

Issuance Date: January 25, 2010
Effective Date: February 1, 2010
Expiration Date: January 31, 2015

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
WASTE DISCHARGE PERMIT No. WA-004547-1

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 1342 et seq.

Town of Spangle
P.O. Box 147
Spangle, WA 99301

Plant Location: 17 miles south of Spokane
along Highway 195

Receiving Water: Spangle Creek

Water Body I.D. No.: WA-56-1900

Discharge Location:

Latitude: 47° 26' 04" N

Longitude: 117° 22' 54" W

Plant Type: Biolac Activated Sludge Plant

With Ultraviolet light disinfection

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

James M. Bellatty
Water Quality Section Manager
Eastern Regional Office
Washington State Department of Ecology

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SUMMARY OF PERMIT REPORT SUBMITTALS

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

Permit Section	Submittal	Frequency	First Submittal Date
S3.	Discharge Monitoring Report	Monthly	March 15, 2010
S3.E	Noncompliance Notification	As necessary	
S4.B.	Plans for Maintaining Adequate Capacity	As necessary	
S4.D.	Notification of New or Altered Sources	As necessary	
S4.E.	Infiltration and Inflow Evaluation	1/permit cycle	July 1, 2012
S4.F.	Waste load Assessment	Annually	March 1, 2010
S5.G.	Operations and Maintenance Manual	1/permit cycle	June 1, 2011
S5.G.	Update or Review Confirmation Letter	Annually	May 15, 2010
S6.D.	Industrial User Survey	1/permit cycle	November 1, 2012
S8.	Application for Permit Renewal	1/permit cycle	December 1, 2014
S9.	Spill Plan	1/permit cycle	March 1, 2011
S10.	Quality Assurance Project Plan	1/permit cycle	June 1, 2010
S10.	Annual Temperature and Nutrient Impacts of the Spangle WWTP on Spangle Creek	1/year	November 1, 2010, and annually thereafter

SPECIAL CONDITIONS

In this permit the word “must” denotes an action that is mandatory and is equivalent to the word shall used in previous permits.

S1. DISCHARGE LIMITATIONS

A. Effluent Limitations

All discharges and activities authorized by this permit must comply with the terms and conditions of this permit. The discharge of any of the following pollutants more frequently than, or at a level in excess of, that identified and authorized by this permit constitutes a violation of the terms and conditions of this permit.

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee may discharge municipal wastewater at the permitted location subject to compliance with the following limitations:

EFFLUENT LIMITATIONS ^a : OUTFALL #1		
Parameter	Average Monthly	Average Weekly
Biochemical Oxygen Demand (5 day)	10 mg/L, 5.7 lbs/day 85% removal of influent BOD	15 mg/L, 8.5 lbs/day
Total Suspended Solids	15 mg/L, 8.5 lbs/day 85% removal of influent TSS	23 mg/L, 13 lbs/day
Fecal Coliform Bacteria	100 / 100 mL	200 / 100 mL
Parameter	Average Monthly	Maximum Daily ^b
Total Ammonia (as NH ₃ -N)	1.0 mg/L	1.5 mg/L
pH ^c	Daily minimum is equal to or greater than 6.0 and the daily maximum is less than or equal to 9.0.	
^a The average monthly and weekly effluent limitations equal the arithmetic mean of the samples taken. The average monthly and weekly limitations for fecal coliform are equal to the geometric mean of the samples taken.		
^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. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day. This does not apply to pH.		

B. Mixing Zone Descriptions

The Spangle wastewater treatment plant has not been granted a mixing zone because the outfall is a flap gate with not diffuser installed into Spangle Creek.

S2. MONITORING REQUIREMENTS**A. Monitoring Schedule**

The Permittee must monitor in accordance with the following schedule:

Category	Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
Wastewater Influent	BOD ₅	mg/L lbs/day	Head works building	First Week and Third Week of each Month	24 hr. composite
“	TSS	mg/L lbs/day	Head works building	First Week and Third Week of each Month	24 hr. composite
Wastewater Effluent	Flow	MGD	Outfall V notch Weir	Continuous ^a	flow meter
“	BOD ₅	mg/L lbs/day and % removal	Over flow of UV Disinfect.	First Week and Third Week of each Month	24 hr. composite
“	TSS	mg/L lbs/day and % removal	Over flow of UV Disinfect	First Week and Third Week of each Month	24 hr. composite
“	pH Daily Max. and Min.	Standard Units	Over flow of UV Disinfect	Daily	Grab
“	Temperature	°C	Data Logger at Outfall	Continuous	30 minute Data Intervals
	Temperature Logger Check	Present/ Missing	All three monitoring Locations	Once a Month ^b	Personal Observation
“	Fecal Coliform	Org./100 mL	Over flow of UV Disinfect	First Week and Third Week of each Month	24 hr. composite
	Total ammonia	mg/L lbs/day	Over flow of UV Disinfect	First Week and Third Week of each Month	24 hr. composite
	Total Phosphorus	mg/L	Over flow of UV Disinfect	First Week and Third Week of each Month	24 hr. composite

Category	Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
Receiving Water and Effluent Study	Temperature	°C	Upstream and Downstream in Spangle Creek	May 1 through October 31 continuous Data Logger ^b	30 minute Data Logger
	Total Phosphorus	mg/L	Upstream and Downstream in Spangle Creek	First and Third Week of each Month	Grab
<p>^a Continuous means uninterrupted except for brief lengths of time for calibration, for power failure, or for unanticipated equipment repair or maintenance. The Permittee must sample at least three times daily when continuous monitoring is not possible.</p>					
<p>^b Temperature Data Loggers must be visually inspected once each month May through October and the Discharge Monitoring Report must be marked to show the presence or failure to find each upstream, downstream and effluent Temperature Data Logger.</p>					

B. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit must be representative of the volume and nature of the monitored parameters. The Permittee must conduct representative sampling of any unusual discharge or discharge condition, including bypasses, upsets and maintenance-related conditions that may affect effluent quality.

Sampling and analytical methods used to meet the monitoring requirements specified in this permit must conform to the latest revision of the Guidelines Establishing Test Procedures for the Analysis of Pollutants contained in 40 CFR Part 136.

C. Flow Measurement

The Permittee must select and use appropriate flow measurement devices and methods consistent with accepted scientific practices. The Permittee must install, calibrate, and maintain the flow devices. This work is necessary to ensure that the accuracy of the measurements are consistent with the accepted industry standard and the manufacturers recommendation for that type of device. The Permittee must perform calibration at the frequency recommended by the manufacturer and at a minimum frequency of at least one calibration per year. The Permittee must 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. Conductivity and pH must be accredited if the laboratory must otherwise be registered or accredited. Ecology exempts crops, soils, and hazardous waste data from this requirement pending accreditation of laboratories for analysis of these media.

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. Reporting

The first monitoring period begins on the effective date of the permit. The Permittee must submit monitoring results each month. The Permittee must summarize, report, and submit monitoring data obtained during each monitoring period on a Discharge Monitoring Report (DMR) form provided, or otherwise approved, by Ecology. The Permittee must ensure that DMR forms are postmarked or received by Ecology no later than the 15th day of the month following the completed monitoring period, unless otherwise specified in this permit. The Permittee must submit priority pollutant analysis data no later than forty-five (45) days following the monitoring period. The Permittee must send report(s) to the Department of Ecology, Attention: Permit Coordinator, Eastern Regional Office of the Dept. of Ecology, 4601 North Monroe, Spokane, Washington 99205-1295.

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

The Permittee must submit DMR forms monthly whether or not the facility was discharging. If there was no discharge during a given monitoring period, the Permittee must submit the form as required with the words "no discharge" entered in place of the monitoring results.

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

B. Records Retention

The Permittee must retain records of all monitoring information for a minimum of three (3) years. Such information must include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports

required by this permit, and records of all data used to complete the application for this permit. During the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by Ecology, the Permittee must extend this period of retention.

C. Recording of Results

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

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

D. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by 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.

E. Notice of Noncompliance Reporting

The permittee must take the following action upon violation of any permit condition: Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the noncompliance and correct the problem and, if applicable, immediately repeat sampling and analysis. The results of any repeat sampling must be submitted to Ecology within 30 days of sampling.

1. Immediate Noncompliance Notification

Any failure of the disinfection system, must be reported immediately to the Department of Ecology's Regional Office 24-hr. number the 24-hr. number is (509) 329-3400.

2. Twenty four hour Noncompliance Notification

The Permittee must report the following occurrences of noncompliance by telephone, to Ecology at 329-3400, within 24 hours from the time the Permittee becomes aware of any of the following circumstances:

- a. Any noncompliance that may endanger health or the environment, unless previously reported under subpart 1 above.
- b. Any unanticipated bypass that exceeds any effluent limitation in the permit. (See Part S4.B, "Bypass Procedures")

- c. Any upset that exceeds any effluent limitation in the permit. (See G.15, “Upset”)
- d. Any violation of a maximum daily or instantaneous maximum discharge limitation for any of the pollutants in Section S1.A of this permit.
- e. Any overflow prior to the treatment works, whether or not such overflow endangers health or the environment or exceeds any effluent limitation in the permit.

3. Report within Five Days

The Permittee must also provide a written submission within five days of the time that the Permittee becomes aware of any event required to be reported under subparts 1 or 2, above. The written submission must contain:

- a. A description of the noncompliance and its cause.
- b. The period of noncompliance, including exact dates and times.
- c. The estimated time noncompliance is expected to continue if it has not been corrected.
- d. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
- e. If the noncompliance involves an overflow prior to the treatment works, an estimate of the quantity (in gallons) of untreated overflow.

4. Waiver of Written Reports

Ecology may waive the written report required in subpart 3 above on a case-by-case basis upon request, if a timely oral report has been received.

5. Report Submittal

Reports must be submitted to the address in S3. (“REPORTING AND RECORDKEEPING REQUIREMENTS”).

F. Other Noncompliance Reporting

The permittee must report all instances of noncompliance, not required to be reported immediately or within 24 hours, at the time that monitoring reports for S3.A ("Reporting") are submitted. The reports must contain the information listed in paragraph E.3. 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.

The spill of oil or hazardous materials must be reported in accordance with the instructions obtained at the following website:

www.ecy.wa.gov/programs/spills/other/reportaspill.htm

G. Maintaining a Copy of This Permit

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

S4. FACILITY LOADING

A. Design Criteria

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

Minimum Daily:	26,000 gal/day
Average flow for the maximum month:	68,000 gal/day
Maximum Daily:	85,000 gal/day
Peak Hourly:	230,000 gal/day
BOD5 loading for maximum month:	155 lbs./day
TSS loading for maximum month:	155 lbs./day

B. Plans for Maintaining Adequate Capacity

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

1. The actual flow or waste load reaches 85 percent of:

68,000 gallons per day, which equals	57,800 gallons/day
155 lbs/day of BOD5, which equals	132 lbs/day of BOD5
155 lbs/day of TSS, which equals	132 lbs/day of TSS

for three consecutive months; or

2. The projected increase would reach design capacity within five years, whichever occurs first.

The plan and schedule for continuing to maintain capacity must be sufficient to achieve the effluent limitations and other conditions of this permit. This plan must identify any of the following actions or any other actions necessary to meet the objective of maintaining capacity.

- a. Analysis of the present design including the introduction of any process modifications that would establish the ability of the existing facility to achieve the effluent limits and other requirements of this permit at specific levels in excess of the existing design criteria specified in paragraph A above.
 - b. Reduction or elimination of excessive infiltration and inflow of uncontaminated ground and surface water into the sewer system.
 - c. Limitation on future sewer extensions or connections or additional waste loads.
 - d. Modification or expansion of facilities necessary to accommodate increased flow or waste load.
 - e. Reduction of industrial or commercial flows or waste loads to allow for increasing sanitary flow or waste load.
3. Engineering documents associated with the plan must meet the requirements of WAC 173-240-060, "Engineering Report," and be approved by Ecology prior to any construction.
 4. If the permittee intends to apply for State or Federal funding for the design or construction of a facility project, the plan must also meet the requirements of a "Facility Plan" as described in 40 CFR 35.2030. The plan must specify any contracts, ordinances, methods for financing, or other arrangements necessary to achieve this objective.

C. Duty to Mitigate

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

D. Notification of New or Altered Sources

1. The Permittee must submit written notice to Ecology whenever any new discharge or a substantial change in volume or character of an existing discharge into the POTW is proposed which:
 - a. Would interfere with the operation of, or exceed the design capacity of, any portion of the POTW;
 - b. Is not part of an approved general sewer plan or approved plans and specifications; or

- c. Would be subject to pretreatment standards under 40 CFR Part 403 and Section 307(b) of the Clean Water Act.
2. This notice must include an evaluation of the POTW's ability to adequately transport and treat the added flow and/or waste load, the quality and volume of effluent to be discharged to the POTW, and the anticipated impact on the Permittee's effluent [40 CFR 122.42(b)].
3. The Permittee must test the portion of the collection system which operates at greater than atmospheric pressure for exfiltration no later than October 1, 2012.

E. Waste Load Assessment

1. The Permittee must conduct an annual assessment of their flow and waste load and submit a report to Ecology by March 1, 2010, and annually thereafter
2. The report must contain the following: an indication of compliance or noncompliance with the permit effluent limitations; a comparison between the existing and design monthly average dry weather and wet weather flows, peak flows, BOD, and total suspended solids loadings; and (except for the first report) the percentage change in these parameters since the previous report.
3. The report must also state the present and design population or population equivalent, projected population growth rate, and the estimated date upon which the design capacity is projected to be reached, according to the most restrictive of the parameters above.
4. Ecology may modify the interval for review and reporting if it determines that a different frequency is sufficient.

S5. OPERATION AND MAINTENANCE

The Permittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that 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 back-up or auxiliary facilities or similar systems only when the operation is necessary to achieve compliance with the conditions of this permit.

A. Certified Operator

This permitted facility must be operated by an operator certified by the state of Washington by the state of Washington for at least a Class II plant. This operator must be in responsible charge of the day-to-day operation of the wastewater treatment plant. An operator certified for at least a Class II plant must be in charge during all regularly scheduled shifts.

B. O & M Program

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

C. Short-term Reduction

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

1. Give written notification to Ecology, if possible, 30 days prior to such activities,
2. The notice must detail the reasons for, length of time of, and the potential effects of the reduced level of treatment.
3. This notification does not relieve the Permittee of its obligations under this permit.

D. Electrical Power Failure

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

For Reliability Class II - The Permittee must maintain Reliability Class II (EPA 430/9-74-001) at the wastewater treatment plant. Reliability Class II requires a backup power source sufficient to operate all vital components and critical lighting and ventilation during peak wastewater flow conditions. Vital components used to support the secondary processes (i.e., mechanical aerators or aeration basin air compressors) need not be operable to full levels of treatment, but must be sufficient to maintain the biota.

E. Prevent Connection of Inflow

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

F. Bypass Procedures

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

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

This permit authorizes a bypass if it allows for essential maintenance and does not have the potential to cause violations of limitations or other conditions of this permit, or adversely impact public health as determined by Ecology prior to the bypass. The Permittee must submit prior notice, if possible, at least ten (10) days before the date of the bypass.

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

This permit authorizes such a bypass only if:

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

- b. No feasible alternatives to the bypass exist, such as:

the use of auxiliary treatment facilities,

retention of untreated wastes,

stopping production,

maintenance during normal periods of equipment downtime, but not if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass

or transport of untreated wastes to another treatment facility..

- c. The Permittee has properly notified Ecology of the bypass as required in condition S3.E. of this permit.

3. If bypass is anticipated and has the potential to result in noncompliance of this permit.

- a. The Permittee must notify Ecology at least thirty (30) days before the planned date of bypass. The notice must contain:

- i. a description of the bypass and its cause;

- ii. an analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing;
 - iii. a cost-effectiveness analysis of alternatives including comparative resource damage assessment;
 - 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 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; and
 - ix. details of the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.
- b. For probable construction bypasses, the Permittee must notify Ecology of the need to bypass as early in the planning process as possible. The Permittee must consider the analysis required above during preparation of the engineering report or facilities plan and plans and specifications and must include these to the extent practical. In cases where the Permittee determines the probable need to bypass early, the Permittee must continue to analyze conditions up to and including the construction period in an effort to minimize or eliminate the bypass.
- c. Ecology will consider the following prior to issuing an administrative order for this type of bypass:
- i. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
 - ii. If feasible alternatives to bypass exist, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
 - iii. If the Permittee planned and scheduled the bypass to minimize adverse effects on the public and the environment.

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

G. Operations and Maintenance Manual

The Permittee must keep the approved Operations and Maintenance Manual available at the treatment plant and all operators must follow the instructions and procedures of this manual.

The Permittee must prepare an Operations and Maintenance (O&M) Manual according to WAC 173-240-080 and submit it to Ecology for approval by June 1, 2011. In addition to the requirements of WAC 173-240-080 (1) through (5) the O&M Manual must include:

1. Emergency procedures for plant shutdown and cleanup in the event of wastewater system upset or failure.
2. Wastewater system maintenance procedures that contribute to the generation of process wastewater
3. Any directions to maintenance staff when cleaning, or maintaining other equipment or performing other tasks which are necessary to protect the operation of the wastewater system (for example, defining maximum allowable discharge rate for draining a tank, blocking all floor drains before beginning the overhaul of a stationary engine.)
4. The treatment plant process control monitoring schedule.
5. Minimum staffing adequate to operate and maintain the treatment processes and carry out compliance monitoring required by the permit.
6. Operation and Maintenance requirements for all waste activated sludge treatment and handling facilities.

The Permittee must review the O&M Manual at least annually and confirm this review by letter to Ecology. Whenever the Permittee makes substantial changes or updates to the O&M Manual the Permittee must submit the changes in writing to Ecology.

S6. PRETREATMENT

A. General Requirements

The Permittee must work with Ecology to ensure that all commercial and industrial users of the publicly owned treatment works (POTW) comply with the pretreatment regulations in 40 CFR Part 403 and any additional regulations that may be promulgated under Section 307(b) (pretreatment) and 308 (reporting) of the Federal Clean Water Act.

B. Wastewater Discharge Permit Required

The Permittee must not allow any significant industrial users (SIUs) to discharge wastewater to the Permittee's sewer system until such user has received a wastewater discharge permit from Ecology in accordance with Chapter 90.48 RCW and Chapter 173-216 WAC.

C. Identification and Reporting of Existing, New, and Proposed Industrial Users

1. The Permittee must take continuous, routine measures to identify all existing, new, and proposed SIUs and potential significant industrial users (PSIUs) discharging or proposing to discharge to the Permittee's sewer system (see Appendix B of the Fact Sheet for definitions).
2. Within 30 days of becoming aware of an unpermitted existing, new, or proposed industrial user who may be an SIU, the Permittee must notify such user by registered mail that, if classified as an SIU, they must apply to Ecology and obtain a State Waste Discharge Permit. The Permittee must send a copy of this notification letter to Ecology within this same 30-day period.
3. The Permittee must also notify all Potential SIUs (PSIUs), as they are identified, that if their classification should change to an SIU, they must apply to Ecology for a State Waste Discharge Permit within 30 days of such change.

D. Industrial User Survey

1. The Permittee must complete an Industrial User Survey listing all SIUs and PSIUs discharging to the POTW. The Permittee must submit the survey to Ecology by November 1, 2012.. At a minimum, the Permittee must develop the list of SIUs and PSIUs by means of a telephone book search, a water utility billing records search, and a physical reconnaissance of the service area. Information on PSIUs must include at a minimum: the business name, telephone number, address, description of the industrial process(es), and the known wastewater volumes and characteristics.

E. Duty to Enforce Discharge Prohibitions

1. Under 40 CFR 403.5(a), the Permittee must not authorize or knowingly allow the discharge of any pollutants into its POTW which cause pass through or interference, or which otherwise violate general or specific discharge prohibitions contained in 40 CFR Part 403.5 or WAC-173-216-060.
2. The Permittee must not authorize or knowingly allow the introduction of any of the following into their treatment works:
 - a. Pollutants which create a fire or explosion hazard in the POTW (including, but not limited to waste streams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21).
 - b. Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, or greater than 11.0 standard units, unless the works are specifically designed to accommodate such discharges.
 - c. Solid or viscous pollutants in amounts that could cause obstruction to the flow in sewers or otherwise interfere with the operation of the POTW.

- d. Any pollutant, including oxygen demanding pollutants, (BOD, etc.) released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the POTW.
 - e. Petroleum oil, nonbiodegradable cutting oil, or products of mineral origin in amounts that will cause interference or pass through.
 - f. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity which may cause acute worker health and safety problems.
 - g. Heat in amounts that will inhibit biological activity in the POTW resulting in interference but in no case heat in such quantities such that the temperature at the POTW headworks exceeds 40 degrees Centigrade (104 degrees Fahrenheit) unless Ecology, upon request of the Permittee, approves, in writing, alternate temperature limits.
 - h. Any trucked or hauled pollutants, except at discharge points designated by the Permittee.
 - i. Wastewaters prohibited to be discharged to the POTW by the Dangerous Waste Regulations (Chapter 173-303 WAC), unless authorized under the Domestic Sewage Exclusion (WAC 173-303-071).
3. This Permit prohibits all of the following from discharge to the POTW unless approved in writing by Ecology under extraordinary circumstances (such as a lack of direct discharge alternatives due to combined sewer service or the need to augment sewage flows due to septic conditions):
 - a. Noncontact cooling water in significant volumes.
 - b. Stormwater, and other direct inflow sources.
 - c. Wastewaters significantly affecting system hydraulic loading, which do not require treatment, or would not be afforded a significant degree of treatment by the system.
 4. The Permittee must notify Ecology if any industrial user violates the prohibitions listed in this section.

S7. RESIDUAL SOLIDS

Residual solids include screenings, grit, scum, primary sludge, waste activated sludge, and other solid waste. The Permittee must store and handle all residual solids in a manner that prevents their entry into state ground or surface waters. The Permittee must not discharge leachate from residual solids to state surface or ground waters.

S8. APPLICATION FOR PERMIT RENEWAL

The Permittee must submit an application for renewal of this permit by December 1, 2014.

S9. SPILL PLAN

- A. By March 1, 2011, the Permittee must submit to Ecology a Spill Control Plan for the prevention, containment, and control of spills or unplanned releases.
- B. The Permittee must review the plan at least annually and update as needed. The Permittee must send changes to the plan to Ecology.
- C. The updated Spill Control Plan must include the following:
 - 1. A description of operator training to implement the Plan.
 - 2. A description of the reporting system which will be used to alert responsible managers and legal authorities in the event of a spill.
 - 3. A description of preventive measures and facilities (including an overall facility plot showing drainage patterns) which prevent, contain, or treat spills of these materials.
 - 4. A list of all oil and petroleum products, and other materials, which when spilled, or otherwise released into the environment, are designated Dangerous (DW) or Extremely Hazardous Waste (EHW) by the procedures set forth in WAC 173-303-070, and other materials which may become pollutants or cause pollution upon reaching state's waters.
 - 5. 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 may be submitted.
- D. The Permittee must follow the Plan and any supplements throughout the term of the permit.

S10. RECEIVING WATER AND EFFLUENT STUDY OF TEMPERATURE AND PHOSPHORUS

The Permittee must collect information on the effluent and receiving water to determine if the effluent has a reasonable potential to cause a violation of the water quality standards for temperature and nutrients. If reasonable potential exists, Ecology will use this information to calculate effluent limits.

- 1. Quality Assurance Project Plan: The Permittee must submit a sampling and quality assurance plan for Ecology review and approval by June 1, 2010. The Permittee must conduct all sampling and analysis in accordance with the guidelines given in Guidelines for Preparing Quality Assurance Project Plans for Environmental Studies, Ecology Publication 04-03-030 <http://www.ecy.wa.gov/pubs/0403030.pdf>. A model Quality Assurance Plan specific for temperature may be found at <http://www.ecy.wa.gov/programs/wq/permits/guidance.html>.

2. Temperature must be measured in the effluent and in the ambient water upstream and downstream of the outfall at least 100 feet upstream and downstream of the outfall structure. Temperature must be measured during the months of May through October of each year, beginning July 1, 2010.
3. Temperature must be monitored using micro-recording temperature devices known as thermistors. Ecology's Quality Assurance Project Plan Development Tool (Continuous Temperature Sampling Protocols for the Environmental Monitoring and Trends) contains protocols for continuous temperature sampling. This document is available online at <http://www.ecy.wa.gov/programs/eap/qa/docs/QAPPtool/Mod6%20Ecology%20SOPs/Protocols/ContinuousTemperatureSampling.pdf>. Calibration as specified in this document is not required if the permittee uses recording devices which are certified by the manufacturer. Ecology does not require manufacture-specific equipment as given in this document; however, if the Permittee wishes to use measuring devices from another company the accuracy must be demonstrated to be equivalent. The recording devices must be set to record at one-half hour intervals.
4. Temperature monitoring data must be reported as: daily maximum, seven-day running average of the daily maximums, and the monthly maximum of the seven-day running average. The model Quality Assurance Plan shows an example of these calculations.
5. Temperature data for each May-October period must be submitted to Ecology by November 1 of each year. The data must be included in a short report on temperature phosphorus and ammonia impacts of the Spangle effluent on Spangle Creek.

GENERAL CONDITIONS

G1. SIGNATORY REQUIREMENTS

- A. All applications, reports, or information submitted to Ecology must be signed and certified.
- (a) In the case of corporations, by a responsible corporate officer.
For the purpose of this section, a responsible corporate officer means: (i) 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 (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- (b) In the case of a partnership, by a general partner.
- (c) In the case of sole proprietorship, by the proprietor.
- (d) In the case of a municipal, state, or other public facility, by either a principal executive officer or ranking elected official.

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

- 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 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 paragraph 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 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 A1 through A7 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 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 must, as soon as possible, but no later than sixty (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 must be submitted to Ecology for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications must be submitted at least one hundred eighty (180) days prior to the planned start of construction unless a shorter time is approved by Ecology. Facilities must be constructed and operated in accordance with the approved plans.

G6. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in this permit must be construed as excusing 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 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 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 122.41 and 122.42 are incorporated in this permit by reference.

G12. ADDITIONAL MONITORING

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

G13. PAYMENT OF FEES

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

G14. PENALTIES FOR VIOLATING PERMIT CONDITIONS

Any person who is found guilty of willfully violating the terms and conditions of this permit is deemed guilty of a crime, and upon conviction thereof must 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 will incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars (\$10,000) for every such violation. Each and every such violation is a separate and distinct offense, and in case of a continuing violation, every day's continuance is deemed to be a separate and distinct violation.

G15. UPSET

Definition – “Upset” means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent 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 must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that: 1) an upset occurred and that the Permittee can identify the cause(s) of the upset; 2) the permitted facility was being properly operated at the time of the upset; 3) the Permittee submitted notice of the upset as required in condition S3.E; and 4) the Permittee complied with any remedial measures required under S4.C 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 must, 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 must be a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four (4) years, or by both.

G20. REPORTING ANTICIPATED NON-COMPLIANCE

The Permittee must give advance notice to Ecology by submission of a new application or supplement thereto at least one hundred and eighty (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, must be scheduled during noncritical water quality periods and carried out in a manner approved by Ecology.

G21. 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, such facts or information must be submitted promptly.

G22. COMPLIANCE SCHEDULES

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

G23. CONTRACT REVIEW

The Permittee must submit to Ecology any proposed contract for the operation of any wastewater treatment facility covered by this permit. The review is to insure consistency with chapters 90.46 and 90.48 RCW. In the event that Ecology does not comment within a thirty-day period, the Permittee may assume consistency and proceed with the contract.

APPENDIX A

**EFFLUENT CHARACTERIZATION FOR POLLUTANTS
THIS LIST INCLUDES EPA REQUIRED POLLUTANTS (PRIORITY POLLUTANTS) AND
SOME ECOLOGY PRIORITY TOXIC CHEMICALS (PBTs)**

The following table with analytical levels is to be used as guidance for effluent characterization in NPDES permit applications and applications for permit renewal. The permit applications will specify the groups of compounds to be analyzed. Ecology may require additional groups to be analyzed. The table should also be used as a guide for routine effluent monitoring for pollutants specified in the permit. The objectives are to reduce the number of analytical “non-detects” in applications and monitoring reports and to measure effluent concentrations near or below criteria values where possible at a reasonable cost. If an applicant or 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.

EPA 307(A) REF. #	Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL) ¹ µg/L unless specified	Quantitation Level (QL) ² µg/L unless specified	Lowest Criteria Values 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 CaCo ₃	
	Bromide (24959-67-9)	4110 B	100	400	
	Chlorine, Total Residual	4500 Cl G		50.0	7.5
	Color	SM2120 B/C/E		10 color unit	
	Fecal Coliform	SM 9221E	N/A	N/A	

EPA 307(A) REF. #	Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL) ¹ µg/L unless specified	Quantitation Level (QL) ² µg/L unless specified	Lowest Criteria Values µg/L unless specified
	Fluoride (16984-48-8)	SM4500-F E	25	100	
	Nitrate-Nitrite (as N)	4500-NO ₃ -E/F/H		100	10,000
	Nitrogen, Total Kjeldahl (as N)	4500-NH ₃ -C/E/FG		300	
	Ortho-Phosphate (PO ₄ as P)	4500- PE/PF	30	100	
	Phosphorus, Total (as P)	4500-PE/PF	30	100	
	Oil and Grease (HEM)	1664A		5,000	
	Radioactivity	Table 1E			
	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-S2F/D/E/G		200	2.0
	Sulfite (as mg/L SO ₃)	SM4500-SO ₃ B		2000	
	Surfactants	SM5540 C		50	
	Total dissolved solids	SM2540 C		20 mg/L	500 mg/L ¹²
	Total Hardness	2340B		200 as CaCO ₃	
	Aluminum, Total (7429-90-5)	200.8	2.0	10	750
	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)	200.8	12.5	50	300
	Magnesium, Total (7439-95-4)	200.8	10	50	
	Molybdenum, Total (7439-98-7)	200.8	0.1	0.5	
	Manganese, Total (7439-96-5)	200.8	0.1	0.5	50
	Tin, Total (7440-31-5)	200.8	0.3	1.5	
	Titanium, Total (7440-32-6)	200.8	0.5	2.5	
	Metals, Cyanide & Total Phenols				
114	Antimony, Total (7440-36-0)	200.8	0.3	1.0	145
115	Arsenic, Total (7440-38-2)	200.8	0.1	0.5	367
117	Beryllium, Total (7440-41-7)	200.8	0.1	0.5	48
118	Cadmium, Total (7440-43-9)	200.8	0.05	0.25	0.373
	Chromium (hex) dissolved (185-402-99)	SM3500-Cr EC	0.3	1.2	107
119	Chromium, Total (7440-47-3)	200.8	0.2	1.0	57.23
120	Copper, Total (7440-50-8)	200.8	0.4	2.0	3.13
122	Lead, Total (7439-92-1)	200.8	0.1	0.5	0.543
123	Mercury, Total (7439-97-6)	1631E	0.0002	0.0005	0.0127
124	Nickel, Total (7440-02-0)	200.8	0.1	0.5	8.23
125	Selenium, Total (7782-49-2)	200.8	1.0	1.0	57
126	Silver, Total (7440-22-4)	200.8	0.04	0.2	0.323
127	Thallium, Total (7440-28-0)	200.8	0.09	0.36	1.75

EPA 307(A) REF. #	Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL)1 µg/L unless specified	Quantitation Level (QL) 2 µg/L unless specified	Lowest Criteria Values µg/L unless specified
128	Zinc, Total (7440-66-6)	200.8	0.5	2.5	32.33
121	Cyanide, Total (7440-66-6)	335.4	5	10	1.07
	Cyanide, Available	SM4500-CN G	5	10	
065	Phenols, Total	EPA 420.1		50	210005
Dioxin					
129	2,3,7,8-Tetra-Chlorodibenzo-P-Dioxin (176-40-16)	1613B	1.3 pg/L	5 pg/L	0.0000000135
Volatile Compounds					
002	Acrolein (107-02-8)	624	5	10	320/7805
003	Acrylonitrile (107-13-1)	624	1.0	2.0	0.059/0.665
004	Benzene (71-43-2)	624	1.0	2.0	5.08
018	Bis(2-Chloroethyl)ether (111-44-4)	611/625	1.0	2.0	0.0315
042	Bis(2-Chloroisopropyl) ether (108-60-1)	611/625	1.0	2.0	14005
047	Bromoform (75-25-2)	624	1.0	2.0	4.35
006	Carbon tetrachloride (108-90-7)	624/601 or SM6230B	1.0	2.0	0.255
007	Chlorobenzene (108-90-7)	624	1.0	2.0	6805
016	Chloroethane (75-00-3)	624/601	1.0	2.0	
019	2-Chloroethylvinyl Ether (110-75-8)	624	1.0	2.0	354010
023	Chloroform (67-66-3)	624 or SM6210B	1.0	2.0	5.75
051	Dibromochloromethane (124-48-1)	624	1.0	2.0	0.415
025	1,2-Dichlorobenzene (95-50-1)	624	1.9	7.6	27005
026	1,3-Dichlorobenzene (541-73-1)	624	1.9	7.6	4005
027	1,4-Dichlorobenzene (106-46-7)	624	4.4	17.6	4005
028	3,3'-Dichlorobenzidine (91-94-1)	605/625	0.5	1.0	
048	Dichlorobromomethane (75-27-4)	624	1.0	2.0	0.275
013	1,1-Dichloroethane (75-34-3)	624	1.0	2.0	
010	1,2-Dichloroethane (107-06-2)	624	1.0	2.0	0.385
029	1,1-Dichloroethylene (75-35-4)	624	1.0	2.0	0.0575
032	1,2-Dichloropropane (78-87-5)	624	1.0	2.0	311
033	1,3-dichloropropylene (mixed isomers) (542-75-6)	624	1.0	2.0	105
038	Ethylbenzene (100-41-4)	624	1.0	2.0	31005
046	Methyl bromide (74-83-9) (Bromomethane)	624/601	5.0	10.0	485
045	Methyl chloride (74-87-3) (Chloromethane)	624	1.0	2.0	27000010
044	Methylene chloride (75-09-2)	624	5.0	10.0	4.75
015	1,1,2,2-Tetrachloroethane (79-34-5)	624	1.9	2.0	0.175
085	Tetrachloroethylene (127-18-4)	624	1.0	2.0	0.805

EPA 307(A) REF. #	Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL)1 µg/L unless specified	Quantitation Level (QL) 2 µg/L unless specified	Lowest Criteria Values µg/L unless specified
086	Toulene (108-88-3)	624	1.0	2.0	68005
030	1,2-Trans-Dichloroethylene (156-60-5) (Ethylene dichloride)	624	1.0	2.0	7004
011	1,1,1-Trichloroethane (71-55-6)	624	1.0	2.0	2008
014	1,1,2-Trichloroethane (79-00-5)	624	1.0	2.0	0.65
087	Trichloroethylene (79-01-6)	624	1.0	2.0	2.75
088	Vinyl chloride (75-01-4)	624/SM6200 B	1.0	2.0	25
Acid Compounds					
024	2-Chlorophenol (95-57-8)	625	1.0	2.0	814
031	2,4-Dichlorophenol (120-83-2)	625	0.5	1.0	935
034	2,4-Dimethylphenol (105-67-9)	625	0.5	1.0	3804
060	4,6-dinitro-o-cresol (534-52-1) (2-methyl-4,6,-dinitrophenol)	625/1625B	1.0	2.0	13.45
059	2,4 dinitrophenol (51-28-5)	625	1.0	2.0	705
057	2-Nitrophenol (88-75-5)	625	0.5	1.0	45013
058	4-nitrophenol (100-02-7)	625	0.5	1.0	60013
022	Parachlorometa cresol (59-50-7) (4-chloro-3-methylphenol)	625	1.0	2.0	-
064	Pentachlorophenol (87-86-5)	625	0.5	1.010	0.285
065	Phenol (108-95-2)	625	2.0	4.0	210005
021	2,4,6-Trichlorophenol (88-06-2)	625	2.0	4.0	2.15
Base/Neutral Compounds					
001	Acenaphthene (83-32-9)	625	0.2	0.4	6706
077	Acenaphthylene (208-96-8)	625	0.3	0.6	1320009
078	Anthracene (120-12-7)	625	0.3	0.6	96005
005	Benzidine (92-87-5)	625	12	24	0.000125
067	Benzyl butyl phthalate (85-68-7)	625	0.3	0.6	1500
072	Benzo(a)anthracene (56-55-3)	625	0.3	0.6	0.00285
PBT	Benzo(j)fluoranthene (205-82-3)	625	0.5	1.0	-
PBT	Benzo(r,s,t)pentaphene (189-55-9)	625	0.5	1.0	
073	Benzo(a)pyrene (50-32-8)	610/625	0.5	1.0	0.0028/0.0315
074	3,4-benzofluoranthene (Benzo(b)fluoranthene) (205-99-2)	610/625	0.8	1.6	
075	11,12-benzofluoranthene (Benzo(k)fluoranthene) (207-08-9)	610/625	0.8	1.6	0.0028/0.0315
079	Benzo(ghi)Perylene (191-24-2)	610/625	0.5	1.0	0.19
043	Bis(2-chloroethoxy)methane (111-91-1)	625	5.3	21.2	920009
018	Bis(2-chloroethyl)ether (111-44-4)	611/625	0.3	1.0	0.0315
042	Bis(2-chloroisopropyl)ether (108-60-1)	625	0.3	0.6	14005
066	Bis(2-ethylhexyl)phthalate (117-81-7)	625	0.1	0.5	1.85
070	Butyl benzyl phthalate (117-81-7)	625	0.25	0.6	1500

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041	4-Bromophenyl phenyl ether (101-55-3)	625	0.2	0.4	18010
020	2-Chloronaphthalene (91-58-7)	625	0.3	0.6	10006
040	4-Chlorophenyl phenyl ether (7005-72-3)	625	0.3	0.5	3659
076	Chrysene (218-01-9)	610/625	0.3	0.6	0.00285
PBT	Dibenzo (a,j)acridine (224-42-0)	610M/625M	2.5	10.0	-
PBT	Dibenzo (a,h)acridine (226-36-8)	610M/625M	2.5	10.0	-
082	Dibenzo(a-h)anthracene (53-70-3) (1,2,5,6-dibenzanthracene)	625	0.8	1.6	27005
PBT	Dibenzo(a,e)pyrene (192-65-4)	610M/625M	2.5	10.0	-
PBT	Dibenzo(a,h)pyrene (189-64-0)	625M	2.5	10.0	-
028	3,3'-Dichlorobenzidine (91-94-1)	605/625	0.5	1.0	0.045
070	Diethyl phthalate (84-66-2)	625	1.9	7.6	230005
071	Dimethyl phthalate (131-11-3)	625	1.6	6.4	3130005
068	Di-n-butyl phthalate (84-74-2)	625	0.5	1.0	27005
035	2,4-dinitrotoluene (121-14-2)	609	0.2	0.4	0.115
036	2,6-dinitrotoluene (606-20-2)	609/625	0.2	0.4	625013
069	Di-n-octyl phthalate (117-84-0)	625	0.3	0.6	3.113
037	1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	1625B	5.0	20	0.045
039	Fluoranthene (206-44-0)	625	0.3	0.6	3005
080	Fluorene (86-73-7)	625	0.3	0.6	13005
009	Hexachlorobenzene (118-74-1)	612/625	0.3	0.6	0.000755
052	Hexachlorobutadiene (87-68-3)	625	0.5	1.0	0.445
053	Hexachlorocyclopentadiene (77-47-4)	1625B/625	0.5	1.0	2405
012	Hexachloroethane (67-72-1)	625	0.5	1.0	1.95
083	Indeno(1,2,3-cd)Pyrene (193-39-5)	610/625	0.5	1.0	0.00286
054	Isophorone (78-59-1)	625	0.5	1.0	8.45
PBT	3-Methyl cholanthrene (56-49-5)	625	2.0	8.0	-
055	Naphthalene (91-20-3)	625	0.3	0.6	40011
056	Nitrobenzene (98-95-3)	625	0.5	1.0	175
061	N-Nitrosodimethylamine (62-75-9)	607/625	2.0	4.0	0.000695
063	N-Nitrosodi-n-propylamine (621-64-7)	607/625	0.5	1.0	0.0055
062	N-Nitrosodiphenylamine (86-30-6)	625	0.5	1.0	55
PBT	Perylene (198-55-0)	625	1.9	7.6	-
081	Phenanthrene (85-01-8)	625	0.3	0.6	411
084	Pyrene (129-00-0)	625	0.3	0.6	9605
008	1,2,4-Trichlorobenzene (120-82-1)	625	0.3	0.6	356
Pesticides/PCBs					
089	Aldrin (309-00-2)	608	0.025	0.05	0.000135
102	alpha-BHC (319-84-6)	608	0.025	0.05	0.00395

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103	beta-BHC (319-85-7)	608	0.025	0.05	0.0145
104	gamma-BHC (58-89-9)	608	0.025	0.05	0.0195
105	delta-BHC (319-86-8)	608	0.025	0.05	7.013
091	Chlordane (57-74-9)	608	0.025	0.05	0.000575
092	4,4'-DDT (50-29-3)	608	0.025	0.05	0.000595
093	4,4'-DDE (72-55-9)	608	0.025	0.0510	0.000595
094	4,4' DDD (72-54-8)	608	0.025	0.05	0.000835
090	Dieldrin (60-57-1)	608	0.025	0.05	0.000145
095	alpha-Endosulfan (959-98-8)	608	0.025	0.05	0.00875
096	beta-Endosulfan (33213-65-9)	608	0.025	0.05	0.00875
097	Endosulfan Sulfate (1031-07-8)	608	0.025	0.05	0.0935
098	Endrin (72-20-8)	608	0.025	0.05	0.00235
099	Endrin Aldehyde (7421-93-4)	608	0.025	0.05	0.765
100	Heptachlor (76-44-8)	608	0.025	0.05	0.000215
101	Heptachlor Epoxide (1024-57-3)	608	0.025	0.05	0.000105
106	PCB-1242 (53469-21-9)	608	0.25	0.5	0.0001705
107	PCB-1254 (11097-69-1)	608	0.25	0.5	0.0001705
108	PCB-1221 (11104-28-2)	608	0.25	0.5	0.0001705
109	PCB-1232 (11141-16-5)	608	0.25	0.5	0.0001705
110	PCB-1248 (12672-29-6)	608	0.025	0.5	0.0001705
111	PCB-1260 (11096-82-5)	608	0.13	0.5	10.513
112	PCB-1016 (12674-11-2)	608	0.13	0.5	0.4213
113	Toxaphene (8001-35-2)	608	0.24	0.5	0.000735

PBT - Denotes a State of Washington priority pollutant.

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.
3. This criterion is dependent upon receiving water characteristics. This value is the aquatic life chronic value at a hardness of 25 mg/l
4. EPA 822-R-03-031
5. Human health criteria as fresh or marine – EPA National Toxic Rule
6. Fresh water aquatic life as Acute or Chronic – EPA recommended values
7. Aquatic life as Acute or Chronic – WAC 173-201A
8. USEPA Drinking Water Criteria

9. No human health based screening levels were available for 2-chloroethylvinyl ether. This value is the surface water screening values derived by U.S. EPA Region 4 Water Management Division. These values were obtained from Water Quality Criteria documents and represent the chronic ambient water quality criteria values for the protection of aquatic life.
10. USGS 2004-5194. Pesticides Detected in Urban Streams in King County, Washington, 1998–2003.
11. Estimated effect level
12. Chapter WAC 173-200.
13. Estimated effect level