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Permit No.: ST-5528
Issuance Date: September 10, 2009
Effective Date: November 1, 2009
Expiration Date: October 31, 2014

STATE WASTE DISCHARGE PERMIT NUMBER ST-5528

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
CENTRAL REGIONAL OFFICE

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

TOWN OF CONCONULLY
PO BOX 127
CONCONULLY, WA 98819

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

<u>Plant Location:</u>	<u>Discharge Location:</u>
Approximately ½ mile SE of Town	Legal Description: NW¼ of Section 18, Township 35 N, Range 25 E. W. M.
<u>Treatment Type</u>	Latitude: 48.539722 N
STEP system, facultative lagoons and land treatment (sprayfield)	Longitude: -118.259167 W

Jonathan Merz
Acting Section Manager
Water Quality Program
Central 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. The following table is for quick reference only. Enforceable submittal requirements are contained in the permit narrative.

Permit Section	Submittal	Frequency	First Submittal Date
S2.F.7.	Flow Meter Manufacturer's Documentation, Calibration and Maintenance Specifications	1/permit cycle	December 15, 2009
S3.A.	Discharge Monitoring Report	Monthly	December 15, 2009
S3.E.	Reporting Permit Violations	As necessary	
S3.F.	Other Reporting	As necessary	
S4.E.	Wasteload Assessment	1/permit cycle	October 31, 2013
S5.F.	Reporting Bypasses	As necessary	
S5.G.1.	Operations and Maintenance Manual Update	1/permit cycle	November 1, 2009
S5.G.2	Operations and Maintenance Manual Review or Update	Annually	
S6.C.	Biosolids Report/Disposal Plan	1/Permit cycle	October 31, 2013
S8.	Application for Permit renewal	1/permit cycle	October 31, 2013
S9.	Irrigation and Crop Management Plan	1/year	October 1, each year of the permit term
G1.C.	Signatory Authorization Requirements	As necessary	
G4.	Reporting a Cause for Modification	As necessary	
G5.	Plant Review Required	As necessary	
G7.	Notice of Permit Transfer	As necessary	

SPECIAL CONDITIONS

S1. DISCHARGE LIMITS

A. Effluent Limits

All discharges and activities authorized by this permit must comply with the terms and conditions of this permit. The discharge of any of the following pollutants more frequently than, or at a concentration in excess of, that authorized by this permit violates the terms and conditions of this permit. Wastewater flows and loadings must not exceed the Design Criteria specified in Special Condition S4.

Beginning on the **November 1, 2009** and lasting through **October 31, 2014**, the Permittee is authorized to apply wastewater to land via spray irrigation at rates not to exceed those in the most recent Ecology-approved Sprayfield Management Plan on the following designated irrigation lands:

Approximately 22 acres located approximately one-half mile southeast of the Town of Conconully, in portions of the NW¹/₄ of Section 18, Township 35 N, Range 25 E. W. M.

EFFLUENT LIMITATIONS	
Parameter	Maximum Daily ^a
BOD ₅	65 mg/L
Fecal Coliform	Less than 200 colonies/100mL
pH	Between 6.0 and 9.0 at all times
^a 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.	

B. Best Management Practices/Pollution Prevention

The Permittee must comply with the following Best Management Practices to prevent pollution to waters of the State:

1. Do not discharge in excess of the hydraulic capacity of the facultative lagoons so that the lagoons overflow.
2. Do not discharge priority pollutants, dangerous wastes, or toxics in toxic amounts.
3. The Permittee must operate the sprayfields so as to protect the existing and future beneficial uses of the ground water and not cause a violation of the ground water standards (chapter 173-200 WAC).

S2. MONITORING REQUIREMENTS

A. Wastewater Monitoring

The Permittee must monitor the wastewater according to the following schedule (see Appendix 1 for analytical methods and levels):

Parameter	Units	Sample Point	Sampling Frequency	Sample Type
Total Influent ^a				
Flow, Total ^b	gallons/day	Pump station	Continuous ^c	Meter
BOD ₅	mg/L	Discharge pipe to lagoon	Twice per Month ^d	8-hour composite ^e
BOD ₅	lbs/day	Discharge pipe to lagoon	Twice per Month	Calculation ^f
TSS	mg/L	Discharge pipe to lagoon	Twice per Month	8-hour composite
TSS	lbs/day	Discharge pipe to lagoon	Twice per Month	Calculation
Okanogan County STEP Influent ^g				
Flow	gallons/day	STEP system wet well	Continuous	Meter
pH	Standard Units	STEP system wet well	Twice per Month	Grab
Okanogan County STEP Influent Monitoring Begin May 1, 2012 End May 31, 2013				
Flow	gallons/day	STEP system wet well	Continuous	Meter
BOD ₅	mg/L	STEP system wet well	Twice per Month	Grab ^h
BOD ₅	lbs/day	STEP system wet well	Twice per Month	Calculation
pH	Standard Units	STEP system wet well	Twice per Month	Grab
Content of Lagoons: Primary, Secondary, and Maturation: April through September				
Dissolved Oxygen (DO)	mg/L	Lagoon	Once per Month ⁱ	Grab
pH	Standard Units	Lagoon	Once per Month ⁱ	Grab
a—Sample the Total Influent (raw sewage flow) entering the headworks of the treatment plant prior to any treatment.				
b--Flow, Total means the combined influent flow of wastewater from the Town's collection system and the STEP systems.				
c--Continuous means, without interruption throughout the operating and discharging hours of the Permittee's facility except for infrequent shutdowns for maintenance.				
d--Twice/month means twice each calendar month. Samples shall not be taken during the same week nor during consecutive weeks.				
e--8-hour composite means a series of at least three (3) individual samples of equal volume collected over an 8-hour period into a single container, and analyzed as one sample.				
f--Calculation means figured concurrently with the respective sample, using the following formula: Concentration (in mg/L) X Flow (in MGD) X Conversion Factor (8.34) = lbs/day.				
g--STEP Influent means the aggregate influent from the Okanogan County STEP collection systems.				
h--Grab means an individual sample collected over a fifteen (15) minute, or less, period.				
i--Once per Month means once every calendar month during alternate weeks. Samples shall not be taken during the same or consecutive calendar weeks.				

B. Irrigation Wastewater Monitoring

The sampling point for the irrigated wastewater is at the irrigation pump station located adjacent to the maturation lagoon.

The Permittee must monitor the irrigation wastewater according to the following schedule (see Appendix 1 for analytical methods and levels):

Parameter	Units	Sample Point	Sampling Frequency	Sample Type
Effluent ^a				
Flow	gpd	Irrigation pump station	When irrigating	Meter
Soluble BOD ₅	mg/L	Irrigation pump station	Once per irrigation event ^b	Grab
Soluble BOD ₅	lbs/acre/day	Irrigation pump station	Once per irrigation event	Calculation ^c
Soluble BOD ₅	total lbs	Irrigation pump station	Once per irrigation event	Calculation ^d
pH	Standard Units	Irrigation pump station	Once per irrigation event	Grab
TKN (as N)	mg/L	Irrigation pump station	Once per irrigation event	Grab
TKN (as N)	lbs/acre/day	Irrigation pump station	Once per irrigation event	Calculation
TKN (as N)	total lbs	Irrigation pump station	Once per irrigation event	Calculation
Nitrate (as N)	mg/L	Irrigation pump station	Once per irrigation event	Grab
Nitrate (as N)	lbs/acre/day	Irrigation pump station	Once per irrigation event	Calculation
Nitrate (as N)	total lbs	Irrigation pump station	Once per irrigation event	Calculation
Total Dissolved Solids (TDS)	mg/L	Irrigation pump station	Once per irrigation event	Grab
Chlorides	mg/L	Irrigation pump station	Once per irrigation event	Grab
Chlorides	total lbs	Irrigation pump station	Once per irrigation event	Calculation
Specific Conductance	µS/cm	Irrigation pump station	Once per irrigation event	Grab
Fecal Coliform Bacteria	#/100 mL	Irrigation pump station	Once per irrigation event	Grab

a--Effluent means wastewater, which has exited the last treatment lagoon, prior to discharge to the sprayfield.
b--A sample must be taken for an irrigation event lasting three (3) days or more. If multiple short duration irrigation events occur within one month then a minimum of two (2) effluent samples are required.
c--Calculation of lbs/acre/day means using the algorithm in footnote "f" of S2.A. wastewater monitoring, table. to determine total pounds, and then dividing that result by the number of acres irrigated, then dividing by the actual number of days of the month that irrigation occurred.
d--Calculation of total lbs means the total mass of BOD applied to the sprayfield during a calendar month.

C. Ground Water Monitoring

Conconully must inspect the sprayfield monitoring well monthly beginning in March and ending in July of each year of the permit term. If the sprayfield monitoring well has enough water to sample, then Conconully must sample the sprayfield well, the irrigation wells and the domestic well immediately. One sample set per irrigation season is sufficient to satisfy the terms of the permit.

The Permittee must analyze the groundwater sampled from all three sources for:

Parameter	Units	Sampling Frequency	Sample Type
pH	Standard Units	When water is found in the sprayfield monitoring well.	Grab
Conductivity	µS/cm		"
Total Coliform Bacteria	CFU/100 ml		"
Sulfate	mg/L		"
Total Dissolved Solids	mg/L	"	"
Nitrate	mg/L	"	"
Total Kjeldahl Nitrogen	mg/L	"	"
Orthophosphate	mg/L	"	"
Calcium	mg/L	"	"
Magnesium	mg/L	"	"
Potassium	mg/L	"	"
Sodium	mg/L	"	"
Chloride	mg/L	"	"
Alkalinity	mg/L	"	"

D. Soil Monitoring

The Permittee must monitor soil on the irrigation lands as follows:

1. Monitor once per year at the end of the growing season.
2. Locate sampling sites so they represent each irrigation site or as identified in the crop management plan.

3. If possible, locate sampling site in the same vicinity each year.
4. Test soil at each sampling site at depth of one foot and three feet.
5. Conduct a one-time complete set of analyses at the same depth as #4 outside the sprayfield to determine background concentrations.
6. Submit results annually with the Irrigation and Crop Management Plan.

The Permittee must monitor the soils at the one-foot and three-foot level in sprayfield according to the following schedule:

Parameter	Parameter	Parameter
Total Nitrogen	pH	Potassium (available)
Boron	Nitrate-Nitrogen	Cation Exchange Capacity (CEC)
Soluble Salts	Phosphorus	Exchangeable Sodium Percentage (ESP) %
Bicarbonate	--	--

E. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit must represent the volume and nature of the monitored parameters, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets and maintenance-related conditions affecting effluent quality.

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

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

The Permittee must conduct and report all soil analysis in accordance with the Western States Laboratory Plant, Soil and Water Analysis Manual, *Soil, Plant And Water Reference Methods for The Western Region, 2nd Edition, 2003* available at http://cropandsoil.oregonstate.edu/wera103/Soil_Methods.htm .

F. Flow Measurement

The Permittee must:

1. Select and use appropriate flow measurement, field measurement, and continuous monitoring devices and methods consistent with accepted scientific practices.
2. Install, calibrate, and maintain these devices to ensure the accuracy of the measurements is consistent with the accepted industry standard and the manufacturer's recommendation for that type of device.
3. Use field measurement devices as directed by the manufacturer and do not use reagents beyond their expiration dates.
4. Calibrate these devices at the frequency recommended by the manufacturer.
5. Frequency of calibration shall be in conformance with manufacturer's recommendations.
6. Maintain calibration records for at least three years.
7. **Provide Ecology with documentation as to the make, model and manufacturer's maintenance and calibration requirements no later than December 15, 2009.**

G. 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.

H. Request for Reduction in Monitoring

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

The Permittee must:

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

S3. REPORTING AND RECORDKEEPING REQUIREMENTS

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

A. Reporting

The first monitoring period begins on **November 1, 2009**. The Permittee must:

1. Submit monitoring results each month.
2. Summarize, report, and submit monitoring data obtained during each monitoring period on a Discharge Monitoring Report (DMR) form provided, or otherwise approved, by Ecology.
3. Submit DMR forms monthly whether or not the facility was discharging. If the facility did not discharge during a given monitoring period, submit the form as required with the words "NO DISCHARGE" entered in place of the monitoring results.
4. 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.
5. Send report(s) to Ecology at:

**Water Quality Permit Coordinator
Department of Ecology
Central Regional Office
15 West Yakima Avenue, Suite 200
Yakima, WA 98902**

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.

B. Records Retention

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

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

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

C. Recording of Results

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

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

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. Reporting Permit Violations

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

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

1. Immediate Reporting

Any collection system overflows or any plant bypass discharging to a waterbody used as a source of drinking water must be reported immediately to the Department of Ecology and the Department of Health, Drinking Water

Program at the numbers listed below:

Central Regional Office	509-575-2490
Department of Health,	360-521-0323 (business hours)
Drinking Water Program	360-481-4901 (after business hours)

2. Twenty-four-hour Reporting

The Permittee must report the following occurrences of noncompliance by telephone, to Ecology at 509-575-2490 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 limit in the permit (See Part S5.F., “Bypass Procedures”).
- c. Any **upset** that exceeds any effluent limit in the permit. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limits because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- d. Any violation of a maximum daily or instantaneous maximum discharge limit 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 limit 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

The Permittee must submit reports to the address listed in S3.

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

G. Maintaining a Copy of This Permit

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

S4. FACILITY LOADING

A. Design Criteria

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

Parameter	Design Criteria
Hydraulic-Lagoons (October-April)	39,000 GPD
Organic-Lagoons (November-April)	50 lbs BOD ₅ /day
Organic-Lagoons (May-October)	165 lbs BOD ₅ /day
Hydraulic-Sprayfield (May-October irrigation)	32.5 inches/acre-year
Nitrogen-Sprayfield	250 lbs N/acre-year
Irrigation Pump Rate	200 gpm

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 any one of the design criteria in S4.A for three consecutive months.
2. The projected increase would reach design capacity within five years. The plan and schedule for continuing to maintain capacity must be sufficient to achieve the effluent limits 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 adequate 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. Limit 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.

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.

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)].

E. Wasteload Assessment

1. The Permittee must conduct an assessment of its influent flow and waste load and submit the report to with its application for permit renewal.
2. The report must contain the following: an indication of compliance or noncompliance with the permit effluent limits; a comparison between the existing and design monthly average dry weather and wet weather flows, peak flows, BOD, and total suspended solids loadings.
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 or systems of treatment and control (and related appurtenances) which are installed to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

A. Certified Operator

An operator certified for at least a Class I plant by the State of Washington must be in responsible charge of the day-to-day operation of the wastewater treatment plant.

B. O & M Program

The Permittee must:

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

C. Short-term Reduction

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

1. Give written notification to Ecology, if possible, thirty (30) days prior to such activities.
2. Detail the reasons for, length of time of, and the potential effects of the reduced level of treatment.

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

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.

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

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

1. Bypass 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 limits or other conditions of this permit, or adversely impact public health as determined by Ecology prior to the bypass. The Permittee must submit prior notice, if possible, at least ten (10) days before the date of the bypass.

2. Bypass is unavoidable, unanticipated, and results in noncompliance 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 the Permittee should have installed adequate backup equipment in the exercise of reasonable engineering judgment to prevent a bypass.

- Transport of untreated wastes to another treatment facility.
- 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:
- A description of the bypass and its cause.
 - An analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing.
 - A cost-effectiveness analysis of alternatives including comparative resource damage assessment.
 - The minimum and maximum duration of bypass under each alternative.
 - A recommendation as to the preferred alternative for conducting the bypass.
 - The projected date of bypass initiation.
 - A statement of compliance with SEPA.
 - A request for modification of water quality standards as provided for in WAC 173-201A-410, if an exceedance of any water quality standard is anticipated.
 - Details of the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.
- b. For probable construction bypasses, the Permittee must notify Ecology of the need to bypass as early in the planning process as possible. The Permittee must consider the analysis required above during preparation of the engineering report or facilities plan and plans and specifications and must include these to the extent practical. In cases where the Permittee determines the probable need to bypass early, the Permittee must continue to analyze conditions up to and including the construction period in an effort to minimize or eliminate the bypass.
- c. Ecology will consider the following prior to issuing an administrative order for this type of bypass:
- If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.

- If feasible alternatives to bypass exist, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
- If the Permittee planned and scheduled the bypass to minimize adverse effects on the public and the environment.

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

G. Operations and Maintenance Manual

The Permittee must:

1. Update the Operations and Maintenance (O&M) Manual in accordance with WAC 173-240-150 and **submit it to Ecology for approval by November 1, 2009.**
2. Review the O&M Manual annually and update the manual as needed.
3. Submit to Ecology for review and approval substantial changes or updates to the O&M Manual whenever it incorporates them into the manual.
4. Keep the approved O&M Manual at the permitted facility.
5. Follow the instructions and procedures of this manual.

In addition to the requirements of WAC 173-240-150(1) and (2), the O&M manual must include:

1. Emergency procedures for plant shutdown and cleanup in event of wastewater system upset or failure.
2. Wastewater system maintenance procedures that contribute to the generation of 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. Treatment plant process control monitoring schedule.
5. Wastewater sampling protocols and procedures for compliance with the sampling and reporting requirements in the wastewater discharge permit.
6. Minimum staffing adequate to operate and maintain the treatment processes and carry out compliance monitoring required by the permit.

7. Protocols and procedures for ground water monitoring network, vadose zone, and soil sampling and testing.

H. Irrigation Land Application Best Management Practices

The Permittee must:

1. Not allow spray irrigation practices to result in runoff of wastewater to any surface waters of the state or to any land not owned by or under its control.
2. Use recognized good practices, and all available and reasonable procedures to control odors from the land application system.
3. Implement measures to reduce odors to a reasonable minimum when notified by Ecology.
4. Not apply wastewater to the irrigation lands in quantities that:
 - a. Significantly reduce or destroy the long-term infiltration rate of the soil.
 - b. Would cause long-term anaerobic conditions in the soil.
 - c. Would cause ponding of wastewater and produce objectionable odors or support insects or vectors.
 - d. Would cause leaching losses of constituents of concern beyond the treatment zone or in excess of the approved design. Constituents of concern are constituents in the wastewater, partial decomposition products, or soil constituents that would alter ground water quality in amounts that would affect current and future beneficial uses.
5. Maintain all irrigation agreements for lands not owned for the duration of the permit cycle. Any reduction in irrigation lands by termination of any irrigation agreements may result in permit modification or revocation.
6. Immediately inform Ecology in writing of any proposed changes to existing irrigation agreements.

S6. SOLID WASTES

A. Solid Waste Handling

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

B. Leachate

The Permittee must not allow leachate from its solid waste material to enter state waters without providing all known, available and reasonable methods of treatment, nor allow such leachate to cause violations of the State Surface Water Quality Standards, Chapter 173-201A WAC, or the State Ground Water Quality Standards, Chapter 173-200 WAC. The Permittee must apply for a permit or

permit modification as may be required for such discharges to state ground or surface waters.

C. 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.

The final use and disposal of biosolids shall be done in accordance with Chapter 173-308 WAC ("Biosolids Management"), 40 CFR Part 503, and under coverage of the State general permit for biosolids management, as applicable.

The Permittee **is required to assess its load of biosolids contained in the wastewater treatment lagoons**. Based on the buildup of sludge in the primary lagoon as determined by inspection, the Permittee must submit a projected date and if necessary a plan for the removal and disposal of biosolids in accordance with Chapter 173-308 WAC. The Permittee is required to include the assessment and plan with the required Wasteload Assessment due **October 31, 2013**.

S7. PRETREATMENT

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

A. Discharge Authorization Required

Significant commercial or industrial operations must not be allowed to discharge wastes to the Permittee's sewerage system until they have received prior authorization from Ecology in accordance with Chapter 90.48 RCW and Chapter 173-216 WAC, as amended. The Permittee must immediately notify Ecology of any proposed new sources of wastewater from significant commercial or industrial operations.

B. 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 may be reasonably expected to cause pass through or interference, or which otherwise violate general or specific discharge prohibitions contained in 40 CFR Part 403.5 or WAC-173-216-060.
2. The Permittee must not authorize or knowingly allow the introduction of any of the following into their treatment works:
 - a. Pollutants which create a fire or explosion hazard in the POTW (including, but not limited to waste streams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21).
 - b. Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, or greater than 11.0 standard units, unless the works are specifically designed to accommodate such discharges.
 - c. Solid or viscous pollutants in amounts that could cause obstruction to the flow in sewers or otherwise interfere with the operation of the POTW.
 - d. Any pollutant, including oxygen demanding pollutants, (BOD, etc.) released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the POTW.
 - e. Petroleum oil, non-biodegradable cutting oil, or products of mineral origin in amounts that will cause interference or pass through.
 - f. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity which may cause acute worker health and safety problems.
 - g. Heat in amounts that will inhibit biological activity in the POTW resulting in interference but in no case heat in such quantities such that the temperature at the POTW headworks exceeds 40 degrees Centigrade (104 degrees Fahrenheit) unless Ecology, upon request of the Permittee, approves, in writing, alternate temperature limits.
 - h. Any trucked or hauled pollutants, except at discharge points designated by the Permittee.
 - i. Wastewaters prohibited to be discharged to the POTW by the Dangerous Waste Regulations (chapter 173-303 WAC), unless authorized under the Domestic Sewage Exclusion (WAC 173-303-071).

3. The Permittee must also not allow the following discharges to the POTW unless approved in writing by Ecology:
 - a. Noncontact cooling water in significant volumes.
 - b. Stormwater and other direct inflow sources.
 - c. Wastewaters significantly affecting system hydraulic loading, which do not require treatment, or would not be afforded a significant degree of treatment by the system.
4. The Permittee must notify Ecology if any industrial user violates the prohibitions listed in this section (S7.B), and initiate enforcement action to promptly curtail any such discharge.

S8. APPLICATION FOR PERMIT RENEWAL

The Permittee must apply for permit renewal by **October 31, 2013**.

S9. IRRIGATION MANAGEMENT PLAN

The Permittee must submit an Irrigation Management Plan **annually by October 1** for Ecology review. The plan must address amount of wastewater applied during the course of the irrigation season and present a tentative schedule of wastewater application to meet next years' wastewater application goals.

The plan must include the following elements:

1. A comparison of the actual total net nitrogen, water, fixed dissolved solids, (other parameters) loads, and the leaching fractions for each field to the estimated values presented in the previous year's Irrigation and Crop Plan.
2. A summary and evaluation of the **soil testing results**.
3. The frequency and timing of wastewater and supplemental irrigation water application (including harvest and non-harvest periods).
4. Recommended rest cycles for wastewater application where organic or hydraulic loading is of concern.

GENERAL CONDITIONS

G1. SIGNATORY REQUIREMENTS

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

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

Representatives of Ecology have the right to enter at all reasonable times in or upon any property, public or for the purpose of inspecting and investigating conditions relating to the pollution or the possible pollution of any waters of the state. Reasonable times includes normal business hours; hours during which production, treatment, or discharge occurs; or times when Ecology suspects a violation requiring immediate inspection.

Representatives of Ecology must be allowed to have access to, and copy at reasonable cost, any records required to be kept under terms and conditions of the permit; to inspect any monitoring equipment or method required in the permit; and to sample the discharge, waste treatment processes, or internal waste streams.

G3. PERMIT ACTIONS

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

- A. Violation of any permit term or condition;
- B. Obtaining a permit by misrepresentation or failure to disclose all relevant facts;
- C. A material change in quantity or type of waste disposal;
- D. A material change in the condition of the waters of the state; or
- E. Nonpayment of fees assessed pursuant to RCW 90.48.465.

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

G4. REPORTING A CAUSE FOR MODIFICATION

The Permittee must submit a new application at least 60 days before it wants to discharge more of any pollutant, a new pollutant, or more flow than allowed under this permit. The Permittee should use the State Waste Discharge Permit application, and submit required plans at the same time. Required plans include an Engineering Report, Plans and Specifications, and an Operations and Maintenance manual, (see Chapter 173-240 WAC). Ecology may waive these plan requirements for small changes, so contact Ecology if they do not appear necessary. The Permittee must obtain the written concurrence of the receiving POTW on the application before submitting it to Ecology. The Permittee must continue to comply with the existing permit until it is modified or reissued. Submitting a notice of dangerous waste discharge (to comply with Pretreatment or Dangerous Waste rules) triggers this requirement as well.

G5. PLAN REVIEW REQUIRED

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

G6. COMPLIANCE WITH OTHER LAWS AND STATUTES

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

G7. TRANSFER OF THIS PERMIT

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 thirty (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. PAYMENT OF FEES

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

G9. PENALTIES FOR VIOLATING PERMIT CONDITIONS

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

Any person who violates the terms and conditions of a waste discharge permit incurs, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars for every such violation. Each and every such violation is a separate and distinct offense, and in case of a continuing violation, every day's continuance is considered a separate and distinct violation.

G10. DUTY TO PROVIDE INFORMATION

The Permittee must submit to Ecology, within a reasonable time, all information which Ecology may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee must also submit to Ecology upon request, copies of records required to be kept by this permit.

G11. DUTY TO COMPLY

The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of 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.

G12. 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 ensure consistency with chapters 90.46 and 90.48 RCW. In the event that Ecology does not comment within a thirty (30)-day period, the Permittee may assume consistency and proceed with the contract.

APPENDIX 1

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

The following table with analytical methods and levels is to be used as guidance for effluent characterization in NPDES permit applications, applications for permit renewal, and monitoring required by permit. This attachment is used in conjunction with Section V, Parts A, B, and C of EPA Application Form 2C, Parts A.12, B.6, and D of EPA application form 2A and with State applications. This attachment specifies effluent characterization requirements of the Department of Ecology. For application, analyze your wastewater for all parameters required by the application and any additional pollutants with an X in the left column. The data should be compiled from last year's data if it is a parameter routinely measured. If you are a primary industry category with effluent guidelines you may have some mandatory testing requirements (see Table 2C-2 of Form 2C). If you are a municipal POTW you also have some mandatory testing requirements which are dependent upon the design flow (see EPA form 2A).

The permit applications will specify the groups of compounds to be analyzed. Ecology may require additional pollutants to be analyzed within a group. The objectives are to reduce the number of analytical "non-detects" in applications 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.

	Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL)² µg/L unless specified	Quantitation Level (QL)³ µg/L unless specified
¹	CONVENTIONALS			
X	Biochemical Oxygen Demand	SM5210-B		2 mg/L
X	Flow	Calibrated device		
X	Dissolved oxygen	4500-OC/OG		0.2 mg/L
X	pH	SM4500-H ⁺ B	N/A	N/A
¹	NONCONVENTIONALS			

	Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL)² µg/L unless specified	Quantitation Level (QL)³ µg/L unless specified
	Total Alkalinity	SM2320-B		5 mg/L as CaCo3
	Bromide (24959-67-9)	4110 B	100	400
	Chlorine, Total Residual	4500 Cl G		50.0
	Color	SM2120 B/C/E		10 color unit
X	Fecal Coliform	SM 9221E	N/A	N/A
	Fluoride (16984-48-8)	SM4500-F E	25	100
X	Nitrate-Nitrite (as N)	4500-NO3- E/F/H		100
X	Nitrogen, Total Kjeldahl (as N)	4500-NH3-C/E/FG		300
X	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
	Surfactants	SM5540 C		50
X	Total dissolved solids	SM2540 C		20 mg/L
	Total Hardness	2340B		200 as CaCO3
	Aluminum, Total (7429-90-5)	200.8	2.0	10

1. An X placed in this box means you must analyze for all pollutants in the group.
2. 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.
3. 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.