of Change in Authorization	As necessary	
G4	Permit Application for Substantive Changes to the Discharge	As necessary	
G5	Engineering Report for Construction or Modification Activities	As necessary	
G7	Notice of Permit Transfer	As necessary	
G8	Payment of Fees	As assessed	
G10	Duty to Provide Information	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 concentration in excess of, that authorized by this permit violates the terms and conditions of this permit.

The permittee is authorized to land apply process wastewater to the designated land treatment site via a drain field, and at concentrations for wastewater constituents not to exceed those established in this permit to protect background groundwater quality.

The permittee is authorized to apply process wastewater for final treatment on the following designated land treatment site:

Approximately 3,000 square feet on 268th Street NW, located east of the city of Stanwood, in the SW $\frac{1}{4}$, SE $\frac{1}{4}$, of section 23, township 32N, range 4E.

The permittee must operate the drain field in such a manner as to:

1. Protect the existing and future beneficial uses of both groundwater and surface water.
2. Not cause a violation of the groundwater standards (chapter 173-200 WAC) or the surface water quality standards (chapter 173-201A WAC).
3. Alter the existing infiltration capacity of the soils within the infiltration site to the extent that continued use of the land treatment site is no longer feasible.

Beginning on January 1, 2020, and lasting through December 31, 2024, the permittee is authorized to discharge process wastewater to the drain field at the permitted location subject to the following limits:

Effluent Limits: Outfall # 001		
Latitude: 48.2398 Longitude: -122.260438		
Parameter	Average Monthly ^{a, b}	Maximum Daily ^c
Flow ^d	93,000 gpm ^e	4,000 gpd ^f
Oil and Grease	10 mg/L ^g	15 mg/L
	Monthly Geometric Mean ^h	7-day Geometric Mean ⁱ
Fecal Coliform	200 CFU/100 mL ^j	400 CFU/100 mL
	Daily Minimum	Daily Maximum
pH	6.5 S.U. ^k	8.5 S.U.
^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.	
^b	To calculate the average value (monthly average): <ul style="list-style-type: none"> • Use the reported numeric value for all parameters measured between the agency-required detection value and the agency-required quantitation value. 	

Effluent Limits: Outfall # 001	
Latitude: 48.2398 Longitude: -122.260438	
	<ul style="list-style-type: none"> For values reported below detection, use one-half the detection value if the lab detected the parameter in another sample for the reporting period. For values reported below detection, use zero if the lab did not detect the parameter in another sample for the reporting period.
c	Maximum daily effluent limit means the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. The maximum daily effluent is the highest value of the pollutant measured on single day. pH is recorded as both the maximum and minimum values for the day.
d	Ecology uses the flow data submitted in the application to set permit fees. The permittee must report to Ecology when actual flows exceed the values reported on the permit application.
e	gpmo \equiv gallons per month (total)
f	gpd \equiv gallons per day.
g	mg/L \equiv Milligrams per liter.
h	Ecology provides directions to calculate the monthly geometric mean in publication No. 04-10-020, <i>Information Manual for Treatment Plant Operators</i> available at: https://fortress.wa.gov/ecy/publications/documents/0410020.pdf .
i	A maximum of 400 CFU/100 mL weekly geometric mean. Ecology provides directions to calculate the monthly and the weekly geometric mean in publication No. 04-10-020, <i>Information Manual for Treatment Plant Operators</i> available at: https://fortress.wa.gov/ecy/publications/SummaryPages/0410020.html
j	CFU/100 mL \equiv Colony forming units per 100 milliliters (of wastewater).
k	S.U. \equiv Standard units.

S1.B. Best management practices/pollution prevention

The permittee must comply with the following best management practices to prevent pollution to waters of the state:

1. Do **not** commingle process wastewater streams with sanitary (domestic) sewage.
2. Do **not** discharge in excess of the hydraulic capacity of the drain field such that surface ponding occurs.
3. Do **not** apply wastewater to the irrigation lands in quantities that would:
 - a. Significantly reduce or destroy the long-term infiltration rate of the soil.
 - b. Cause long-term anaerobic conditions in the soil.
 - c. Cause ponding of wastewater and produce objectionable odors or support insects or vectors.
 - d. Cause leaching losses of constituents of concern beyond the treatment zone or in excess of the approved design. Constituents of concern are constituents in the wastewater, partial decomposition products, or soil constituents that would alter groundwater quality in amounts that would affect current and future beneficial uses.
4. Do **not** discharge priority pollutants, dangerous wastes, or toxics in toxic amounts.

S2. Monitoring requirements

S2.A. Process wastewater monitoring

The permittee must monitor the process wastewater prior to its discharge to the drain field. Results are to be reported as a Daily Maximum, except Flow Average is reported as a Daily Average.

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

S2.A. Effluent Monitoring Parameters: Outfall # 001 ^a			
Parameter	Units & Speciation	Sampling Frequency	Sample Type
Flow	gallons/day (gpd)	1/Day - recorded but not reported	Measurement ^b
Flow, Average	gpd	Monthly	Calculation ^c
Fecal Coliform	CFU/100 mL	Monthly	Grab ^d
Oil and Grease	mg/L	Monthly	Grab
pH	Standard Units	Monthly	Measurement
Application Loading Rate	in/day	Monthly / Bimonthly ^e	Calculated
Conductivity	µmhos/cm	Monthly / Bimonthly	Measurement
Biochemical Oxygen Demand (BOD ₅)	mg/L	Monthly / Bimonthly	Grab
Chemical Oxygen Demand	mg/L	Monthly / Bimonthly	Grab
Nitrate + Nitrite - Nitrogen	mg/L as N	Monthly / Bimonthly	Grab
Ammonia - Nitrogen	mg/L as N	Monthly / Bimonthly	Grab
Total Nitrogen	mg/L as N	Monthly / Bimonthly	Calculated
Total Coliform	CFU/100 mL	Monthly / Bimonthly	Grab
Total Suspended Solids (TSS)	mg/L	Monthly / Bimonthly	Grab
Total Dissolved Solids (TDS)	mg/L	Monthly / Bimonthly	Grab
Bicarbonate Alkalinity	mg/L as CaCO ₃	Semiannually / Annually ^f	Grab
Hardness	mg/L as CaCO ₃	Semiannually / Annually	Grab
Chloride	mg/L	Semiannually / Annually	Grab
Sulfate	mg/L	Semiannually / Annually	Grab
Calcium (Total)	mg/L	Semiannually / Annually	Grab
Iron (Total)	mg/L	Semiannually / Annually	Grab
Manganese (Total)	mg/L	Semiannually / Annually	Grab
Magnesium (Total)	mg/L	Semiannually / Annually	Grab
Potassium (Total)	mg/L	Semiannually / Annually	Grab
Sodium (Total)	mg/L	Semiannually / Annually	Grab
^a	See Appendix A for the required detection (DL) or quantitation (QL) levels.		
^b	Measurement means the parameter is measured in the field or on site at the point of discharge with a field kit, ruler, etc.		
^c	Calculated means the value is the result of a calculation using the results from some other parameter(s).		
^d	Grab means an individual sample collected over a period of not more than fifteen (15) minutes.		
^e	Monitor monthly for years one and two, then go to bimonthly (every other month) for years three through five.		
^f	Monitor semiannually for years one and two, then go to annually for years three through five.		

S2.B. Vadose zone / Groundwater monitoring

The sampling point for the treated wastewater is within the interflow zone directly above the till layer.

The permittee must monitor the percolate /groundwater at monitoring wells installed in the interflow zone under Special Condition S11 in accordance with the following schedule and the requirements specified in Appendix A.

S2.B. Groundwater Monitoring Parameters: Outfall # 002			
Parameter	Units & Speciation	Sampling Frequency	Sample Type
Depth to Groundwater	Feet (nearest 0.01 ft)	Monthly / Bimonthly ^a	Field Measurement
pH	Standard Units	Monthly / Bimonthly	Field Measurement
Conductivity	Micromhos/cm	Monthly / Bimonthly	Field Measurement
Temperature	Degrees C	Monthly / Bimonthly	Field Measurement
Oxidation Reduction Potential	Millivolts	Monthly / Bimonthly	Field Measurement
Dissolved Oxygen	mg/L	Monthly / Bimonthly	Field Measurement
Biological Oxygen Demand	mg/L	Monthly / Bimonthly	Grab
Chemical Oxygen Demand	mg/L	Monthly / Bimonthly	Grab
Nitrate + Nitrite – Nitrogen	mg/L as N	Monthly / Bimonthly	Grab
Ammonia – Nitrogen	mg/L as N	Monthly / Bimonthly	Grab
Total Nitrogen	mg/L	Monthly / Bimonthly	Calculated
Total Dissolved Solids	mg/L	Monthly / Bimonthly	Grab
Total Suspended Solids	mg/L	Monthly / Bimonthly	Grab
Bicarbonate Alkalinity	mg/L as CaCO ₃	Semiannually / Annually ^b	Grab
Hardness	mg/L as CaCO ₃	Semiannually / Annually	Grab
Chloride	mg/L	Semiannually / Annually	Grab
Sulfate	mg/L	Semiannually / Annually	Grab
Calcium (Total)	mg/L	Semiannually / Annually	Grab
Iron (Total)	mg/L	Semiannually / Annually	Grab
Manganese (Total)	mg/L	Semiannually / Annually	Grab
Magnesium (Total)	mg/L	Semiannually / Annually	Grab
Potassium (Total)	mg/L	Semiannually / Annually	Grab
Sodium (Total)	mg/L	Semiannually / Annually	Grab
^a	Monitor monthly for years one and two, then go to bimonthly (every other month) for years three through five.		
^b	Monitor semiannually for years one and two, then go to annually for years three through five.		

The permittee must monitor the vadose zone within the till for the following parameters using appropriate sampling equipment/methods for the constituent listed.

S2.B. Vadose Zone Monitoring Parameters: Outfall # 003			
Parameter	Units & Speciation	Sampling Frequency	Sample Type
Moisture content	Percent (%)	Weekly / Monthly ^a	Calculated
^a	Weekly monitoring between October 1 and March 31; Monthly monitoring between April 1 and September 30.		

S2.C. 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.

Groundwater sampling must conform to the latest protocols in the *Implementation Guidance for the Ground Water Quality Standards* (Ecology 2005).

Sampling and analytical methods used to meet the water and wastewater monitoring requirements specified in this permit must conform to the latest revision of the following rules and documents unless otherwise specified in this permit or approved in writing by the Department of Ecology (Ecology).

- Guidelines Establishing Test Procedures for the Analysis of Pollutants contained in 40 CFR Part 136.
- Standard Methods for the Examination of Water and Wastewater (APHA).

The permittee must conduct and report all soil analysis in accordance with the Western States Laboratory Plant, Soil and Water Analysis Manual, *Soil, Plant and Water Reference Methods for The Western Region, 3rd Edition*, 2005. You can find more information at:

www.naptprogram.org/files/napt/publications/method-papers/western-states-methods-manual-2013.pdf

S2.D. Flow measurement, field measurement, and monitoring devices

The permittee must:

1. Select and use appropriate flow measurement, field measurement, and 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 and the manufacturer's recommendation for that type of device.
3. Calibrate continuous monitoring instruments weekly unless the permittee can demonstrate a longer period is sufficient based on monitoring records. The permittee:
 - a. May calibrate apparatus for continuous monitoring of dissolved oxygen by air calibration.
 - b. Must calibrate continuous pH measurement instruments using a grab sample analyzed in the lab with a pH meter calibrated with standard buffers and analyzed within 15 minutes of sampling.
4. Use field measurement devices as directed by the manufacturer and do not use reagents beyond their expiration dates.
5. Calibrate these devices at the frequency recommended by the manufacturer.

6. Calibrate flow-monitoring devices at a minimum frequency of at least one calibration per year.
7. Maintain calibration records for at least three years.

S2.E. 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.

S2.F. Request for reduction in monitoring

The permittee may request a reduction of the sampling frequency after twelve (12) months of monitoring. Ecology will review each request and at its discretion grant the request when it reissues the permit or by a permit modification.

The permittee must:

1. Provide a written request.
2. Clearly state the parameters for which it is requesting reduced monitoring.
3. Clearly state the justification for the reduction.

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. Reporting

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

To find out more information and to sign up for WAWebDMR, go to:
<http://www.ecy.wa.gov/programs/wq/permits/paris/webdmr.html>

If unable to submit electronically (for example, if you do not have an internet connection), the permittee must contact Ecology to request a waiver and obtain instructions on how to obtain a paper copy DMR.

2. 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.
3. Report single analytical values:
 - a. Below detection as “less than the detection level (DL),” where “detection level” is the numeric value specified in attachment A, 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.
 - b. Between the Ecology-required detection and quantitation levels with a qualifier code of “J” following the value.
4. 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.
5. 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.
6. Calculate average values (unless otherwise specified in the permit) using:
 - a. The reported numeric value for all parameters measured between the agency-required detection value and the agency-required quantitation value.
 - b. One-half the detection value (for values reported below detection) if the lab detected the parameter in another sample 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.
7. The permittee must submit an electronic PDF copy of the contract laboratory report using WAWebDMR. The contract laboratory report must provide the following information: date sampled, sample location, date of analysis, parameter name, CAS number, analytical method/number, detection limit (DL), laboratory quantitation level (QL), reporting units, and concentration detected.

The contract laboratory report must also include information on the chain of custody, QA/QC results, and documentation of accreditation for the parameter.

If the permittee has obtained a waiver from electronic reporting, the permittee must submit a paper copy of the contract laboratory report providing the same information as listed above.
8. Ensure that DMRs are electronically submitted no later than the dates specified below, unless otherwise specified in this permit.

If the permittee has obtained a waiver, it must ensure that paper forms are postmarked or received by Ecology no later than the dates specified below, unless otherwise specified in this permit.

9. 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 28th day of the following month.
 - b. Submit **bimonthly DMRs**, unless otherwise specified in the permit, by the 28th day of the month following the monitoring period. Bimonthly sampling periods are January through February, March through April, May through June, July through August, September through October, and November through December.
 - c. Submit **semiannual DMRs**, unless otherwise specified in the permit, by July 28 and January 28 of each year. Semiannual sampling periods are January through June, and July through December.
 - d. Submit **annual DMRs**, unless otherwise specified in the permit, by January 28 for the previous calendar year. The annual sampling period is the calendar year.
10. Submit reports to Ecology online using Ecology's electronic WAWebDMR submittal forms (electronic DMRs) as required above. If a waiver from electronic submittal is granted, the address for submittal of paper forms will be supplied in the waiver.

S3.B. 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.

The permittee must retain all records pertaining to the monitoring of sludge for a minimum of five years.

S3.C. 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.D. 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.

S3.E. 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 notify the coast guard and the division of emergency management:

- Any spills of oil or hazardous substances to waters of the state (refer to RCW 90.56.280).

The permittee must immediately notify all local authorities in accordance with the local emergency plan and report to Ecology (numbers listed below).

- Any spills of dangerous waste or hazardous substances onto the ground or into groundwater or surface water, regardless of the quantity of dangerous waste or hazardous substance. This applies when the spilled material threatens human health or the environment (refer to WAC 173-303-145).

The permittee must immediately report to the Department of Ecology and the Department of Health, Drinking Water Program (at the numbers listed below), all:

- Overflows or leaks of transmission or irrigation pipelines that discharge to a waterbody used as a source of drinking or irrigation water.
- Failures of the disinfection system.

Northwest Regional Office	425-649-7000
Department of Health,	800-521-0323 (business hours)
Drinking Water Program	877-481-4901 (after business hours)
Snohomish County Health District	425-339-5250

b. Twenty-four-hour reporting

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

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 an effluent limit in the permit (See Part S4.B., “Bypass Procedures”).
3. Any upset that causes an exceedance of an effluent limit in the permit. 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.
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.
6. When a monitoring well exceeds an enforcement limit for the same parameter in two consecutive sampling events.

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. Maps, drawings, aerial photographs, or pictures to show the location and cause(s) of the non-compliance.
3. The period of noncompliance, including exact dates and times.
4. The estimated time the permittee expects the noncompliance to continue if not yet corrected.
5. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
6. 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.

f. Report submittal

The permittee must submit reports to the address listed in S3A. 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.F. Other reporting

The permittee must report a spill of oil or hazardous materials in accordance with the requirements of RCW 90.56.280. You can obtain further instructions at the following website: <http://www.ecy.wa.gov/programs/spills/other/reportaspill.htm> .

S3.G. 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. Operation and maintenance

The permittee must, at all times, properly operate and maintain all facilities or 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 includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

The permittee must prepare an operations and maintenance manual (O&M) as detailed in Sections S4.A(a) and S4.A(b) below, or provide a paper copy and an electronic copy [preferably in a portable document format (PDF)] of current standard operating procedures (SOPs), preventative maintenance programs (PMPs), etc. that cover the operation and maintenance of the wastewater treatment and distribution system. Existing SOPs, PMPs, etc. should meet the substantive requirement of the cited WACs in Sections S4.A(a) and S4.A(b), but **must** meet all other conditions.

S4.A. Operations and maintenance (O&M) manual

a. O&M manual submittal and requirements

The permittee must:

1. Prepare an O&M manual that meets the requirements of 173-240-150 WAC and submit it to Ecology by 90 days after permit effective date. The permittee must submit a paper copy and an electronic copy (preferably as a PDF).
2. Submit to Ecology for review substantial changes or updates to the O&M manual whenever it incorporates them into the manual. The permittee must submit a paper copy and an electronic copy (preferably as a PDF).
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 include:

1. Emergency procedures for plant shutdown and cleanup in the event of a wastewater system upset or failure including pipeline leaks.
2. Treatment system operational controls and procedures.
3. Wastewater system maintenance procedures that contribute to the generation of wastewater.
4. 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.)
5. Wastewater sampling protocols and procedures for compliance with the sampling and reporting requirements in the wastewater discharge permit.
6. Protocols and procedures for groundwater/vadose zone monitoring network sampling and testing.

S4.B. Bypass procedures

This permit prohibits a bypass, which is the intentional diversion of waste streams from any portion of a treatment facility.

Ecology may take enforcement action against a permittee for a bypass unless one of the following circumstances (1, 2, or 3) applies.

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

This permit authorizes a bypass if it allows 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 must submit prior notice, if possible, at least ten (10) days before the date of the bypass.

2. Bypass is unavoidable, unanticipated, and results in noncompliance of this permit.

This permit authorizes such a bypass only if:

- a. 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.
 - b. No 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.
 - Transport of untreated wastes to another treatment facility or preventative maintenance), or transport of untreated wastes to another treatment facility.
 - c. The permittee has properly notified Ecology of the bypass as required in Special Condition S3.E of this permit.
3. If bypass is anticipated and has the potential to result in noncompliance of this permit.
 - a. The permittee must notify Ecology at least thirty (30) days before the planned date of bypass. The notice must contain:
 - A description of the bypass and its cause.
 - An analysis of all known alternatives, which would eliminate, reduce, or mitigate the need for bypassing.
 - A cost-effectiveness analysis of alternatives including comparative resource damage assessment.
 - 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 reoccurrence 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 preparation of the engineering report or facilities plan and plans and specifications and must include these 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 consider the following prior to issuing an administrative order for this type of bypass:
- If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
 - If feasible alternatives to 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.
 - If the permittee planned and scheduled the bypass to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, Ecology will approve or deny the request. Ecology will give the public an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Ecology will approve a request to bypass by issuing an administrative order under RCW 90.48.120.

S5. Solid wastes

S5.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.

S5.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.

S5.C. Solid waste control plan

a. Submittal requirements

The permittee must:

1. Submit a solid waste control plan, or any existing SOP, PMP, etc. that covers solid waste handling at the facility to Ecology by within 180 days of permit effective date.

Any existing SOP, PMP, etc. that covers solid waste handling at the facility must meet the substantive requirements of section S5.C(b) below, as well as items 2 through 4 of this section.

2. Submit to Ecology any proposed revision or modification of the solid waste control plan for review at least 30 days prior to implementation. The permittee must submit a paper copy and an electronic copy (preferably as a PDF).
3. Comply with the plan and any modifications.

b. Solid waste control plan content

The solid waste control plan must:

1. Follow Ecology's guidance for preparing a solid waste control plan (<https://fortress.wa.gov/ecy/publications/SummaryPages/0710024.html>) and address all solid wastes generated by the permittee.
2. Include, at a minimum, a description, source, generation rate, and disposal methods of these solid wastes.
3. Not conflict with local or state solid waste regulations.

S6. Application for permit renewal or modification for facility changes

The permittee must submit an application for renewal of this permit by October 1, 2024. The permittee must submit a paper copy and an electronic copy (preferably as a PDF).

The permittee must also submit a new application or supplement at least sixty (60) 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.

S7. Non-routine and unanticipated discharges

1. Beginning on the effective date of this permit, the permittee is authorized to discharge non-routine wastewater on a case-by-case basis if approved by Ecology. Prior to any such discharge, the permittee must contact Ecology and, at a minimum, provide the following information:
 - 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 proposed discharge.
 - g. The expected rate of discharge discharged, in gallons per minute.
2. The permittee must analyze the water for all constituents limited for the current discharge and report them as required by subpart 1.e, above. The permittee must also analyze for any constituents not in the current discharge, but anticipated to be present in the non-routine/unanticipated discharge. The analysis must also include any parameter deemed necessary by Ecology. All discharges must comply with the effluent limits as established in Special Condition S1 of this permit, water quality standards, and any other limits imposed by Ecology.
3. The permittee must limit the discharge rate, as referenced in subpart 1.g, above, so it will not cause erosion of ditches or structural damage to culverts and their entrances or exits.
4. The discharge cannot proceed until Ecology has reviewed the information provided and has authorized the discharge by letter to the permittee or by an 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 they plan to discharge.

S8. Spill prevention / Best management practices

The permittee must:

1. Store solid chemicals, chemical solutions, cleaners, disinfectants, paints, oils, solvents, acids, caustic solutions and waste materials, including used batteries, in a manner which will prevent the inadvertent entry of these materials into waters of the state, including groundwater, and including the sanitary sewer system (except as authorized by this permit).

Storage must be in a manner that will prevent spillage by overfilling, tipping or rupture.
2. Store all liquid products on durable impervious surfaces and within appropriate secondary containment.

3. Store and dispense chemicals only in roofed and contained areas to eliminate potential spills to waters of the state or contamination of storm water runoff.
4. Locate any tanks containing chemical solutions in a diked, or no-outlet area adequate to prevent chemical loss to waters of the state or the sanitary sewer.
5. Contain all quenching, hydraulic, machining, and lubricating oils to prevent spills or loss to waters of the state.
6. Store waste liquids under cover, such as tarpaulins or roofed structures, or in a closed vessel.
7. Segregate and securely store incompatible or reactive materials in separate containment areas sufficient to prevent the mixing of the incompatible chemicals.
8. Dispose of concentrated waste or spilled chemicals at a facility approved by Ecology or appropriate county health department. These materials must not be discharged to any storm sewer, sanitary sewer, or state water.
9. Not discharge concentrated organic solvents to the storm sewer system, sanitary sewer system, or industrial wastewater system in quantities that would adversely affect the operation of these systems.
10. Close any spill control valves to prevent the entry of chemicals to the sanitary sewer, storm sewer, or industrial wastewater system, in the event that a spill should occur within the process area.
11. Treat all industrial wastes containing pollutants using all known, available, and reasonable methods for treatment prior to discharge.
12. Use drip pans or equivalent containment measures during all material transfer operations.
13. Locate materials, equipment, and activities so that leaks are contained in existing containment and diversion systems (confine the storage of leaky or leak-prone *vehicles* and equipment awaiting maintenance to protected areas).
14. Maintain a spill log that includes the following information for chemical and petroleum spills: date, time, amount, location, and reason for spill; date/time cleanup completed, notifications made and staff involved.

S9. Industrial stormwater discharge

If the permittee discharges stormwater exposed to industrial activities to surface waters or to a storm sewer system that drains to surface water, the permittee must apply for coverage under the NPDES Industrial Stormwater General Permit.

Facilities are eligible for a conditional no exposure (CNE) exemption if there is “no exposure” of industrial materials and activities to rain, snow, snow melt, and/or runoff. To obtain a CNE exemption, the permittee must submit an online No Exposure Certification Form to Ecology.

Information about the permit and CNE and application forms are available at <https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Stormwater-general-permits/Industrial-stormwater-permit>.

S10. Groundwater monitoring evaluation (hydrogeologic study)

The permittee must evaluate the impacts of its activities on vadose zone groundwater quality by completing the elements below to include a scope of work for a groundwater monitoring evaluation study, a report of study results, installation of a groundwater monitoring network, and ongoing monitoring.

1. By 180 days from permit effective date, the permittee must submit a scope of work to Ecology for a groundwater monitoring evaluation study at the wastewater application site, in accordance with WAC 173-200-080. The scope of work must conform to *Guidelines for Preparation of Engineering Reports for Industrial Wastewater Land Application Systems*, Ecology 1993. Additional guidance is provided in Appendix D of the fact sheet associated with this permit.
2. Upon approval of the scope of work by Ecology, the permittee must conduct the study to determine site-specific hydrogeologic conditions, well siting, quality control protocols, a sampling plan, and sampling protocols. The permittee must submit a report of the results within one hundred eighty (180) days of approval of the scope of work. The permittee must submit a paper copy and an electronic copy (preferably as a PDF).
3. Within ninety (90) days after review and approval of the report by Ecology, the permittee must begin construction of the approved groundwater monitoring network. The permittee must construct wells in accordance with Chapter 173-160 WAC.
4. Report to Ecology the tag numbers, latitude and longitude (NAD83/WGS84 datum), and top-of-casing elevations (NAVD88 datum) of each monitoring well.
5. After completion of the installation of the groundwater monitoring network, the permittee must notify Ecology and begin monitoring according to S2.B.

S11. Groundwater monitoring wells

The permittee must:

1. Install monitoring wells in accordance with the approved hydrogeologic study.
2. Meet the requirements of Chapters 173-160 and 173-162 WAC during well construction.
3. Report to Ecology the tag numbers, latitude and longitude (NAD83/WGS84 datum), and top-of-casing elevations (NAVD88 datum) of each monitoring well.
4. Complete well installation within 90 days of approval of the final hydrogeologic report.
5. Commence sampling by within 60 days after well completion.

General Conditions

G1. Signatory requirements

All applications, reports, or information submitted to Ecology must be signed as follows:

1. All permit applications must be signed by either a principal executive officer or ranking elected official.
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 the person described above and is submitted to Ecology at the time of authorization, and
 - b. The authorization specifies 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 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 entry

Representatives of Ecology have the right to enter at all reasonable times in or upon any property, public or private, for the purpose of inspecting and investigating conditions relating to the pollution or the possible pollution of any waters of the state. Reasonable times include normal business hours; hours during which production, treatment, or discharge occurs; or times when Ecology suspects a violation requiring immediate inspection. Representatives of Ecology must be allowed to have access to, and copy at reasonable cost, any records required to be kept under terms and conditions of the permit; to inspect any monitoring equipment or method required in the permit; and to sample the discharge, waste treatment processes, or internal waste streams.

G3. Permit actions

This permit is subject to modification, suspension, or termination, in whole or in part by Ecology for any of the following causes:

1. Violation of any permit term or condition;
2. Obtaining a permit by misrepresentation or failure to disclose all relevant facts;
3. A material change in quantity or type of waste disposal;
4. A material change in the condition of the waters of the state; or
5. Nonpayment of fees assessed pursuant to RCW 90.48.465.

Ecology may also modify this permit, including the schedule of compliance or other conditions, if it determines good and valid cause exists, including promulgation or revisions of regulations or new information.

G4. Reporting a cause for modification

The permittee must submit a new application at least one hundred eighty 180 days before it wants to discharge more of any pollutant, a new pollutant, or more flow than allowed under this permit. The permittee should use the State Waste Discharge Permit application, and submit required plans at the same time. Required plans include an engineering report, plans and specifications, and an operations and maintenance manual, (see Chapter 173-240 WAC). Ecology may waive these plan requirements for small changes, so contact Ecology if they do not appear necessary. The permittee must obtain the written concurrence of the receiving POTW on the application before submitting it to Ecology. The permittee must continue to comply with the existing permit until it is modified or reissued. Submitting a notice of dangerous waste discharge (to comply with pretreatment or dangerous waste rules) triggers this requirement as well.

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 180 days prior to the planned start of construction. Facilities must be constructed and operated in accordance with the approved plans.

G6. Compliance with other laws and statutes

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

G7. Transfer of this permit

This permit is automatically transferred to a new owner or operator if:

1. A written agreement between the old and new owner or operator containing a specific date for transfer of permit responsibility, coverage, and liability is submitted to Ecology;

2. A copy of the permit is provided to the new owner; and
3. Ecology does not notify the permittee of the need to modify the permit.

Unless this permit is automatically transferred according to Section 1, above, this permit may be transferred only if it is modified to identify the new permittee and to incorporate such other requirements as determined necessary by Ecology.

G8. Payment of fees

The permittee must submit payment of fees associated with this permit as assessed by Ecology. Ecology may revoke this permit if the permit fees established under Chapter 173-224 WAC are not paid.

G9. 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 will be punished by a fine of up to ten thousand dollars 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 incurs, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars 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 a separate and distinct violation.

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. Duty to comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of chapter 90.48 RCW and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

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.

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.

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
Fecal Coliform		SM 9221E, 9222	N/A	Specified in method - sample aliquot dependent
Oil and Grease		1664 A or B	1,400	5,000
pH		SM4500-H ⁺ B	N/A	N/A
Total Suspended Solids		SM2540-D		5 mg/L

NONCONVENTIONAL POLLUTANTS

Pollutant & CAS No. (if available)	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
Ammonia, Total (as N)		SM4500-NH ₃ -B and C/D/E/G/H		20
Calcium, Total		200.7	1	
Chemical Oxygen Demand		SM5220-D		10 mg/L
Chloride		SM4500-Cl B/C/D/E and SM4110 B		Sample and limit dependent
Dissolved oxygen		SM4500-OC/OG		0.2 mg/L
Flow		Calibrated device		
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
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
Potassium, Total		258.1	1	
Sodium, Total		200.7	3	
Sulfate (as mg/L SO ₄)		SM4110-B		0.2 mg/L
Temperature (max. 7-day avg.)		Analog recorder or use micro-recording devices known as thermistors		0.2° C
Total Coliform		SM 9221B, 9222B, 9223B	N/A	Specified in method - sample aliquot dependent
Total Dissolved Solids		SM2540 C		20 mg/L

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).