DEPARTMENT OF
ECOLOGY
State of Washington

Issuance Date: June 10, 2020
Effective Date: August 1, 2020
Expiration Date: July 31, 2025

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
WASTE DISCHARGE PERMIT NO. WA0040819

State of Washington
DEPARTMENT OF ECOLOGY
Southwest Regional Office
P.O. Box 47775
Olympia, WA 98504-7775

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.

Riverence LLC
120 State Avenue Southwest
Olympia, Washington 98501

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

Facility Location: 10414 173rd Ave SW P.O.Box 880 Rochester, WA 98579	**Receiving Water**: Black River
Treatment Type: Swales/Settling Ponds	**SIC Code**: 0921
Industry Type: Finfish Rearing and Egg Production	**NAICS Code**: 112511
	Categorical Industry: 40 CFR 451

Electronically Signed & Emailed due to COVID 19

Andrew Kolosseus
Southwest Region Manager
Water Quality Program
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.

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S3.F	Reporting Permit Violations	As Necessary	
S4.B	Operations and Maintenance Manual	1/Permit Cycle	July 1, 2021
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SPECIAL CONDITIONS

S1. DISCHARGE LIMITS

A. Process Wastewater Discharges

All discharges and activities authorized by this permit must be consistent 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 is authorized to discharge hatchery wastewater to the Black River at the permitted location (Outfall 001) subject to complying with the following limits:

Effluent Limits: Outfall 001 **Latitude:** 46.83990 **Longitude:** -123.10418		
Parameter	**Average Monthly [a]**	**Maximum Daily [b]**
Biochemical Oxygen Demand (5-day) (BOD_5)	-	210 lbs/day
Total Suspended Solids (TSS)	5 mg/L	15 mg/L
Ammonia, Total	-	84 lbs/day
Phosphorus	-	16 lbs/day
Net Settleable Solids	0.1 ml/L	-
Total Chlorine Residual[c]	-	19 µg/L

Footnote Information	
[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]	Maximum daily effluent limit is the highest allowable daily discharge. The daily discharge is the average discharge of a pollutant measured during a calendar day. For pollutants with limits expressed in units of mass, calculate the daily discharge as the total mass of the pollutant discharged over the day. The average daily measurement does not apply to pH or temperature.
[c]	The Department of Ecology (Ecology) will use the Quantitation Level (QL) of Appendix A of the permit as the compliance evaluation for total residual chlorine.

B. Mixing Zone Authorization

This permit does not authorize mixing zone.

S2. MONITORING REQUIREMENTS

A. Monitoring Schedule

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

Effluent Characterization – Final Wastewater Effluent[1]

Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type
Flow	Million Gallons per Day (MGD)	Weekly	Daily Total, Estimated[2]
pH	Standard Units	Monthly	Grab[3]
BOD5	mg/L	Monthly[7]	Grab[3]
BOD5	lbs/day	Monthly[7]	Calculated[4]
TSS	mg/L	Twice a Month	Grab[3]
Settleable Solids (Influent and Effluent)[5]	ml/L	Twice a Month	Grab[3]
Net Settleable Solids	ml/L	Twice a month	Calculated[6]
Total Residual Chlorine	µg/L	Twice a month	Grab[3]
Total Ammonia	mg/L	Monthly[7]	Grab[3]
Total Ammonia	lbs/day	Monthly[7]	Calculated[4]
Total Phosphorus	mg/L	Monthly[7]	Grab[3]
Total Phosphorus	lbs/day	Monthly[7]	Calculated[4]

Permit Renewal Application Requirements – Final Wastewater Effluent

Submit four year data for the effluent characterization parameters with the permit renewal application.

Footnote Information	
1	Final Effluent means wastewater exiting, or that has exited, the last treatment process or operation.
2	Flow (Daily Total) must be estimated and reported for the day when the sampling was completed for BOD_5, Ammonia, and Phosphorus.

Footnote Information	
[3]	Grab means an individual sample collected over a 15 minute, or less, period.
[4]	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.
[5]	Influent and effluent grab samples are to be taken on the same day. Effluent samples shall be taken during rearing pond/tank or raceway cleaning. If the frequency of rearing pond/tank or raceway cleaning is less than twice a month, settleable solids samples may be collected immediately following fish feeding. The influent sample shall be considered to be zero if the sample was not collected/analyzed.
[6]	Net Settleable Solids is calculated by subtracting influent (ml/L) from effluent (ml/L).
[7]	Sampling is required only from May 1st, through October 31st of each year.

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 Code of Federal Regulation (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. The Department of Ecology (Ecology) may only specify alternative methods for parameters without limits and for those parameters without an Environmental Protection Agency (EPA) approved test method in 40 CFR Part 136.

C. Flow Measurement, Field 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 Operation and Maintenance (O&M) Manual procedures for the device and the wastestream.

3. Calibrate continuous monitoring instruments weekly unless it 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 according to the manufacturer's requirements.

   c. Must calibrate continuous chlorine measurement instruments using a grab sample analyzed in the laboratory within 15 minutes of sampling.

4. Calibrate micro-recording temperature devices, known as thermistors, using protocols from Ecology's Quality Assurance Project Plan Development Tool (*Standard Operating Procedures for Continuous Temperature Monitoring of Fresh Water Rivers and Streams Version 1.0 10/26/2011)*. This document is available at: https://fortress.wa.gov/ecy/publications/documents/1803205.pdf. Calibration as specified in this document is not required if the Permittee uses recording devices certified by the manufacturer.

5. Use field measurement devices as directed by the manufacturer and do not use reagents beyond their expiration dates.

6. Establish a calibration frequency for each device or instrument in the O&M Manual that conforms to the frequency recommended by the manufacturer.

7. Calibrate flow-monitoring devices at a minimum frequency of at least one calibration per year.

8. Maintain calibration records for at least three years.

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 Washington Administrative Code (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.

E. Request for Reduction in Monitoring

The Permittee may request a reduction of the sampling frequency after 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.

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.

   To find out more information and to sign up for the Water Quality Permitting Portal go to: http://ecyapwq/wqwebportal.

2. Ensure that DMRs are electronically submitted no later than the dates specified below, unless otherwise specified in this permit.

3. Submit DMRs for parameters with the monitoring frequencies specified in S2 at the reporting schedule identified below. The Permittee must:

   a. Submit **monthly** DMRs by the 15th day of the following month.

4. 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.

5. 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.

6. Report single analytical values between the DL and the 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.

7. 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.**

8. 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.

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.

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
Southwest Regional Office
PO Box 47775
Olympia, WA 98504-7775

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.

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

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.

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 30 days of sampling.

    a. Immediate Reporting

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

    i. Failures of the disinfection system.

    ii. Collection system overflows discharging to a water body used as a source of drinking water.

    iii. Plant bypasses discharging to a waterbody used as a source of drinking water.

Southwest Regional Office	360-407-6300
Department of Health Drinking Water Program Local Health District	800-521-0323 (business hours) 877-481-4901 (after business hours) 360-867-2500

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:

i. Any noncompliance that may endanger health or the environment, unless previously reported under immediate reporting requirements.

ii. Any unanticipated bypass that causes an exceedance of any effluent limit in the permit (See Part S4.C., "Bypass Procedures").

iii. Any upset that causes an exceedance of an effluent limit in the permit (See G.15, "Upset").

iv. Any violation of a maximum daily or instantaneous maximum discharge limit for any of the pollutants in Section S1.A of this permit.

v. 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. This requirement does not include industrial process wastewater overflows to impermeable surfaces which are collected and routed to the treatment works.

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:

i. A description of the noncompliance and its cause.

ii. The period of noncompliance, including exact dates and times.

iii. The estimated time the Permittee expects the noncompliance to continue if not yet corrected.

iv. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

v. 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.

G. Other Reporting

1. Spills of Oil or Hazardous Materials

The Permittee must report a spill of oil or hazardous materials in accordance with the requirements of Revised Code of Washington (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.

2. 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.

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. 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 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.

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 Operation and Maintenance (O&M) Manual or as otherwise approved by Ecology.

A. General Operating Requirements

The Permittee must:

1. Properly handle and dispose of sand, silt, mud, solids, sludges, filter backwash, debris, or other pollutants deposited or removed in the course of treatment or control of water supply and wastewaters in a manner so as to prevent such materials or leachate from such materials entering waters of the state, including ground water.

2. Not discharge untreated cleaning wastes (for example, obtained from a vacuum or standpipe bottom drain system) to waters of the state (including ground water) without prior treatment.

3. Not sweep or intentionally discharge accumulated solids from raceways or ponds to waters of the state without prior treatment.

4. Not remove dam boards in raceways or ponds that allow accumulated solids to discharge to waters of the state.

5. Clean rearing ponds and raceways within one week prior to drawdown for fish release, where practical.

6. Implement all aspects of the Pollution Prevention Plan required in Section S9**,** during all phases of operation of the facility.

8. Dispose of fish mortalities, egg taking, or processing wastes in a manner so as to prevent such materials, including leachate, from entering the waters of the state.

9. Conduct phased reductions of the amount of water discharged prior to complete shutdown, if supplied with ground water and discharging to surface receiving waters.

10. Prevent the discharge of floating solids to surface waters to the extent possible.

11. Ensure proper storage, containment, and disposing of drugs, pesticides, and feed to prevent such materials from entering waters of the state.

12. At all times comply with applicable water quality standards.

B. Operations and Maintenance Manual

1. O&M Manual Submittal and Requirements

The Permittee must:

a. Prepare the O&M Manual that meets the requirements of 173-240-150 WAC as wellas addresses S4.A, General Operating Requirements. Submit it to Ecology for approval **by July 1, 2021.**

b. Keep the approved O&M Manual at the permitted facility.

c. Follow the instructions and procedures of this manual.

2. O&M Manual Components

a. Emergency procedures for plant shutdown and cleanup in the event of a wastewater system upset or failure.

b. 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.

c. Wastewater system maintenance procedures that contribute to the generation of process wastewater.

d. 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.

e. Wastewater sampling protocols and procedures for compliance with the sampling and reporting requirements in the wastewater discharge permit.

f. Minimum staffing adequate to operate and maintain the treatment processes and carry out compliance monitoring required by the permit.

g. Treatment plant process control monitoring schedule.

C. 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 S4.C.1, or is approved by Ecology as an anticipated bypass following the procedures in S4.C.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 10 days before the planned date of bypass. The notice must contain:

i. A description of the bypass and the reason the bypass is necessary.

ii. An analysis of all known alternatives which would eliminate, reduce, or mitigate the potential impacts from the proposed bypass.

iii. A cost-effectiveness analysis of alternatives.

iv. The minimum and maximum duration of bypass under each alternative.

v. A recommendation as to the preferred alternative for conducting the bypass.

vi. The projected date of bypass initiation.

vii. A statement of compliance with State Environmental Policy Act (SEPA).

viii. 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.

ix. 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 S4.C.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:

i. If the Permittee planned and scheduled the bypass to minimize adverse effects on the public and the environment.

ii. 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. Severe property damage does not mean economic loss caused by delays in production.

iii. 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.

D. Duty to Mitigate

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

E. Production Changes

The Permittee shall submit a new application to Ecology 30 days in advance of any proposed production increases or changes in the nature of the discharge which substantially deviates from the information submitted in the permit application.

S5. DISEASE CONTROL CHEMICALS

A. Disease Control Chemicals

Unless approved by Ecology, only disease control chemicals approved for hatchery use by the United States Food and Drug Administration (USFDA) or the EPA may be used. USFDA approved Investigational New Animal Drugs (INADs) may be used at a facility, provided the conditions detailed in a facility's INAD permit application are met and the use is reported on the disease control chemical use form required in Section S5.C.

Permittees must use disease control chemicals in conformance with product label instructions or approved INAD protocols, or use a licensed veterinarian to administer the disease control chemical. Permittees must document the disposal of all spent chemical bath, drip, and dip treatment solutions in the Chemical Operational Log in accordance with the provisions of S5.B.1. The Permittee must record amount used, estimated concentration, detention time, type of treatment (bath, flush, dip), facility flow, and receiving water (Appendix D).

1. Non-Emergency Extra-Label Drug and Chemical Use

Ecology recognizes that there are many situations where the extra-label use of disease control chemicals could occur with little or no reasonable potential to impact water quality. If administered by or under the supervision of a licensed veterinarian, Permittees may use:

a. Disease control chemicals or drugs through injection, by the use of a drip, dip, or as an additive to feed.

b. Any drugs classified by USFDA as a low priority aquaculture drug (Appendix C).

2. Emergency Drug and Chemical Use

Ecology recognizes that an emergency epizootic disease may require the use of a drug or chemical not approved by either the USFDA or the USEPA, and not in conformance with S5.B.1, above.

The use of disease control chemicals not otherwise approved by Ecology is approved for the treatment of an emergency epizootic disease provided:

a. A licensed veterinarian administers or directly supervises the administration of the drug or disease control chemical.

b. The Permittee notifies Ecology 24 hours prior to administering the drug or disease-control chemical in writing or by facsimile.

3. Formalin Use

When formalin is used in the hatchery and discharged to the receiving water, the Permittee must follow all label directions and calculate the final concentration of the formalin in the final discharge. The Permittee must record amount used, estimated concentration, detention time, type of treatment (bath, flush, dip), facility flow, and receiving water. This information must be entered into the Operational Log.

B. Operational Log

1. The Permittee must keep records on all **disease control chemicals** used at the facility. All variances from the disease control chemical use procedures contained in the facility Pollution prevention plan must be noted. These records must include the:

a. Person responsible for the administration of the disease control chemical if different from the individual identified in the facility Pollution Prevention Plan.

b. Date of application of the disease control chemical used. For disease chemicals that are used on a routine basis, the frequency of application may be recorded in place of each individual application date.

c. Trade name of the disease control chemical used.

d. Pond or raceway treatment concentration of the active ingredient, duration of treatment, and amount in gallons or pounds of chemical.

e. Estimated concentration of the active ingredient in the hatchery or rearing facility effluent at the point of discharge to the receiving waters.

f. Reason for use and method of application.

g. Quantity, type (trade name), method of disposal, and location of any disposed spent chemical dip solutions.

2. The Permittee must keep records of the average loading in pounds of fish and the total amount of food fed in pounds for each calendar month at the facility. The Permittee must provide a copy of loading and feeding records to Ecology upon request.

C. Disease Control Chemical Use Report

The Permittee shall report the use of any disease control chemicals on a form (Appendix D-Chemical operational log) supplied by Ecology. The Disease control chemical use report

shall be submitted annually unless Ecology requests this information on a more frequent basis. Each annual report, covering the previous calendar year, shall be post-marked by the 30th day of January. The first report is due by **January 30, 2021**.

S6. SOLID WASTES

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.

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.

C. Solid Waste Control Plan

The Permittee must submit all proposed revisions or modifications to the solid waste control plan to Ecology for review and approval at least 30 days prior to implementation. The Permittee must comply with the approved solid waste control plan and any modifications once approved. The Permittee must submit an update of the solid waste control plan **by July 1, 2021**

S7. NON-ROUTINE AND UNANTICIPATED WASTEWATER

A. Beginning on the effective date of this permit, the Permittee is authorized to discharge non-routine wastewater or unanticipated wastewater and therefore not listed on the permit application, 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:

1. The proposed discharge location.

2. The nature of the activity that will generate the discharge.

3. Any alternatives to the discharge, such as reuse, storage, or recycling of the water.

4. The total volume of water it expects to discharge.

5. The results of the chemical analysis of the water.

6. The date of proposed discharge.

7. The expected rate of discharge discharged, in gallons per minute.

B. The Permittee must analyze the water for all constituents limited for the discharge and report them as required by subpart 1.e above. 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.

C. The Permittee must limit the discharge rate, as referenced in subpart A.7 above, so it will not cause erosion of ditches or structural damage to culverts and their entrances or exits.

D. 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 it plans to discharge.

S8. SPILL CONTROL PLAN

A. Spill Control Plan Submittals and Requirements

The Permittee must:

1. Submit to Ecology a spill control plan for the prevention, containment, and control of spills or unplanned releases of pollutants by **July 1, 2021.**

2. Review the plan at least annually and update the spill plan as needed.

3. Send changes to the plan to Ecology.

4. Follow the plan and any supplements throughout the term of the permit.

B. Spill Control Plan Components

The spill control plan must include the following:

1. A list of all oil and petroleum products and other materials used and/or stored on-site, which when spilled, or otherwise released into the environment, designate as Dangerous Waste (DW) or Extremely Hazardous Waste (EHW) by the procedures set forth in WAC 173-303-070. Include other materials used and/or stored on-site which may become pollutants or cause pollution upon reaching state's waters.

2. A description of preventive measures and facilities (including an overall facility plot showing drainage patterns) which prevent, contain, or treat spills of these materials.

3. A description of the reporting system the Permittee will use to alert responsible managers and legal authorities in the event of a spill.

4. A description of operator training to implement the plan.

The Permittee may submit plans and manuals required by 40 CFR Part 112, contingency plans required by Chapter 173-303 WAC, or other plans required by other agencies, which meet the intent of this section.

S9. POLLUTION PREVENTION PLAN

The Permittee must prepare or update the site-specific Pollution Prevention Plan and submit to Ecology **by July 1, 2021**. This plan must address operating, spill prevention, spill response, and stormwater discharge practices that will prevent or minimize the release of pollutants from the facility to the waters of the state.

The Permittee must review the effectiveness of the Pollution Prevention Plan at least annually, and following any facility changes and revise the plan as needed. Any proposed revision or modification of the Pollution Prevention Plan must be submitted to Ecology within 30 days of plan revision. The Permittee must comply with the plan and any plan modifications. The Permittee must operate the facility in accordance with this plan along with any subsequent amendments or revisions.

The Permittee must maintain a copy of the most current version of the Pollution Prevention Plan at the facility and ensure that its operations staff for the facility are familiar with the plan and adequately trained in the specific procedures that it requires.

The Permittee must address the following in the Plan.

A. How it will conduct fish feeding to minimize the discharge of unconsumed food.

B. The frequency of pond and raceway cleaning and what procedures it will use to determine when cleaning is necessary to prevent accumulated solids from being discharged.

C. How it will perform pond and raceway cleaning to reduce the disturbance and subsequent discharge of settled solids during cleaning events.

D. How it will carry out fish grading, harvesting, and other activities within ponds or raceways to minimize the disturbance and subsequent discharge of accumulated solids.

E. How it will prevent the discharge of accumulated solids during the fish release if it release fishes for enhancement purposes.

F. How it uses disease control chemicals within the facility to ensure that the amounts and frequency of application are the minimum necessary for effective disease treatment and control. The Permittee must minimize the concentration of disease control chemicals in the facility's discharge to the maximum extent practicable.

G. Practices for the storage and, if necessary, disposal of disease control chemicals.

H. Procedures to prevent or respond to spills and unplanned discharges of oil and hazardous materials.

These procedures must address the following:

1. A description of the reporting system to alert responsible facility management and appropriate legal authorities.

2. A description of facilities (including an overall facility site plan) which prevent, control, or treat spills and unplanned discharges and compliance schedule to install any necessary facilities in accordance with the approved plan.

3. A list of all hazardous materials used, processed, or stored at the facility that may spill directly or indirectly into state waters.

I. Procedures to identify and prevent existing and potential sources of stormwater pollution.

The Permittee may combine the Pollution Prevention Plan with the Spill Control Plan (S8) and submit these plans together by **July 1, 2021.**

S10. ENGINEERING DOCUMENTS

A. Prior to constructing or modifying any wastewater control facilities (including Pollution Abatement structures), the Permittee must submit:

1. An Engineering Report and detailed plans and specifications to Ecology for approval in accordance with Chapter 173-240 WAC.

2. Engineering reports, plans, and specifications at least 180 days prior to the planned start of construction unless Ecology approves a shorter time.

B. Permittees must construct and operate facilities in accordance with the approved plans.

C. The Permittee must 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 Part 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.

Ecology may require the Permittee to submit a new application or supplement to the existing application, along with required engineering plans and reports for review and approval.

S11. APPLICATION FOR PERMIT RENEWAL OR MODIFICATION FOR FACILITY CHANGES

The Permittee must submit an application for renewal of this permit by **July 1, 2024.**

The Permittee must also submit a new application or addendum at least 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

A. All applications submitted to Ecology must be signed and certified.

1. 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.

2. In the case of a partnership, by a general partner.

3. In the case of sole proprietorship, by the proprietor.

4. 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.

B. 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:

1. The authorization is made in writing by a person described above and submitted to Ecology.

2. 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.)

C. Changes to Authorization. If an authorization under paragraph G1.B, 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.B, above, must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.

D. 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:

A. 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.

B. 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.

C. To inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.

D. 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.

A. The following are causes for terminating this permit during its term, or for denying a permit renewal application:

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 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.

5. 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.

6. Nonpayment of fees assessed pursuant to RCW 90.48.465.

7. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.

B. The following are causes for modification but not revocation and reissuance except when the Permittee requests or agrees:

1. A material change in the condition of the waters of the state.

2. New information not available at the time of permit issuance that would have justified the application of different permit conditions.

3. Material and substantial alterations or additions to the permitted facility or activities which occurred after this permit issuance.

4. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions, or requiring permit revision.

5. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR Part 122.62.

6. Ecology has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statutory deadlines.

7. Incorporation of an approved local pretreatment program into a municipality's permit.

C. The following are causes for modification or alternatively revocation and reissuance:

1. When cause exists for termination for reasons listed in A.1 through A.7 of this section, and Ecology determines that modification or revocation and reissuance is appropriate.

2. 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 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:

A. The permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b).

B. A significant change in the nature or an increase in quantity of pollutants discharged.

C. 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 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.

A. Transfers by Modification

Except as provided in paragraph (B) 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 Part 122.62(b)(2), or a minor modification made under 40 CFR Part 122.63(d), to identify the new Permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

B. Automatic Transfers

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

1. The Permittee notifies Ecology at least 30 days in advance of the proposed transfer date.

2. 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.

3. 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 Part 122.41 and 40 CFR Part 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 $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 $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:

A. An upset occurred and that the Permittee can identify the cause(s) of the upset.

B. The permitted facility was being properly operated at the time of the upset.

C. The Permittee submitted notice of the upset as required in Special Condition S3.F.

D. 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 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 years, or by both.

G20. REPORTING REQUIREMENTS APPLICABLE TO EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURAL DISCHARGERS

The Permittee belonging to the categories of existing manufacturing, commercial, mining, or silviculture must notify Ecology as soon as they know or have reason to believe:

A. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following "notification levels:"

1. One hundred micrograms per liter (100 μg/L).

2. Two hundred micrograms per liter (200 μg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 μg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony.

3. Five times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR Part 122.21(g)(7).

4. The level established by the Director in accordance with 40 CFR Part 122.44(f).

B. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following "notification levels:"

1. Five hundred micrograms per liter (500 μg/L).

2. One milligram per liter (1 mg/L) for antimony.

3. Ten times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR Part 122.21(g)(7).

4. The level established by the Director in accordance with 40 CFR Part 122.44(f).

G21. 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 14 days following each schedule date.

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 136If 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.

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

Pollutant	**CAS Number** (if available)	**Recommended Analytical Protocol**	**Detection (DL)[1] *µg/L*** *Unless specified*	**Quantitation Level (QL)[2] *µg/L*** *Unless specified*
Fecal Coliform		SM 9221E,9222	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

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 CaCO3
Aluminum, Total	7429-90-5	200.8	2.0	10
Ammonia, Total (as N)		SM4500-NH3-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
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

Pollutant	**CAS Number** (if available)	**Recommended Analytical Protocol**	**Detection (DL)[1] *µg/L*** *Unless specified*	**Quantitation Level (QL)[2] *µg/L*** *Unless specified*
Dissolved oxygen		SM4500-OC/OG		0.2 mg/L
E.coli		SM 9221B, 9221F, 9223B	N/A	Specified in method - sample aliquot dependent
Enterococci		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 CaCO3
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-NO3-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
NWTPH Gx [5]		Ecology NWTPH Gx	250	250
Phosphorus, Total (as P)		SM 4500 PB followed by SM4500-PE/PF	3	10

Pollutant	**CAS Number** (if available)	**Recommended Analytical Protocol**	**Detection (DL)[1] *µg/L*** *Unless specified*	**Quantitation Level (QL) [2] *µg/L*** *Unless specified*
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^2F/D/E/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		0.2º 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, 9223B	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

PRIORITY POLLUTANTS

Metals, Cyanide & Total Phenols

Priority Pollutants	**PP #**	**CAS Number** (if available)	**Recommended Analytical Protocol**	**Detection (DL)[1] *µg/L*** *Unless specified*	**Quantitation Level (QL)[2] *µg/L*** *Unless specified*
Antimony, Total	114	7440-36-0	200.8	0.3	1.0
Arsenic, Total	115	7440-38-2	200.8	0.1	0.5
Beryllium, Total	117	7440-41-7	200.8	0.1	0.5
Cadmium, Total	118	7440-43-9	200.8	0.05	0.25
Chromium (hex) dissolved	119	18540-29-9	SM3500-Cr C	0.3	1.2
Chromium, Total	119	7440-47-3	200.8	0.2	1.0
Copper, Total	120	7440-50-8	200.8	0.4	2.0
Lead, Total	122	7439-92-1	200.8	0.1	0.5
Mercury, Total	123	7439-97-6	1631E	0.0002	0.0005
Nickel, Total	124	7440-02-0	200.8	0.1	0.5
Selenium, Total	125	7782-49-2	200.8	1.0	1.0
Silver, Total	126	7440-22-4	200.8	0.04	0.2
Thallium, Total	127	7440-28-0	200.8	0.09	0.36
Zinc, Total	128	7440-66-6	200.8	0.5	2.5
Cyanide, Total	121	57-12-5	335.4	5	10
Cyanide, Weak Acid Dissociable	121		SM4500-CN I	5	10
Cyanide, Free Amenable to Chlorination (Available Cyanide)	121		SM4500-CN G	5	10
Phenols, Total	65		EPA 420.1		50

Acid Compounds

Priority Pollutants	**PP #**	**CAS Number** (if available)	**Recommended Analytical Protocol**	**Detection (DL)[1] *µg/L*** *Unless specified*	**Quantitation Level (QL)[2] *µg/L*** *Unless specified*
2-Chlorophenol	24	95-57-8	625.1	3.3	9.9
2,4-Dichlorophenol	31	120-83-2	625.1	2.7	8.1
2,4-Dimethylphenol	34	105-67-9	625.1	2.7	8.1
4,6-dinitro-o-cresol (2-methyl-4,6,-dinitrophenol)	60	534-52-1	625.1/1625B	24	72
2,4 dinitrophenol	59	51-28-5	625.1	42	126
2-Nitrophenol	57	88-75-5	625.1	3.6	10.8
4-Nitrophenol	58	100-02-7	625.1	2.4	7.2
Parachlorometa cresol (4-chloro-3-methylphenol)	22	59-50-7	625.1	3.0	9.0
Pentachlorophenol	64	87-86-5	625.1	3.6	10.8
Phenol	65	108-95-2	625.1	1.5	4.5
2,4,6-Trichlorophenol	21	88-06-2	625.1	2.7	8.1

Volatile Compounds

Priority Pollutants	**PP #**	**CAS Number** (if available)	**Recommended Analytical Protocol**	**Detection (DL)[1] *µg/L*** *Unless specified*	**Quantitation Level (QL)[2] *µg/L*** *Unless specified*
Acrolein	2	107-02-8	624.1	5	10
Acrylonitrile	3	107-13-1	624.1	1.0	2.0
Benzene	4	71-43-2	624.1	4.4	13.2
Bromoform	47	75-25-2	624.1	4.7	14.1
Carbon tetrachloride	6	56-23-5	624.1/601 or SM6230B	2.8	8.4
Chlorobenzene	7	108-90-7	624.1	6.0	18.0

Priority Pollutants	**PP #**	**CAS Number** (if available)	**Recommended Analytical Protocol**	**Detection (DL)[1] *µg/L*** *Unless specified*	**Quantitation Level (QL)[2] *µg/L*** *Unless specified*
Chloroethane	16	75-00-3	624/601	1.0	2.0
2-Chloroethylvinyl Ether	19	110-75-8	624.1	1.0	2.0
Chloroform	23	67-66-3	624.1 or SM6210B	1.6	4.8
Dibromochloromethane (chlordibromomethane)	51	124-48-1	624.1	3.1	9.3
1,2-Dichlorobenzene	25	95-50-1	624.1	1.9	7.6
1,3-Dichlorobenzene	26	541-73-1	624.1	1.9	7.6
1,4-Dichlorobenzene	27	106-46-7	624.1	4.4	17.6
Dichlorobromomethane	48	75-27-4	624.1	2.2	6.6
1,1-Dichloroethane	13	75-34-3	624.1	4.7	14.1
1,2-Dichloroethane	10	107-06-2	624.1	2.8	8.4
1,1-Dichloroethylene	29	75-35-4	624.1	2.8	8.4
1,2-Dichloropropane	32	78-87-5	624.1	6.0	18.0
1,3-dichloropropene (mixed isomers) (1,2-dichloropropylene)[6]	33	542-75-6	624.1	5.0	15.0
Ethylbenzene	38	100-41-4	624.1	7.2	21.6
Methyl bromide (Bromomethane)	46	74-83-9	624/601	5.0	10.0
Methyl chloride (Chloromethane)	45	74-87-3	624.1	1.0	2.0
Methylene chloride	44	75-09-2	624.1	2.8	8.4
1,1,2,2-Tetrachloroethane	15	79-34-5	624.1	6.9	20.7
Tetrachloroethylene	85	127-18-4	624.1	4.1	12.3
Toluene	86	108-88-3	624.1	6.0	18.0

Priority Pollutants	**PP #**	**CAS Number** (if available)	**Recommended Analytical Protocol**	**Detection (DL)[1] *µg/L*** *Unless specified*	**Quantitation Level (QL)[2] *µg/L*** *Unless specified*
1,2-Trans-Dichloroethylene (Ethylene dichloride)	30	156-60-5	624.1	1.6	4.8
1,1,1-Trichloroethane	11	71-55-6	624.1	3.8	11.4
1,1,2-Trichloroethane	14	79-00-5	624.1	5.0	15.0
Trichloroethylene	87	79-01-6	624.1	1.9	5.7
Vinyl chloride	88	75-01-4	624/SM6200B	1.0	2.0

Base/Neutral Compounds (Compounds in **Bold** are Ecology PBTS)

Priority Pollutants	**PP #**	**CAS Number** (if available)	**Recommended Analytical Protocol**	**Detection (DL)[1] *µg/L*** *Unless specified*	**Quantitation Level (QL)[2] *µg/L*** *Unless specified*
Acenaphthene	1	83-32-9	625.1	1.9	5.7
Acenaphthylene	77	208-96-8	625.1	3.5	10.5
Anthracene	78	120-12-7	625.1	1.9	5.7
Benzidine	5	92-87-5	625.1	44	132
Benzyl butyl phthalate	67	85-68-7	625.1	2.5	7.5
Benzo(a)anthracene	72	56-55-3	625.1	7.8	23.4
Benzo(b)fluoranthene (3,4-benzofluoranthene) [7]	74	205-99-2	610/625.1	4.8	14.4
Benzo(j)fluoranthene [7]		205-82-3	625	0.5	1.0
Benzo(k)fluoranthene (11,12-benzofluoranthene) [7]	75	207-08-9	610/625.1	2.5	7.5
Benzo(r,s,t)pentaphene		189-55-9	625	1.3	5.0
Benzo(a)pyrene	73	50-32-8	610/625.1	2.5	7.5
Benzo(ghi)Perylene	79	191-24-2	610/625.1	4.1	12.3

Priority Pollutants	**PP #**	**CAS Number** (if available)	**Recommended Analytical Protocol**	**Detection (DL)[1] *µg/L*** *Unless specified*	**Quantitation Level (QL)[2] *µg/L*** *Unless specified*
Bis(2-chloroethoxy)methane	43	111-91-1	625.1	5.3	15.9
Bis(2-chloroethyl)ether	18	111-44-4	611/625.1	5.7	17.1
Bis(2-chloro-1-methylethyl)Ether (Bis(2-chloroisopropyl)ether)[10]	42	108-60-1	625.1	5.7	17.1
Bis(2-ethylhexyl)phthalate	66	117-81-7	625.1	2.5	7.5
4-Bromophenyl phenyl ether	41	101-55-3	625.1	1.9	5.7
2-Chloronaphthalene	20	91-58-7	625.1	1.9	5.7
4-Chlorophenyl phenyl ether	40	7005-72-3	625.1	4.2	12.6
Chrysene	76	218-01-9	610/625.1	2.5	7.5
Dibenzo (a,h)acridine		226-36-8	610M/625M	2.5	10.0
Dibenzo (a,j)acridine		224-42-0	610M/625M	2.5	10.0
Dibenzo(a-h)anthracene (1,2,5,6-dibenzanthracene)	82	53-70-3	625.1	2.5	7.5
Dibenzo(a,e)pyrene		192-65-4	610M/625M	2.5	10.0
Dibenzo(a,h)pyrene		189-64-0	625M	2.5	10.0
3,3-Dichlorobenzidine	28	91-94-1	605/625.1	16.5	49.5
Diethyl phthalate	70	84-66-2	625.1	1.9	5.7
Dimethyl phthalate	71	131-11-3	625.1	1.6	4.8
Di-n-butyl phthalate	68	84-74-2	625.1	2.5	7.5
2,4-dinitrotoluene	35	121-14-2	609/625.1	5.7	17.1
2,6-dinitrotoluene	36	606-20-2	609/625.1	1.9	5.7

Priority Pollutants	**PP #**	**CAS Number** (if available)	**Recommended Analytical Protocol**	**Detection (DL)[1] *µg/L*** *Unless specified*	**Quantitation Level (QL)[2] *µg/L*** *Unless specified*
Di-n-octyl phthalate	69	117-84-0	625.1	2.5	7.5
1,2-Diphenylhydrazine (as Azobenzene)	37	122-66-7	1625B	5.0	20
Fluoranthene	39	206-44-0	625.1	2.2	6.6
Fluorene	80	86-73-7	625.1	1.9	5.7
Hexachlorobenzene	9	118-74-1	612/625.1	1.9	5.7
Hexachlorobutadiene	52	87-68-3	625.1	0.9	2.7
Hexachlorocyclopentadiene	53	77-47-4	1625B/625	2.0	4.0
Hexachloroethane	12	67-72-1	625.1	1.6	4.8
Indeno(1,2,3-cd)Pyrene	83	193-39-5	610/625.1	3.7	11.1
Isophorone	54	78-59-1	625.1	2.2	6.6
3-Methyl cholanthrene		56-49-5	625	2.0	8.0
Naphthalene	55	91-20-3	625.1	1.6	4.8
Nitrobenzene	56	98-95-3	625.1	1.9	5.7
N-Nitrosodimethylamine	61	62-75-9	607/625	2.0	4.0
N-Nitrosodi-n-propylamine	63	621-64-7	607/625	0.5	1.0
N-Nitrosodiphenylamine	62	86-30-6	625	1.0	2.0
Perylene		198-55-0	625	1.9	7.6
Phenanthrene	81	85-01-8	625.1	5.4	16.2
Pyrene	84	129-00-0	625.1	1.9	5.7
1,2,4-Trichlorobenzene	8	120-82-1	625.1	1.9	5.7

Dioxin

Priority Pollutant	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)[1] *µg/L* *Unless specified*	Quantitation Level (QL)[2] *µg/L* *Unless specified*
2,3,7,8-Tetra-Chlorodibenzo-P-Dioxin (2,3,7,8 TCDD)	129	1746-01-6	1613B	1.3 pg/L	5 pg/L

Pesticides/PCBS

Priority Pollutants	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)[1] *µg/L* *Unless specified*	Quantitation Level (QL)[2] *µg/L* *Unless specified*
Aldrin	89	309-00-2	608.3	4.0 ng/L	12 ng/L
alpha-BHC	102	319-84-6	608.3	3.0 ng/L	9.0 ng/L
beta-BHC	103	319-85-7	608.3	6.0 ng/L	18 ng/L
gamma-BHC (Lindane)	104	58-89-9	608.3	4.0 ng/L	12 ng/L
delta-BHC	105	319-86-8	608.3	9.0 ng/L	27 ng/L
Chlordane [8]	91	57-74-9	608.3	14 ng/L	42 ng/L
4,4'-DDT	92	50-29-3	608.3	12 ng/L	36 ng/L
4,4'-DDE	93	72-55-9	608.3	4.0 ng/L	12 ng/L
4,4' DDD	94	72-54-8	608.3	11ng/L	33 ng/L
Dieldrin	90	60-57-1	608.3	2.0 ng/L	6.0 ng/L
alpha-Endosulfan	95	959-98-8	608.3	14 ng/L	42 ng/L
beta-Endosulfan	96	33213-65-9	608.3	4.0 ng/L	12 ng/L
Endosulfan Sulfate	97	1031-07-8	608.3	66 ng/L	198 ng/L
Endrin	98	72-20-8	608.3	6.0 ng/L	18 ng/L
Endrin Aldehyde	99	7421-93-4	608.3	23 ng/L	70 ng/L
Heptachlor	100	76-44-8	608.3	3.0 ng/L	9.0 ng/L

Priority Pollutants	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)[1] *µg/L* *Unless specified*	Quantitation Level (QL)[2] *µg/L* *Unless specified*
Heptachlor Epoxide	101	1024-57-3	608.3	83 ng/L	249 ng/L
PCB-1242 [9]	106	53469-21-9	608.3	0.065	0.195
PCB-1254	107	11097-69-1	608.3	0.065	0.195
PCB-1221	108	11104-28-2	608.3	0.065	0.195
PCB-1232	109	11141-16-5	608.3	0.065	0.195
PCB-1248	110	12672-29-6	608.3	0.065	0.195
PCB-1260	111	11096-82-5	608.3	0.065	0.195
PCB-1016 [9]	112	12674-11-2	608.3	0.065	0.195
Toxaphene	113	8001-35-2	608.3	240 ng/L	720 ng/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, or 5) x 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.**Northwest Total Petroleum Hydrocarbons Diesel Extended Range** OR **NWTPH Dx** – Analytical Methods for Petroleum Hydrocarbons https://fortress.wa.gov/ecy/publications/documents/97602.pdf

4. **Northwest Total Petroleum Hydrocarbons Gasoline Extended** Range OR **NWTPH Gx** – Analytical Methods for Petroleum Hydrocarbons https://fortress.wa.gov/ecy/publications/documents/97602.pdf

5. **1, 3-dichloroproylene (mixed isomers)** – You may report this parameter as two separate parameters: cis-1, 3-dichlorpropropene (10061-01-5) and trans-1, 3-dichloropropene (10061-02-6).

6. **Total Benzofluoranthenes** – Because Benzo(b)fluoranthene, Benzo(j)fluoranthene and Benzo(k)fluoranthene co-elute you may report these three isomers as total benzofluoranthenes.
Chlordane – You may report alpha-chlordane (5103-71-9) and gamma-chlordane (5103-74-2) in place of chlordane (57-74-9). If you report alpha and gamma-chlordane, the DL/PQLs that apply are 14/42 ng/L.
PCB 1016 & PCB 1242 – You may report these two PCB compounds as one parameter called PCB 1016/1242.

7. **Bis(2-Chloro-1-Methylethyl) Ether** – This compound was previously listed as Bis(2-Chloroisopropyl) Ether (39638-32-9)

APPENDIX B – DEFINITIONS

Bypass means the intentional diversion of waste streams from any portion of a treatment facility.

Composite Sample means a flow-proportioned mixture of not less than six discrete aliquots. Each aliquot shall be a grab sample of not less than 100 mL and shall be collected and stored in accordance with procedures prescribed in the most recent edition of *Standard Methods for the Examination of Water and Wastewater.*

Director means the Director of the Department of Ecology or his/her authorized representative.

Epizootic means the occurrence of a specific disease which can be detected in fifty percent of the mortality or moribund individual fish in an affected container or within an affected population, and which results in an average daily mortality of at least one-half of one percent of the affected individual fish for five or more days in any thirty-day period.

FWPCA means the Federal Water Pollution Control Act (The Clean Water Act), as amended, Title 33 United States Code, Section 1251 et seq.

40 CFR means Title 40 of the Code of Federal Regulations. The Code of Federal Regulations is the codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the federal government.

GPD = gallons per day

Grab *Sample* means an individual discrete water sample.

Lined Pond means asphalt, concrete, plastic membrane or similarly lined ponds. Ponds lined with gravel or soil are considered unlined.

Instantaneous Maximum is the maximum allowable concentration of a pollutant determined from the analysis of any discrete or composite sample collected, independent of the flow rate and the duration of the sampling event.

MGD = million gallons per day

mg/L = milligrams per liter ("Net mg/L" = mg/L in hatchery effluent minus mg/L in hatchery influent)

ml/L = milliliters per liter ("Net ml/L" = ml/L in hatchery effluent minus ml/L in hatchery influent)

Monthly Average shall be calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

New Facility means a facility that begins activities that will result in a discharge or potential discharge to waters of the state on or after the effective date of the general permit.

Offline Settling Basin shall mean those pond cleaning waste treatment systems which have a hydraulic detention time of 24 hours and a designed removal efficiency of at least 85% for total suspended solids and 90% for settleable solids.

Production means net gain in weight of fish at the facility.

Rearing Ponds or Raceways means ponds, raceways, circular ponds, or any other method used to keep fin-fish captive for culture purposes at an upland fin-fish rearing facility.

Rearing Vessel means all rearing ponds, raceways, and fish hauling tanks.

Representative Sample means multiple outfalls with similar waste streams can be sampled and combined into one sample for one analysis. The sample volume from each outfall shall be apportioned according to the volume of flow at the time of sampling. These apportioned samples can then be combined into one representative sample for analysis.

Settleable Solids means those solids in surface waters or wastewaters which are measured volumetrically in accordance with procedures prescribed in the most recent edition of *Standard Methods for the Examination of Water and Wastewater.*

Section 303(d) List is a part of the federal Clean Water Act that requires states to identify waterbodies that are water quality limited (i.e. waterbodies that do not meet, or are not expected to meet, applicable water quality standards after sources have undergone technology-based controls).

Severe Property Damage means substantial physical damage to property, damage to the treatment facilities which causes 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. Severe property damage does not mean economic loss caused by delays or losses in production.

Surface Waters include lakes, rivers, ponds, streams, inland waters, salt waters, and all other surface waters and water courses within the jurisdiction of the state of Washington. For the purposes of this permit surface waters do not include hatchery ponds, raceways, pollution abatement ponds, and wetlands constructed solely for wastewater treatment.

Total Maximum Daily Load (TMDL) is the sum of all waste load allocations (WLAs) and load allocations (LAs) (non-point source and background) and a safety margin. The TMDL is a mechanism for establishing water quality-based controls on all point and nonpoint sources of pollutants within a water quality-limited basin, subbasin, or hydrographic segment.

TVSS means total volatile suspended solids in the influent or effluent water, which are measured in accordance with procedures prescribed in the most recent edition of *Standard Methods for the Examination of Water and Wastewater.*

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based, permit effluent limitations 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.

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

A Permittee who wishes to establish the affirmative defense of upset shall 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 facilities were being properly operated at the time of the upset:

3) the Permittee submitted notice of the upset as required; and

4) the Permittee complied with any remedial measures required under this permit.

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

Waters of the State include those waters defined as "waters of the United States" in 40 CFR 122.2 within the geographic boundaries of Washington State and "waters of the state" as defined in Chapter RCW 90.48 RCW which include lakes, rivers, ponds, streams, waters, underground waters, salt waters, and all other surface water and water courses including wetlands within the jurisdiction of the state of Washington.

Water Quality Standards means the water quality standards for ground waters of the state of Washington (Chapter 173-200 WAC), the water quality standards for surface waters of the state of Washington (Chapter 173-201A WAC), and the sediment management standards of the state of Washington (Chapter 173-204 WAC).

APPENDIX C – AQUACULTURE DRUGS

LOW REGULATORY PRIORITY AQUACULTURE DRUGS

The following compounds have undergone review by the U.S. Food and Drug Administration's Center for Veterinary Medicine (CVM) and have been determined to be new animal drugs of low regulatory priority (LRP). At production aquaculture facilities, it is illegal to use any drug that is not approved unless it is being used under the strict conditions of an INAD exemption or an extra-label prescription issued by a licensed veterinarian.

ACETIC ACID - 1000 to 2000 ppm dip for 1 to 10 minutes as a parasiticide for fish.

CALCIUM CHLORIDE - Used to increase water calcium concentration to ensure proper egg hardening. Dosages used would be those necessary to raise calcium concentration to 10-20 ppm $CaCO_3$. - Up to 150 ppm indefinitely to increase the hardness of water for holding and transporting fish in order to enable fish to maintain osmotic balance.

CALCIUM OXIDE - Used as an external protozoacide for fingerlings to adult fish at a concentration of 2000 mg/L for 5 seconds.

CARBON.DIOXIDE GAS - For anesthetic purposes in cold, cool, and warm water fish.

FULLER'S EARTH - Used to reduce the adhesiveness of fish eggs to improve hatchability.

GARLIC (Whole Form) - Used for control of helminth and sea lice infestations of marine salmonids at all life stages.

HYDROGEN PEROXIDE - Used at 250-500 mg/L to control fungi on all species and life stages of fish, including eggs (35% solution).

MAGNESIUM SULFATE - Used to treat external parasitic infections in fish at all life stages. Used in all freshwater species. Fish are immersed in a 30,000 mg $MgSO_4$/L and 7000 mg NaCl/L solutions for 5 to 10 minutes.

ONION (Whole Form) - Used to treat external crustacean parasites, and to deter sea lice from infesting external surface of salmonids at all life stages.

PAPAIN - Use of a 0.2% solution in removing the gelatinous matrix of fish egg masses in order to improve hatchability and decrease the incidence of disease.

POTASSIUM CHLORIDE - Used as an aid in osmoregulation; relieves stress and prevents shock. Dosages used would be those necessary to increase chloride ion concentration to 10-2000 mg/L.

POVIDONE IODINE - 100 ppm solution for 10 minutes as an egg surface disinfectant during and after water hardening.

SODIUM BICARBONATE - 142 to 642 ppm for 5 minutes as a means of introducing carbon dioxide into the water to anesthetize fish.

SODIUM CHLORIDE - 0.5% to 1.0% solution for an indefinite period as an osmoregulatory aid for the relief of stress and prevention of shock; and 3% solution for 10 to 30 minutes as a parasiticide.

SODIUM SULFITE - 15% solution for 5 to 8 minutes to treat eggs in order to improve their hatchability.

THIAMINE HYDROCHLORIDE - Used to prevent or treat thiamine deficiency in salmonids. Eggs are immersed in an aqueous solution of up to 100 ppm for up to four hours during water hardening. Sac fry are immersed in an aqueous solution of up to 1,000 ppm for up to one hour.

UREA and TANNIC ACID - Used to denature the adhesive component of fish eggs at concentrations of 15g urea and 20g NaCl/5 liters of water for approximately 6 minutes, followed by a separate solution of 0.75 g tannic acid/5 liters of water for an additional 6 minutes. These amounts will treat approximately 400,000 eggs.

DRUGS UNDER "DEFERRED REGULATORY STATUS

COPPER SULFATE - Target pathogens: external parasites, bacteria and fungi, Immersion. Treatment dose varies, duration 1 hour.

POTASSIUM PERMANGANATE - Used for external parasites, bacteria and fungi. Method of treatment is Immersion: standing-bath or flow-through treatment. Dosage: 1-10 mg/L, treatment duration 1 hour.

The following is a list of drugs currently approved by CVM for use on/in aquatic species:

- Florenfenicol
- Hydrogen peroxide
- Chorionic Gonadotropin
- Formalin
- Sulfadimethozine and Ormetoprim
- Oxytetracycline Hydrochloride
- Oxytetracycline Dihydrate
- Tricaine Methanesulfonate

For a list of INADS, see: https://www.fws.gov/fisheries/aadap/inads.html

APPENDIX D – CHEMICAL OPERATIONAL LOG

General Upland Fin-fish Hatching and Rearing NPDES Chemical Operational Log. Records of Disease Control Chemicals Used

YEAR ____________

Keep records on station for at least five years

Facility: ________________________

NPDES Permit Number: ________________________

Brood Stock Species	Pond/ Race-way	Date of Appli- cation	Chemical Name	Dosage	Duration	Method Appli- cation	Amt used	Reason for use	Flow	Water Temp	Estimated Conc. In Discharge	Method Disposal	location of dischg	Initials

Notes:

Adopted from WDFW Chemical Operational Log - C. Mains

2007 Chemical log form.xls