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Permit No. WA0039268

Issuance Date: July 22, 2010
Effective Date: October 1, 2010
Expiration Date: September 30, 2015

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
WASTE DISCHARGE PERMIT No. WA0039268

State of Washington
DEPARTMENT OF ECOLOGY
Olympia, Washington 98504-7600

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

Trout Springs Canyon Falls Hatchery
P.O Box 1290
Sumner, WA 98390

Facility Location:
12000 McCutcheon Rd
Sumner, WA 98390

Receiving Water:
Canyon Falls Creek

Water Body I.D. No.:
1222193471508

Discharge Location:
Latitude: 47° 8' 35" N
Longitude: 122° 13' 2" W

Industry Type:
SIC 0273: Animal Aquaculture
SIC: 0921: Fish Hatcheries and Preserves

is authorized to discharge in accordance with the special and general conditions which follow.

Original signed by:
Garin Schrieve, P.E.
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.

Permit Section	Submittal	Frequency	First Submittal Date
S3.A	Monthly Discharge Monitoring Report	Quarterly	January 15, 2011
S3.B	Annual Disease Control Chemical Use Report	Annually	January 31, 2011
S3.F	Noncompliance Notification	As necessary	Within 30 days of violation
S5	Updated Pollution Prevention Plan	1/permit cycle	March 31, 2011
G1.	Notice of Change in Authorization	As necessary	
G4.	Permit Application for Substantive Changes to the Discharge	As necessary	At least 60 days before the proposed change
G5.	Engineering Report for Construction or Modification Activities	As necessary	At least 180 days prior to the planned start of construction
G7.	Application for Permit Renewal	1/permit cycle	January 2, 2014
G8.	Notice of Permit Transfer	As necessary	At least 30 days before the proposed transfer date
G21.	Reporting Anticipated Non-compliance	As necessary	At least 180 days prior to anticipated non-compliance
G22.	Reporting Other Information	As necessary	

SPECIAL CONDITIONS

S1. DISCHARGE LIMITATIONS

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 shall constitute a violation of the terms and conditions of this permit.

The discharge of any pollutant not specifically authorized by this permit in concentrations which violate receiving water quality standards established under section 307(a) of the Clean Water Act or Chapter 173-201A Washington Administrative Code (WAC), shall also be a violation of this permit and the Clean Water Act.

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge wastewater associated with rearing ponds and raceways, incubation, the offline settling basin and the adult rearing pond at Outfalls 001 and 002 subject to complying with the following limitations:

Parameter	Average Monthly ^a	Maximum Daily ^b
REARING POND OR RACEWAY EFFLUENT LIMITATIONS: OUTFALLS #001AND 002		
Total 5-day biochemical oxygen demand (lbs/day) ^c	N/A	389.3
Total ammonia (lbs/day) ^c	N/A	74.5
Settleable Solids at each Outfall (net ml/L)	0.1	N/A
Total suspended solids at each Outfall (net mg/L)	5.0	15.0
pH at each Outfall (S.U.)	At all times between 6.0 and 9.0	
OFFLINE SETTLING BASIN EFFLUENT LIMITATIONS: COMPLIANCE SAMPLING POINT (CSP) #003		
Settleable solids (ml/L)	N/A	1.0
Total suspended solids (mg/L)	N/A	100
REARING POND OR RACEWAY DRAWDOWN EFFLUENT FOR FISH RELEASE LIMITATIONS: COMPLIANCE SAMPLING POINT (CSP) #004		
Settleable solids (ml/L)	N/A	1.0
Total suspended solids (mg/L)	N/A	100
^a The average monthly effluent limitation is defined as the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a		

calendar month divided by the number of daily discharges measured during that month.
^b The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day.
^c The five-day biochemical oxygen demand and ammonia maximum daily limits are effective only during May through October.

B. Prohibitions

The Permittee must not discharge any total residual chlorine into the receiving water. This limit complies with the zero wasteload allocation allotted to this facility in the **Puyallup River Total Maximum Daily Load for Biochemical Oxygen Demand, Ammonia, and Residual Chlorine Study** (June 1993, as revised).

The Permittee must not discharge or release Atlantic salmon (*Salmo salar*) to any freshwater surface waters of the State, unless specifically authorized in writing by the Washington Department of Fish and Wildlife.

S2. MONITORING REQUIREMENTS

Monitoring must be conducted in conformance with the testing methods, detection limits, and quantitation limits specified in Appendix A of this permit. The Permittee shall monitor in accordance with the following schedule:

A. Monitoring Schedule

Category	Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
Rearing Pond or Raceway Effluent	BOD ₅ (May through Oct) ^a	mg/L and lbs/day	Outfalls #001 and #002	1/month	Grab
Rearing Pond or Raceway Effluent	NH ₃ (May through Oct) ^a	mg/L and lbs/day	Outfalls #001 and #002	1/month	Grab
Rearing Pond or Raceway Effluent	Settleable Solids ^b	ml/L	Outfalls #001 and #002	1/week	Grab
Rearing Pond or Raceway Effluent	Total Suspended Solids (TSS) ^c	mg/L	Outfalls #001 and #002	1/month	Composite
Rearing Pond or Raceway Effluent	pH	s.u.	Outfalls #001 and #002	1/month	Grab

Rearing Pond or Raceway Effluent	Temperature	°C	Outfalls #001 and #002	1/month	Grab
Offline Settling Basin Effluent	Flow	gpd	CSP #003	1/week ^{d, e}	Daily Total
Offline Settling Basin Effluent	Settleable Solids	ml/L	CSP #003	1/month ^{d, e}	Grab
Offline Settling Basin Effluent	TSS	mg/L	CSP #003	1/month ^{d, e}	Grab
Rearing Pond or Raceway Drawdown Effluent for Fish Release	Settleable Solids	ml/L	CSP #004	1/drawdown	Grab ^f
Rearing Pond or Raceway Drawdown Effluent for Fish Release	Total Suspended Solids (TSS)	mg/L	CSP #004	1/drawdown	Grab ^f
Influent	Total Pumped and Gravity Flow	MGD	CSP #005	2/month	Daily Total
Influent	Settleable Solids ^b	ml/L	CSP #005	1/week	Grab
Influent	Total Suspended Solids ^c (TSS)	mg/L	CSP #005	1/month	Composite
Influent	pH	S.U.	CSP #005	1/month	Grab
Influent	Temperature	°C	CSP #005	1/month	Grab
Influent	NH ₃	mg/L	CSP #005	1/month	Grab
^a The BOD ₅ and NH ₃ effluent concentrations (in the units of mg/L) shall be multiplied by effluent flow (in the units of MGD) and multiplied by 8.34 (conversion factor) to calculate the effluent loading to Clear Creek (in the units of pounds per day). Both effluent concentrations and loadings of BOD ₅ and NH ₃ to Clear Creek shall be reported on the monthly Discharge Monitoring Report forms.					
^b Influent and effluent grab samples are to be taken on the same day. Effluent samples shall be taken during rearing pond or raceway cleaning, or if the frequency of rearing pond or raceway cleaning is less than twice per week, settleable solids samples may be collected immediately following fish feeding.					
^d The total suspended solids influent sample shall be a flow proportional composite sample of all influent water sources. Total suspended solids effluent samples shall be a combination of at least six representative grab samples collected throughout the normal working day. At least one sample shall be collected while the fish are being fed and another during rearing pond or raceway cleaning. Equal volumes of each of the six grab samples shall be combined and shall constitute the total suspended solids composite sample. The solids contained in each of the six grab samples must be re-suspended prior to compositing a sample.					

^d If the offline settling basin discharges less frequently than required in this permit, the sampling and testing frequency for flow and settleable solids shall be the offline settling basin discharge frequency. Testing of the offline settling basin discharge is unnecessary if the basin does not discharge during a reporting period. In such instances, “no discharge” should be reported on the Discharge Monitoring Reports (DMRs).

^e Offline settling basin effluent samples shall be collected during the last quarter of a rearing pond or raceway cleaning event (for batch type settling basins, a representative sample of the effluent shall be taken at the time of discharge).

^f Rearing pond drawdown for fish release sample(s) shall be collected during the last quarter of each drawdown for release event. A composite sample representing the last quarter of each rearing pond or raceway involved in a continuous drawdown event may replace multiple grab samples from each rearing pond or raceway if the drawdown event involves more than one rearing pond or raceway.

B. Sampling and Analytical Procedures

The Permittee must collect effluent samples to comply with the monitoring and testing requirements established in this permit from the effluent stream prior to discharge into the receiving waters. The Permittee must collect influent samples at the point where the water enters the facility or settling pond. Samples and measurements taken to meet the requirements of this permit shall be representative of 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 shall conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 Code of Federal Regulations (CFR) Part 136 or to the latest revision of *Standard Methods for the Examination of Water and Wastewater* (APHA), unless otherwise specified in this permit or approved in writing by the Department of Ecology (Ecology).

C. Flow Measurement, Field Measurement and Continuous Monitoring Devices

The Permittee must:

1. Select and use appropriate field measurement devices and methods consistent with accepted scientific practices.
2. Select and use appropriate flow measurement devices consistent with accepted aquaculture practice
3. Install, calibrate, and maintain these devices to ensure the accuracy of the measurements is consistent with the manufacturer’s recommendation for that type of device.
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.

D. Laboratory Accreditation

The Permittee must ensure that all monitoring data required by Ecology 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.

E. 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 of each calendar month at the facility. The Permittee must provide a copy of loading and feeding records to Ecology upon request.

3. The Permittee must use the information contained in the operational log to complete the disease control chemical use reporting requirements as noted in Special Condition S3.B of this permit.

S3. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall monitor and report in accordance with the following conditions. The falsification of information submitted to Ecology shall constitute a violation of the terms and conditions of this permit.

A. Reporting

The first monitoring period begins on the effective date of the permit. Results obtained from the monitoring required in Special Condition S2. of this permit shall be documented on the monthly discharge monitoring report (DMR) form supplied by, or approved by, Ecology. The three monthly reports shall be submitted quarterly. The quarterly reporting periods shall be January through March, April through June, July through September, and October through December. Reports shall be postmarked by the 30th day of the month following the quarterly reporting period. The report(s) shall be sent to:

Industrial Unit Permit Coordinator
Department of Ecology
Southwest Region Office
P.O. Box 47775
Olympia, Washington 98504-7775

Discharge Monitoring Report forms must be submitted quarterly whether or not the facility was discharging. If there was no discharge during a given month, submit the form as required with the words "no discharge" entered in place of the monitoring results.

B. Disease Control Chemical Use Report

The Permittee shall report the use of any disease control chemicals on a form 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 31, 2011**.

C. Records Retention

The Permittee shall retain records of all monitoring information for a minimum of three years. Such information shall 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. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Director.

D. Recording of Results

For each measurement or sample taken, the Permittee shall 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; and (6) the results of all analyses.

E. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by this permit using test procedures specified by Special Condition S2 of this permit, then the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Permittee's DMR.

F. Noncompliance Notification

In the event the Permittee is unable to comply with any of the terms and conditions of this permit due to any cause, the Permittee shall:

1. Immediately take action to stop, contain, and clean up unauthorized discharges or otherwise stop the noncompliance, correct the problem and, if applicable, repeat sampling and analysis of any noncompliance immediately and submit the results to Ecology within 30 days after becoming aware of the violation.
2. Immediately notify Ecology of the failure to comply.
3. Submit a detailed written report to Ecology within 30 days (five days for upsets and bypasses), unless requested earlier by Ecology. The report shall contain a description of the noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

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. Maintaining a Copy of This Permit

A copy of this permit must be kept at the facility and be made available upon request to Ecology inspectors.

S4. OPERATING REQUIREMENTS AND CONDITIONS

The Permittee shall, 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 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 following requirements and conditions shall apply:

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 S6, during all phases of operation of the facility.
7. Keep a copy of this permit at the facility at all times and make it available to all employees and to Ecology upon request.
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 shut-down, if supplied with ground water and discharging to surface receiving waters.

B. Bypass Procedures

Bypass, which is the intentional diversion of waste streams from any portion of a treatment facility, is prohibited, and Ecology may take enforcement action against a Permittee for bypass unless one of the following circumstances (1, 2, or 3) is applicable.

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

Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of this permit, or adversely impact public health as determined by Ecology prior to the bypass.

The Permittee shall submit prior notice, if possible, at least 10 days before the date of the bypass.

2. Bypass which is Unavoidable, Unanticipated, and Results in Noncompliance of this Permit.

This bypass is permitted 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. There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment downtime (but not if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance), or transport of untreated wastes to another treatment facility.
- c. Ecology is properly notified of the bypass as required in Special Condition S3.F of this permit.

3. Bypass which is Anticipated and has the Potential to Result in Noncompliance of this Permit.

The Permittee shall notify Ecology at least 30 days before the planned date of bypass. The notice shall contain (1) a description of the bypass and its cause; (2) an analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing; (3) a cost-effectiveness analysis of alternatives including comparative resource damage assessment; (4) the minimum and maximum duration of bypass under each alternative; (5) a recommendation as to the preferred alternative for conducting the bypass; (6) the projected date of bypass initiation; (7) a statement of compliance with State Environmental Policy Act (SEPA); (8) a request for modification of water quality standards as provided for in WAC 173-201A-110, if an exceedance of any water quality standard is anticipated; and (9) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.

For probable construction bypasses, the need to bypass is to be identified as early in the planning process as possible. The analysis required above shall be considered during preparation of the engineering report or facilities plan and plans and specifications and shall be included to the extent practical. In cases where the probable need to bypass is determined early, continued analysis is necessary up to and including the construction period in an effort to minimize or eliminate the bypass.

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

- a. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
- b. If there are feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
- c. If the bypass is planned and scheduled 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. The public shall be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to bypass will be by administrative order issued by Ecology under Revised Code of Washington (RCW) 90.48.120.

C. 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.

D. 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 United States Environmental Protection Agency (USEPA) 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, as required in Special Condition S3.B of this permit. All disease control chemical use must be done in conformance with product label instructions or approved INAD protocols, or be administered by a licensed veterinarian. The disposal of all spent chemical dip treatment solutions shall be documented in the Operational Log in accordance with Special Condition S2.E of this permit.

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. As a result, the following use of disease control chemicals or drugs administered by, or under the supervision of, a licensed veterinarian is approved by Ecology:

- a. Any drug or chemical administered through injection;
- b. Any drug or chemical administered by the use of a dip;
- c. Any drug or chemical administered as an additive to feed; and

- d. Any drugs classified by the USFDA as a low priority aquaculture drug (Appendix A of the fact sheet).

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 Special Condition S4.D.1, above.

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

- a. The drug or disease control chemical is administered by, or under the direct supervision of, a licensed veterinarian.
- b. The drug or disease control chemical used and/or the method of its application could not have reasonably been anticipated; and
- c. Written or facsimile notification is provided to the South Puget Sound Basin Water Quality Management Area Permit Manager at least 24 hours prior to administering the drug or disease control chemical.

Notwithstanding the provisions of Special Condition S4.D, the Permittee is responsible for fully complying with all the terms and conditions contained in this permit including, but not limited to: monitoring, recordkeeping, and reporting. Further, this clarification of disease control chemicals use does not authorize the Permittee to violate, or cause an exceedance of, applicable water quality standards.

E. Production Changes

If the pounds of fish on hand for a facility drops below 20,000 pounds and the monthly pounds of food fed for a month is less than 5,000 pounds, the Permittee shall continue submitting DMRs to Ecology, but may, for those months, suspend the testing requirements for settleable solids and total suspended solids contained in Special Condition S2.A for Rearing Pond or Raceway Effluent and for the Influent until the facility again exceeds the above biomass or feeding rate thresholds. Permittees shall note on the DMR comment and explanation section the reason(s) monitoring information was not submitted (i.e. monthly pounds of fish on hand was below 20,000 pounds and less than 5,000 pounds of fish food was fed). Nothing in this section shall relieve the Permittee of the Equivalent Oxygen Demand, BOD₅, NH₃ and pH testing requirements for Outfall #001 and 002, or for any other the testing requirements for Compliance Sampling Points (CSPs) #'s 003, 004, and 005.

S5. POLLUTION PREVENTION PLAN

The Permittee shall review the Pollution Prevention (P2) Plan for how effective it has been in achieving the goals of minimizing the discharge of pollutants to waters of the state within the first six months after permit coverage has been granted under this permit. This plan shall address operating, spill prevention, spill response, solid waste, and stormwater discharge practices that will prevent or minimize the release of pollutants from the facility to the waters of the state. The

Permittee shall review the plan following any significant discharge of pollutants and revise the plan as needed. The Permittee shall operate the facility in accordance with this plan along with any subsequent amendments or revisions.

The Permittee shall maintain a copy of the most current version of the P2 Plan at the facility and assure that its operations staff for the facility are familiar with the plan and have been adequately trained in the specific procedures that it requires. The Permittee shall submit a copy of the plan to Ecology by **March 31, 2011**.

The Permittee shall address the following in the plan:

- A. How fish feeding will be conducted to minimize the discharge of unconsumed food.
- B. The frequency of pond and raceway cleaning and what procedures will be used to determine when cleaning is necessary to prevent accumulated solids from being discharged.
- C. How pond and raceway cleaning will be performed to reduce the disturbance and subsequent discharge of settled solids during cleaning events.
- D. How fish grading, harvesting, and other activities within ponds or raceways will be carried out to minimize the disturbance and subsequent discharge of accumulated solids.
- E. For facilities that release fish for enhancement purposes, how the discharge of accumulated solids will be prevented during the fish release.
- F. How disease control chemicals are used within the facility to ensure that the amounts and frequency of application are the minimum necessary for effective disease treatment and control. The concentration of disease control chemicals in the facility's discharge shall be minimized to the maximum extent practicable.
- G. Practices for the storage and, if necessary, disposal of disease control chemicals.
- H. How solid and biological wastes are collected, stored, and ultimately disposed. Among the solid wastes of concern are:
 - 1. Sands, silts, and other debris collected from facility source waters.
 - 2. Accumulated settled solids in rearing ponds and settling ponds.
 - 3. Any fish mortalities under normal hatchery operation.
 - 4. Fish mortalities due to a fish kill involving more than five percent of the fish in any raceway or pond, or due to kill spawning operations.
 - 5. Blood from kill spawning or harvesting operations.
- I. Procedures to prevent or respond to spills and unplanned discharges of oil and hazardous materials. These procedures shall address the following:

1. A description of the reporting system which will be used 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 a 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 be spilled directly or indirectly into State waters.
- J. Procedures to identify and prevent existing and potential sources of stormwater pollution.
- K. Facility monitoring plan, including a map identifying all sample locations.

S6. REQUEST TO CHANGE THE WLAS FOR AMMONIA AND BOD₅.

The WLAs for this facility are 389.3 lbs/day for five-day BOD, and 74.5 lbs/day for ammonia, which Ecology used to define limits on the water quality of the discharge. The TMDL Study allows trading of the ammonia WLA for additional BOD₅ WLA at a ratio of 13.4 lbs/day of BOD₅ for 1 lb/day of ammonia. The Permittee may request to interchangeably exchange between the WLAs granted to the Permittee for ammonia and BOD₅. The Permittee must request such a trade at least 90 days before such a trade will go into effect. Ecology will review the request and modify this NPDES permit as necessary.

GENERAL CONDITIONS

G1. SIGNATORY REQUIREMENTS

All applications, reports, or information submitted to Ecology shall be signed and certified.

- A. All permit applications shall be signed by either a responsible corporate officer of at least the level of vice president of a corporation, a general partner of a partnership, or the proprietor of a sole proprietorship.
- B. All reports required by this permit and other information requested by Ecology shall 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 General Condition G1.B.2 (above) is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of General Condition G1.B.2 (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 shall 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 shall 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.
- E. Ecology must provide 72 hours advance notice to enter this particular facility.

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, 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 [40 CFR Part 122.64(3)].
 - 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 [40 CFR Part 122.64(4)].
 - 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. Cause exists for termination for reasons listed in A1 through A7, of this section, and Ecology determines that modification or revocation and reissuance is appropriate.
 2. 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 G8) 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 shall, as soon as possible, but no later than 60 days prior to the proposed changes, give notice to Ecology of planned physical alterations or additions to the permitted facility, production increases, or process modification which will result in: (1) the permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b); (2) a significant change in the nature or an increase in quantity of pollutants discharged; or (3) a significant change in the Permittee's sludge use or disposal practices. Following such notice, and the submittal of a new application or supplement to the existing application, along with required engineering plans and reports, this permit may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation.

G5. PLAN REVIEW REQUIRED

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

G6. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in this permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G7. DUTY TO REAPPLY

The Permittee shall apply for permit renewal no later than **January 2, 2014**.

G8. TRANSFER OF THIS PERMIT

In the event of any change in control or ownership of facilities from which the authorized discharge emanate, the Permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall 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 122.62(b)(2), or a minor modification made under 40 CFR 122.63(d), to identify the new Permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

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 Permittee's 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 the 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.

G9. REDUCED PRODUCTION FOR COMPLIANCE

The Permittee, in order to maintain compliance with its permit, shall 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.

G10. REMOVED SUBSTANCES

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

G11. DUTY TO PROVIDE INFORMATION

The Permittee shall 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 shall also submit to Ecology upon request, copies of records required to be kept by this permit.

G12. OTHER REQUIREMENTS OF 40 CFR

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

G13. ADDITIONAL MONITORING

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

G14. PAYMENT OF FEES

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

G15. PENALTIES FOR VIOLATING PERMIT CONDITIONS

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

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

G16. UPSET

Definition – “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.

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 facility was being properly operated at the time of the upset; 3) the Permittee submitted notice of the upset as required in condition S3.F; and 4) the Permittee complied with any remedial measures required under S4.C of this permit.

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

G17. PROPERTY RIGHTS

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

G18. DUTY TO COMPLY

The Permittee shall 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.

G19. TOXIC POLLUTANTS

The Permittee shall 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.

G20. 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 (4) years, or by both.

G21. REPORTING ANTICIPATED NON-COMPLIANCE

The Permittee shall give advance notice to Ecology by submission of a new application or supplement thereto at least 180 days prior to commencement of such discharges, of any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility or activity which may result in noncompliance with permit limits or conditions. Any maintenance of facilities, which might necessitate unavoidable interruption of operation and degradation of effluent quality, shall be scheduled during non-critical water quality periods and carried out in a manner approved by Ecology.

G22. REPORTING OTHER INFORMATION

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

G23. 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 122.21(g)(7).
 - 4. The level established by the Director in accordance with 40 CFR 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 (500µg/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 122.21(g)(7).
 - 4. The level established by the Director in accordance with 40 CFR 122.44(f).

G24. 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 shall be submitted no later than 14 days following each schedule date.

DEFINITIONS

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

Composite Sample shall mean a flow-proportioned mixture of not less than six discrete aliquots. Each aliquot shall be a grab sample of not less than 100 milliliters (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.

Ecology means Department of Ecology.

Epizootic means the occurrence of a specific disease which can be detected in 50 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 30-day period.

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 means 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 means 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 means million gallons per day.

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

ml/L means milliliters per liter ("Net ml/L" means 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.

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 85 percent for total suspended solids and 90 percent 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**.

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.

Substantially deviates means a production change of greater than 20 percent.

Surface waters includes 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.

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 non-compliance 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 Revised Code of Washington (RCW) 90.48 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 groundwaters of the state of Washington [Chapter 173-200 Washington Administrative Code (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 A

EFFLUENT CHARACTERIZATION FOR POLLUTANTS

THIS LIST INCLUDES EPA REQUIRED POLLUTANTS (PRIORITY POLLUTANTS) AND SOME ECOLOGY PRIORITY TOXIC CHEMICALS (PBTs)

The following table specifies analytical methods and levels to be used for effluent characterization in NPDES and State waste discharge permits. This appendix specifies effluent characterization requirements of the Department of Ecology unless other methods are specified in the body of this permit.

This permit specifies the compounds and groups of compounds to be analyzed. Ecology may require additional pollutants to be analyzed within a group. The objective of this appendix is 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. If a Permittee knows that an alternate, less sensitive method (higher DL and QL) from 40 CFR Part 136 is sufficient to produce measurable results in their effluent, that method may be used for analysis.

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL)¹ μg/L unless specified	Quantitation Level (QL)² μg/L unless specified
CONVENTIONALS			
Biochemical Oxygen Demand	SM5210-B		2 mg/L
Chemical Oxygen Demand	SM5220-D		10 mg/L
Total Organic Carbon	SM5310-B/C/D		1 mg/L
Total Suspended Solids	SM2540-D		5 mg/L
Total Ammonia (as N)	SM4500-NH3-GH		0.3 mg/L
Flow	Calibrated device		
Dissolved oxygen	4500-OC/OG		0.2 mg/L
Temperature (max. 7-day avg.)	Analog recorder or Use micro-recording devices known as thermistors		0.2° C
pH	SM4500-H ⁺ B	N/A	N/A
NONCONVENTIONALS			
Total Alkalinity	SM2320-B		5 mg/L as CaCo3
Chlorine, Total Residual	4500 Cl G		50.0
Color	SM2120 B/C/E		10 color unit
Fecal Coliform	SM 9221D/E, 9222	N/A	N/A
Fluoride (16984-48-8)	SM4500-F E	25	100
Nitrate-Nitrite (as N)	4500-NO3-E/F/H		100
Nitrogen, Total Kjeldahl (as N)	4500-NH3-		300

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
	C/E/FG		
Ortho-Phosphate (PO ₄ as P)	4500- PE/PF	3	10
Phosphorus, Total (as P)	4500-PE/PF	3	10
Oil and Grease (HEM)	1664A	1,400	5,000
Salinity	SM2520-B		3 PSS
Settleable Solids	SM2540 -F		100
Sulfate (as mg/L SO ₄)	SM4110-B		200
Sulfide (as mg/L S)	4500-S ² F/D/E/G		200
Sulfite (as mg/L SO ₃)	SM4500-SO3B		2000
Total dissolved solids	SM2540 C		20 mg/L
Total Hardness	2340B		200 as CaCO ₃
Aluminum, Total (7429-90-5)	200.8	2.0	10
Barium Total (7440-39-3)	200.8	0.5	2.0
Boron Total (7440-42-8)	200.8	2.0	10.0
Cobalt, Total (7440-48-4)	200.8	0.05	0.25
Iron, Total (7439-89-6)	200.7	12.5	50
Magnesium, Total (7439-95-4)	200.7	10	50
Molybdenum, Total (7439-98-7)	200.8	0.1	0.5
Manganese, Total (7439-96-5)	200.8	0.1	0.5
Tin, Total (7440-31-5)	200.8	0.3	1.5
METALS, CYANIDE & TOTAL PHENOLS			
Antimony, Total (7440-36-0)	200.8	0.3	1.0
Arsenic, Total (7440-38-2)	200.8	0.1	0.5
Beryllium, Total (7440-41-7)	200.8	0.1	0.5
Cadmium, Total (7440-43-9)	200.8	0.05	0.25
Chromium (hex) dissolved (18540-29-9)	SM3500-Cr EC	0.3	1.2
Chromium, Total (7440-47-3)	200.8	0.2	1.0
Copper, Total (7440-50-8)	200.8	0.4	2.0
Lead, Total (7439-92-1)	200.8	0.1	0.5
Mercury, Total (7439-97-6)	1631E	0.0002	0.0005
Nickel, Total (7440-02-0)	200.8	0.1	0.5
Selenium, Total (7782-49-2)	200.8	1.0	1.0
Silver, Total (7440-22-4)	200.8	0.04	0.2
Thallium, Total (7440-28-0)	200.8	0.09	0.36
Zinc, Total (7440-66-6)	200.8	0.5	2.5
Cyanide, Total (57-12-5)	335.4	2	10
Cyanide, Weak Acid Dissociable	SM4500-CN I	2	10
Phenols, Total	EPA 420.1		50
DIOXIN			
2,3,7,8-Tetra-Chlorodibenzo-P-	1613B	1.3 pg/L	5 pg/L

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
Dioxin (176-40-16)			
VOLATILE COMPOUNDS			
Acrolein (107-02-8)	624	5	10
Acrylonitrile (107-13-1)	624	1.0	2.0
Benzene (71-43-2)	624	1.0	2.0
Bromoform (75-25-2)	624	1.0	2.0
Carbon tetrachloride (56-23-5)	624/601 or SM6230B	1.0	2.0
Chlorobenzene (108-90-7)	624	1.0	2.0
Chloroethane (75-00-3)	624/601	1.0	2.0
2-Chloroethylvinyl Ether (110-75-8)	624	1.0	2.0
Chloroform (67-66-3)	624 or SM6210B	1.0	2.0
Dibromochloromethane (124-48-1)	624	1.0	2.0
1,2-Dichlorobenzene (95-50-1)	624	1.9	7.6
1,3-Dichlorobenzene (541-73-1)	624	1.9	7.6
1,4-Dichlorobenzene (106-46-7)	624	4.4	17.6
Dichlorobromomethane (75-27-4)	624	1.0	2.0
1,1-Dichloroethane (75-34-3)	624	1.0	2.0
1,2-Dichloroethane (107-06-2)	624	1.0	2.0
1,1-Dichloroethylene (75-35-4)	624	1.0	2.0
1,2-Dichloropropane (78-87-5)	624	1.0	2.0
1,3-dichloropropylene (mixed isomers) (542-75-6)	624	1.0	2.0
Ethylbenzene (100-41-4)	624	1.0	2.0
Methyl bromide (74-83-9) (Bromomethane)	624/601	5.0	10.0
Methyl chloride (74-87-3) (Chloromethane)	624	1.0	2.0
Methylene chloride (75-09-2)	624	5.0	10.0
1,1,2,2-Tetrachloroethane (79-34-5)	624	1.9	2.0
Tetrachloroethylene (127-18-4)	624	1.0	2.0
Toulene (108-88-3)	624	1.0	2.0
1,2-Trans-Dichloroethylene (156-60-5) (Ethylene dichloride)	624	1.0	2.0
1,1,1-Trichloroethane (71-55-6)	624	1.0	2.0
1,1,2-Trichloroethane (79-00-5)	624	1.0	2.0
Trichloroethylene (79-01-6)	624	1.0	2.0

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
Vinyl chloride (75-01-4)	624/SM6200B	1.0	2.0
ACID COMPOUNDS			
2-Chlorophenol (95-57-8)	625	1.0	2.0
2,4-Dichlorophenol (120-83-2)	625	0.5	1.0
2,4-Dimethylphenol (105-67-9)	625	0.5	1.0
4,6-dinitro-o-cresol (534-52-1) (2-methyl-4,6,-dinitrophenol)	625/1625B	1.0	2.0
2,4 dinitrophenol (51-28-5)	625	1.0	2.0
2-Nitrophenol (88-75-5)	625	0.5	1.0
4-nitrophenol (100-02-7)	625	0.5	1.0
Parachlorometa cresol (59-50-7) (4-chloro-3-methylphenol)	625	1.0	2.0
Pentachlorophenol (87-86-5)	625	0.5	1.0
Phenol (108-95-2)	625	2.0	4.0
2,4,6-Trichlorophenol (88-06-2)	625	2.0	4.0
BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)			
Acenaphthene (83-32-9)	625	0.2	0.4
Acenaphthylene (208-96-8)	625	0.3	0.6
Anthracene (120-12-7)	625	0.3	0.6
Benzidine (92-87-5)	625	12	24
Benzyl butyl phthalate (85-68-7)	625	0.3	0.6
Benzo(a)anthracene (56-55-3)	625	0.3	0.6
Benzo(j)fluoranthene (205-82-3)	625	0.5	1.0
Benzo(r,s,t)pentaphene (189-55-9)	625	0.5	1.0
Benzo(a)pyrene (50-32-8)	610/625	0.5	1.0
3,4-benzofluoranthene (Benzo(b)fluoranthene) (205-99-2)	610/625	0.8	1.6
11,12-benzofluoranthene (Benzo(k)fluoranthene) (207-08-9)	610/625	0.8	1.6
Benzo(ghi)Perylene (191-24-2)	610/625	0.5	1.0
Bis(2-chloroethoxy)methane (111-91-1)	625	5.3	21.2
Bis(2-chloroethyl)ether (111-44-4)	611/625	0.3	1.0
Bis(2-chloroisopropyl)ether (39638-32-9)	625	0.3	0.6
Bis(2-ethylhexyl)phthalate (117-81-7)	625	0.1	0.5

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
4-Bromophenyl phenyl ether (101-55-3)	625	0.2	0.4
2-Chloronaphthalene (91-58-7)	625	0.3	0.6
4-Chlorophenyl phenyl ether (7005-72-3)	625	0.3	0.5
Chrysene (218-01-9)	610/625	0.3	0.6
Dibenzo (a,j)acridine (224-42-0)	610M/625M	2.5	10.0
Dibenzo (a,h)acridine (226-36-8)	610M/625M	2.5	10.0
Dibenzo(a-h)anthracene (53-70-3)(1,2,5,6-dibenzanthracene)	625	0.8	1.6
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 (91-94-1)	605/625	0.5	1.0
Diethyl phthalate (84-66-2)	625	1.9	7.6
Dimethyl phthalate (131-11-3)	625	1.6	6.4
Di-n-butyl phthalate (84-74-2)	625	0.5	1.0
2,4-dinitrotoluene (121-14-2)	609/625	0.2	0.4
2,6-dinitrotoluene (606-20-2)	609/625	0.2	0.4
Di-n-octyl phthalate (117-84-0)	625	0.3	0.6
1,2-Diphenylhydrazine (<i>as Azobenzene</i>) (122-66-7)	1625B	5.0	20
Fluoranthene (206-44-0)	625	0.3	0.6
Fluorene (86-73-7)	625	0.3	0.6
Hexachlorobenzene (118-74-1)	612/625	0.3	0.6
Hexachlorobutadiene (87-68-3)	625	0.5	1.0
Hexachlorocyclopentadiene (77-47-4)	1625B/625	0.5	1.0
Hexachloroethane (67-72-1)	625	0.5	1.0
Indeno(1,2,3-cd)Pyrene (193-39-5)	610/625	0.5	1.0
Isophorone (78-59-1)	625	0.5	1.0
3-Methyl cholanthrene (56-49-5)	625	2.0	8.0
Naphthalene (91-20-3)	625	0.3	0.6
Nitrobenzene (98-95-3)	625	0.5	1.0
N-Nitrosodimethylamine (62-75-9)	607/625	2.0	4.0
N-Nitrosodi-n-propylamine (621-64-7)	607/625	0.5	1.0
N-Nitrosodiphenylamine (86-	625	0.5	1.0

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
30-6)			
Perylene (198-55-0)	625	1.9	7.6
Phenanthrene (85-01-8)	625	0.3	0.6
Pyrene (129-00-0)	625	0.3	0.6
1,2,4-Trichlorobenzene (120-82-1)	625	0.3	0.6
PESTICIDES/PCBs			
Aldrin (309-00-2)	608	0.025	0.05
alpha-BHC (319-84-6)	608	0.025	0.05
beta-BHC (319-85-7)	608	0.025	0.05
gamma-BHC (58-89-9)	608	0.025	0.05
delta-BHC (319-86-8)	608	0.025	0.05
Chlordane (57-74-9)	608	0.025	0.05
4,4'-DDT (50-29-3)	608	0.025	0.05
4,4'-DDE (72-55-9)	608	0.025	0.05 ¹⁰
4,4' DDD (72-54-8)	608	0.025	0.05
Dieldrin (60-57-1)	608	0.025	0.05
alpha-Endosulfan (959-98-8)	608	0.025	0.05
beta-Endosulfan (33213-65-9)	608	0.025	0.05
Endosulfan Sulfate (1031-07-8)	608	0.025	0.05
Endrin (72-20-8)	608	0.025	0.05
Endrin Aldehyde (7421-93-4)	608	0.025	0.05
Heptachlor (76-44-8)	608	0.025	0.05
Heptachlor Epoxide (1024-57-3)	608	0.025	0.05
PCB-1242 (53469-21-9)	608	0.25	0.5
PCB-1254 (11097-69-1)	608	0.25	0.5
PCB-1221 (11104-28-2)	608	0.25	0.5
PCB-1232 (11141-16-5)	608	0.25	0.5
PCB-1248 (12672-29-6)	608	0.25	0.5
PCB-1260 (11096-82-5)	608	0.13	0.5
PCB-1016 (12674-11-2)	608	0.13	0.5
Toxaphene (8001-35-2)	608	0.24	0.5

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) is equivalent to EPA's Minimum Level (ML) which is defined in 40 CFR Part 136 as the minimum level at which the entire GC/MS system must give recognizable mass spectra (background corrected) and acceptable calibration points. These levels were published as proposed in the Federal Register on March 28, 1997.