

Expiration: 12/31/2017  
Permit #: 101685  
File #: 106973  
Page: 1 of 16



**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
WASTE DISCHARGE PERMIT**

Oregon Department of Environmental Quality  
Northwest Region – Portland Office  
2020 SW 4<sup>th</sup> Avenue, Suite 400  
Telephone: 503-229-5263

Issued pursuant to ORS 468B.050 and The Federal Water Pollution Control Act (The Clean Water Act)

**ISSUED TO:**

Toyo Tanso USA, Inc.  
2575 NW Graham Circle  
Troutdale, OR 97060

**SOURCES COVERED BY THIS PERMIT:**

Type of Waste	Outfall Number	Outfall Location
Treated Process Wastewater	001	Unnamed tributary of Arata Creek at northwest corner of TTU site; RM 2.2

**FACILITY TYPE AND LOCATION:**


Neutralization, Dechlorination, Filtration  
(a graphite parts production facility)  
2575 NW Graham Circle  
Troutdale, OR 97060

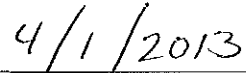
**RECEIVING STREAM INFORMATION:**

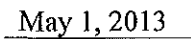
WRD Basin: Willamette  
USGS Subbasin: Lower Willamette  
Receiving Stream: tributary of Arata Creek to Columbia River  
LLID: 1224573455551 RM 1.83 I  
County: Multnomah

**EPA REFERENCE #:** OR-003491-6

Issued in response to application #963647 received June 12, 2012 and based on the land use compatibility statement in the permit record.

  
Tiffany Yelton-Bram, Interim Water Quality  
Source Control Section Manager,  
Northwest Region

  
Signature Date

  
Effective Date

**PERMITTED ACTIVITIES**

Until this permit expires or is modified or revoked, the permittee is authorized to: 1) operate a wastewater collection, treatment, control and disposal system; and 2) discharge treated wastewater to waters of the state only from the authorized discharge point or points in Schedule A in conformance with the requirements, limits, and conditions set forth in this permit.

Unless specifically authorized by this permit, by another NPDES or WPCF permit, or by Oregon statute or administrative rule, any other direct or indirect discharge of pollutants to waters of the state is prohibited.

**SCHEDULE A**  
**Waste Discharge Limitations**

1. **Treated Effluent Outfall 001:** The permittee must meet the limitations in Table A1 year-round for Treated Wastewater Discharges from Outfall 001 to a tributary of Arata Creek and the Columbia River.

**Table A1: Effluent Limitations**

Parameter	Monthly Average	Daily Maximum
Total Dissolved Solids (TDS)	--	1000 mg/L
Total Residual Chlorine	0.02 mg/L <sup>1</sup>	0.04 mg/L <sup>1</sup>
Chloride	542 mg/L	1088 mg/L
	Weekly Averages	Daily Maximum
Temperature	20.4°C (68.7°F) as 7DADM <sup>2</sup> or	25.3°C (77.5°F)
	ETL <sub>LIM-N</sub> <sup>3</sup> = 0.32 M-kcal/day as 7-day rolling average or	
	ETL <sub>LIM-C</sub> <sup>4</sup> = Q <sub>E</sub> D ΔT <sub>PS</sub> C <sub>F</sub> M-kcal/day as 7-day rolling average	
	<b>At all times within the range</b>	
pH	6.5 to 9.0 S.U.	
<p><b>Table A1 Notes:</b> <sup>1</sup> DEQ will use 0.05 mg/L as the compliance evaluation level; concentrations at or below 0.05 mg/L will be considered in compliance with the limit.</p> <p><sup>2</sup> 7DADM is the maximum average effluent temperature calculated as the rolling 7-day average of daily maximum effluent temperatures.</p> <p><sup>3</sup> ETL<sub>LIM-N</sub> is the excess thermal load <u>limit- numeric</u> value in millions of kilocalories/day when compliance is shown by ETL<sub>DIS</sub> ≤ ETL<sub>LIM-N</sub> where ETL<sub>DIS</sub> is the 7-day average excess thermal load in the discharge, calculated using measured effluent temperature and effluent flow rates, (see Schedule B).</p> <p><sup>4</sup> ETL<sub>LIM-C</sub> is the excess thermal load <u>limit- calculated</u> value in millions of kilocalories/day when compliance is shown by ETL<sub>DIS</sub> ≤ ETL<sub>LIM-C</sub> where ETL<sub>LIM-C</sub> is calculated using effluent and river flow as follows:                      Q<sub>E</sub> = 7-day average actual effluent flow, cfs                      D = dilution = (Q<sub>E</sub> + Q<sub>R</sub>)/Q<sub>E</sub>                      Q<sub>R</sub> = 25% of the 7-day average actual flow of the receiving tributary, (Q<sub>R-7D-AV</sub>), measured, in cfs                      ΔT<sub>PS</sub> = allowable increase in stream temperature from this point source at edge of mixing = 0.3 °C                      C<sub>F</sub> = a conversion factor for units and heat capacity = 2,446,665 (M kcal/day)/cfs x °C</p>		

2. **Regulatory Mixing Zone**

No wastes may be discharged or activities conducted that cause or contribute to a violation of water quality standards in OAR Chapter 340, Division 41 applicable to the main stem of the Columbia River and the Willamette Basin except within the following regulatory mixing zone:

<b>MIXING ZONE</b>	The portion of the receiving stream, an Arata Creek tributary, contained within a band extending 3 feet out from the east bank of the creek at the outfall and extending to a point 100 feet downstream from the outfall. The ZID is the portion of the regulatory mixing zone within a 5 foot radius of the outfall.
--------------------	---

3. **Groundwater Protection**

The permittee may not conduct any activities that could cause an adverse impact on existing or potential beneficial uses of groundwater. All wastewater and process related residuals must be managed and disposed of in a manner that will prevent a violation of the Groundwater Quality Protection Rules (OAR Chapter 340, Division 40).

<b>SCHEDULE B</b> <b>Minimum Monitoring and Reporting Requirements</b>
---

**1. Monitoring and Reporting Protocols****a. Sampling, Test Methods, and Laboratory Quality Assurance and Quality Control (QA/QC)**

For all test methods used, the analyses must meet the quantitation limits specified in this schedule, unless the pollutant concentration of the sample can be quantified using a higher analytical threshold. If the permit holder demonstrates, in accordance with the methodology in 40 CFR Part 136, that a higher quantitation limit is needed due to matrix interference, DEQ may approve the change. DEQ's approval must be in writing. The permit holder may also request permission to use a different test method if the one listed in the permit is obsolete, or if a method with comparable or greater accuracy has been identified. As with changes to QLs, DEQ's approval must be in writing. Regarding QA/QC, the permittee must develop and implement a written QA/QC program to verify the accuracy of sample analyses as specified in 40 CFR part 136. The QA/QC program must conform to the requirements of 40 CFR Part 136.7. For further instruction on proper sampling techniques, test methods and the use of laboratories with QA/QC procedures, see Schedule F, Sections B.1 and C.

**b. Re-analysis and Re-sampling if QA/QC Requirements Not Met**

If QA/QC requirements are not met any analysis, the results must be included in reports, but not used in calculations required by this permit. The permittee must re-analyze the sample if QA/QC requirements are not met. If the sample cannot be re-analyzed, the permittee must re-sample and analyze at the earliest opportunity.

**c. Significant Figures and Rounding Conventions**

The permittee must report the same number of significant digits as the permit limit for a given parameter. Regardless of the rounding conventions used by the permittee (i.e., rounding 5 up for the calculated results or, in the case of laboratory results, rounding 5 to the nearest even number), the permittee must use the convention consistently, and must ensure that laboratories employed by the permittee use the same convention.

**d. Reporting of Detection Levels and Quantitation Limits**

When reporting sampling results, the permittee must record the laboratory detection level and quantitation limit as defined below for each analyte except: total dissolved solids, temperature and pH.

- i. **Detection Level (DL):** The Method Detection Limit (MDL) or Limit of Detection (LOD) and derived using 40 CFR §136 Appendix B; and
- ii. **Quantitation Limit (QL):** The Method Reporting Limit (MRL) or Limit of Quantitation (LOQ). It is the lowest level at which the entire analytical system gives a recognizable signal and acceptable calibration for the analyte. It is equivalent to the concentration of the lowest calibration standard assuming that all method-specified sample weights, volumes, and cleanup procedures have been employed.

**e. Reporting Sample Results**

The permittee must follow the procedures listed below when reporting sampling results.

- i. If a sample result is at or below the DL, report the result as less than the specified DL. For example, if the DL is 1.0 µg/L and the result is non-detect, report "<1.0 µg/L" on the discharge monitoring report (DMR).
- ii. If a sample result is above the DL but below the QL, report the result as the DL preceded by DEQ's data code "e". For example, if the DL is 1.0 µg/l, the QL is 3.0 µg/L, and the result is estimated to be between the DL and QL, report "e1.0 µg/L" on the DMR.
- iii. If a sample result does not meet QA/QC requirements, the result must be included in the DMR along with a notation but must not be used in any calculation required by this permit.

These requirements do not apply to the following parameters: total dissolved solids, temperature and pH.

## 2. Effluent Monitoring Requirements

The permittee must monitor and report effluent monitoring year round for Outfall 001 at the approved sampling location in accordance with Table B1 below.

**Table B1: Effluent Monitoring and Reporting**

Item or Parameter	Minimum Frequency	Sample Type/Required Action	Report
FLOW	Daily	Measurement and Calculation	Daily total ( $Q_{E-DLY}$ ), Daily rolling 7-Day Average of daily flows ( $Q_{E-7D-AV}$ )
Total Dissolved Solids (TDS)	1 per week	Continuous or Grab	Daily Maximum
Total Residual Chlorine	1 per week	Continuous or Grab	Monthly Average, Daily Maximum
Chloride	1 per week	Continuous or Grab	Monthly Average, Daily Maximum
Temperature, $T_{E-DLY}$	Daily	Continuous <sup>1</sup>	Daily Maximum
$T_E$ Effluent Temperature as 7DADM <sup>2,3</sup>	Daily <sup>2</sup>	Calculation of rolling 7DADM	Daily 7DADM
$ETL_{DIS}$ <sup>2,4</sup>	Daily <sup>2</sup>	Calculation of rolling 7 day average	Daily $ETL_{DIS}$
pH	1 per week	Continuous or Grab	Minimum in month Maximum in month

**Table B1 Notes:**

<sup>1</sup>Grab sample values may be substituted for continuous temperature monitoring, only when needed due to equipment limitations, provided the grab samples measure the daily maximum temperature of the discharge based on production or storage that raises temperature; otherwise default measurements must be taken daily between 3 and 4 p.m.

<sup>2</sup>After 1 year of data collection, the permittee may request to discontinue calculations of 7DADM and/or  $ETL_{DIS}$  in high stream flow, cold weather months.

<sup>3</sup>The 7DADM is calculated daily as the average of 7 consecutive days of daily maximum effluent temperatures. Record and report the 7DADM for each day in the reporting month.

<sup>4</sup>The  $ETL_{DIS} = Q_E \times (T_E - T_C) \times C_F$

Where:  $ETL_{DIS}$  = is the 7-day average excess thermal load in the discharge, calculated using measured effluent temperature and effluent flow rates, in millions of kilocalories/day.

$Q_E$  = rolling 7-day average of daily flow in cfs

$T_E$  = rolling 7-day average of daily maximum effluent temperatures = 7DADM

$T_C$  = applicable temperature criterion 7dADM in °C = 20°C

$C_F$  = a conversion factor for units and heat capacity = 2.446,665 (M kcal/day)/cfs x °C

## 3. Effluent/Ambient Characterization Monitoring Requirements

The permittee must monitor and report ambient river flow and effluent for Outfall 001 at the approved sampling locations in accordance with Table B2 below.

**Table B2: Effluent/Ambient Characterization Monitoring**

EFFLUENT				
Item or Parameter	Time Period	Minimum Sampling Frequency	Sample Type/Required Action	Report
Fluoride	Year round	1 per month	Grab <sup>1</sup>	Monthly Average, Daily Maximum
Nitrate and TDS ions: Na <sup>+</sup> , Ca <sup>+</sup> , K <sup>+</sup> , Mg <sup>+</sup> , CO <sub>3</sub> <sup>-</sup> , SO <sub>4</sub> <sup>-</sup> ,	Year round	Quarterly <sup>2</sup>	Grab <sup>1</sup>	Maximum
AMBIENT				
Ambient River Flow Q <sub>R-DLY</sub> , cfs <sup>3</sup>	June 1- November 1	Optional; <sup>3</sup> If used, Daily	Reading (Q <sub>R-DLY</sub> specify source); Calculation (Q <sub>R-7D-AV</sub> )	Daily flow Q <sub>R-DLY</sub> ; Daily 7-day rolling average flow Q <sub>R-7D-AV</sub>
ETL <sub>LIM-C</sub>	June 1- November 1	Optional; <sup>3</sup> If used, Daily	Calculation	Q <sub>R</sub> = 25%Q <sub>R-7D-AV</sub> , D, and ETL <sub>LIM-C</sub>
<p>Table B2 Notes: <sup>1</sup> An additional analysis for this parameter will be performed on a split from the samples submitted for the WET Testing</p> <p><sup>2</sup> Quarterly Monitoring is to be performed with <u>sample collection</u> in January, April, July, and October</p> <p><sup>3</sup> Ambient river flow monitoring is usually for characterization; it is for compliance only when used in the formula for ETL<sub>LIM-C</sub>. If Q<sub>R-DLY</sub> is monitored, reporting is required.</p>				

**4. Whole Effluent Toxicity (WET) Testing Requirement**

The permittee must monitor final effluent for whole effluent toxicity as described below using the testing protocols specified in Schedule D, condition 4, Whole Effluent Toxicity Testing for Freshwater. Samples of final effluent must be collected at the location specified below.

**Table B3: WET Test Monitoring**

Parameter	Minimum Frequency	Sample Type/Location
Acute toxicity	The permit holder must monitor 4 times over the permit cycle with each sample collected during a different quarter. <sup>1</sup>	For acute toxicity: Grab or 24-hr composite sample taken at the approved sampling location.
Chronic toxicity	Conduct sampling for WET testing concurrent with sampling for fluoride, nitrate and TDS ions. If 4 consecutive WET tests show no toxicity at the acute (ZID) and the chronic (RMZ) dilutions, no further WET testing is required. Otherwise, the permittee must re-test and if necessary evaluate the cause of toxicity as described in Schedule D, condition 4.	For chronic toxicity: 24-hr composite sample, taken at the approved sampling location. A 24-hr composite may be collected as 4 equal grab samples collected at equal intervals throughout the day, chilled and composited together. Composite sampling is required for dual end-point tests.

Table B3 Note:

<sup>1</sup> See Schedule F, section E, condition E18.

**5. Minimum Reporting Requirements**

The permittee must report monitoring results as listed below.

**Table B4: Reporting Requirements and Due Dates**

Reporting Requirement	Reporting Frequency	Due Date <sup>1</sup>	Report Form	Submit To:
Table B1: Effluent Monitoring	Monthly	15th day of the month following sample collection	DEQ-approved discharge monitoring report (DMR) form. <sup>1</sup>	DEQ Regional Office <sup>2</sup>
Table B2: Effluent and Ambient Characterization Monitoring (parameters with daily or monthly monitoring)	Monthly	15th day of the month following sample collection	DMR <sup>1</sup>	DEQ Regional Office <sup>2</sup>
Table B2: Effluent Characterization Monitoring (parameters with quarterly monitoring)	Quarterly <sup>3</sup>	15th day of the month following sample collection	DMR <sup>1</sup>	DEQ Regional Office <sup>2</sup>
Table B3: WET Test Monitoring	See Table B3	Within 30 days of receiving test results <sup>4</sup>	1 hard copy and 1 electronic copy (electronic copy must include bench sheets)	DEQ Regional Office <sup>2</sup>

**Table B4 Notes:**

<sup>1</sup>Use DEQ approved DMR forms. Prior to use, prepare and submit for approval a temperature and ETL compliance spreadsheet. WET testing reports must meet department guidance. Forms must be submitted on time even when not discharging, noting "no discharge".

<sup>2</sup>Send monthly reports to the DEQ regional Office:  
 DEQ Northwest Region Water Quality  
 2020 SW Fourth Ave, Suite 400,  
 Portland, OR 97201-4987

<sup>3</sup>Quarterly Monitoring is to be reported February, May, August, and November

<sup>4</sup>Failed WET tests require retesting commencing within 2 weeks; see also Schedule D 4(g)(1).

**SCHEDULE D**  
**Special Conditions**

**1. Spill Response Plan**

The permittee must have an up-to-date spill response plan for prevention and handling of spills and unplanned discharges. The spill response plan must include the following:

- a. A description of the reporting system that will be used to alert responsible managers and legal authorities in the event of a spill.
- b. A description of preventive measures and facilities (including an overall facility plot showing drainage patterns) to prevent, contain, or treat spills of these materials.
- c. A description of the permittee's training program to ensure that employees are properly trained at all times to respond to unplanned and emergency incidents.
- d. A description of the applicable reporting requirements. These must be consistent with the reporting requirements found in Schedule F, condition D.5.

**2. Environmental Supervisor**

The permittee must designate a supervisor to coordinate and carry out all necessary functions related to maintenance and operation of wastewater collection, treatment, and disposal facilities. The person must have access to all information pertaining to the generation of wastes in the various process areas.

**3. Maintain Access to Outfall and provide New Sampling Location**

The Permittee must maintain access to the outfall at all times to allow for inspections, observations and monitoring and ambient sampling.

The Permittee must define and develop a new compliance sampling location which is located after all treatment but prior to the outfall to assure sampling is not compromised by high creek flows. Within 6 months of the permit effective date, the plan for such compliance sampling location must be submitted to DEQ for approval. The new compliance sampling location must be installed within 6 months of the approval. Upon completion the new compliance sampling location will become the "approved sampling location" referred to in this permit. Until that time, the existing monitoring location for Outfall 001 will be the designated "approved sampling location".

**4. Whole Effluent Toxicity Testing for Freshwater**

- a. The permittee must conduct whole effluent toxicity (WET) tests as specified in Schedule B of this permit.
- b. The facility is required to sample and conduct WET tests four times during this permit cycle. The sampling events and toxicity tests should take place in a different calendar quarter each year. The facility may choose to conduct all tests within a single year of the permit, in which case, the tests must be conducted quarterly.
- c. Acute Toxicity Testing - Organisms and Protocols
  - (1) The permittee must conduct 48-hour static renewal tests with *Ceriodaphnia dubia* (water flea) and 96-hour static renewal tests with *Pimephales promelas* (fathead minnow).
  - (2) All test methods and procedures must be in accordance with **Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms**, Fifth Edition, EPA-821-R-02-012, October 2002. Any deviation of the bioassay procedures outlined in this method must be submitted in writing to the Department for review and approval prior to use.

- (3) No treatments to the final effluent samples (for example, dechlorination), except those included as part of the methodology, may be performed by the laboratory unless approved by DEQ prior to analysis.
  - (4) **Unless otherwise approved by DEQ in writing, acute tests must be conducted on a control (0%) and the following dilution series: 25%, 33%, 50%, 67%, and 100%.**
  - (5) An acute WET test will be considered to show toxicity if there is a statistically significant difference in survival reported as the NOEC < 50% percent effluent.
- d. Chronic Toxicity Testing - Organisms and Protocols
- (1) The permittee must conduct tests with: *Ceriodaphnia dubia* (water flea) for reproduction and survival test endpoint, *Pimephales promelas* (fathead minnow) for growth and survival test endpoint, and *Raphidocelis subcapitata* (green alga formerly known as *Selanastrum capricornutum*) for growth test endpoint.
  - (2) All test methods and procedures must be in accordance with **Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms**, Fourth Edition, EPA-821-R-02-013, October 2002. Any deviation of the bioassay procedures outlined in this method must be submitted in writing to the Department for review and approval prior to use.
  - (3) Tests must be conducted on final effluent samples collected as 24-hour composite samples, with a minimum 4 equally sized subsamples at 6 hour intervals throughout an operating day. No treatments to the final effluent (i.e. dechlorination, etc), except those included as part of the methodology, may be performed by the laboratory unless approved by the Department prior to analysis.
  - (4) **Unless otherwise approved by DEQ in writing, Chronic tests must be conducted on a control (0%) and the following dilution series: 25%, 33%, 50%, 67%, and 100% effluent.**
  - (5) A chronic WET test will be considered to show toxicity if the IC<sub>25</sub> (25% inhibition concentration) occurs at dilutions equal to or less than the dilution that is known to occur at the edge of the mixing zone, that is **IC<sub>25</sub> ≤ 33% effluent.**
- e. Dual End-Point Tests –
- (1) WET tests may be dual end-point tests in which both acute and chronic end-points can be determined from the results of a single chronic test. The acute end-point shall be based on 48-hours for the *Ceriodaphnia dubia* (water flea) and 96-hours for the *Pimephales promelas* (fathead minnow).
  - (2) All test methods and procedures must be in accordance with **Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms**, Fourth Edition, EPA-821-R-02-013, October 2002. Any deviation of the bioassay procedures outlined in this method must be submitted in writing to the Department for review and approval prior to use.
  - (3) Tests must be conducted on final effluent samples collected as described in item d.(3).
  - (4) **Unless otherwise approved by DEQ in writing, tests run as dual end-point tests must be conducted on a control (0%) and the following dilution series: 25%, 33%, 50%, 67%, and 100% effluent.**
  - (5) Toxicity determinations for dual end-point tests must correspond to the acute and chronic tests described in conditions c.(5) and d.(5) above.



f. Additional Sampling Requirements

- (1) At the time of WET sampling, effluent samples for fluoride, nitrate, and TDS ions must also be collected and analyzed.

g. Evaluation of Causes and Exceedances

- (1) If any test exhibits toxicity as described in conditions c.(5) or d.(5) above, the Permittee must conduct another toxicity test using the same species and DEQ approved methodology within two weeks, unless otherwise approved by DEQ.
- (2) If two consecutive WET test results indicate acute or chronic toxicity, as described in conditions c.(5) or d.(5) above, the permittee must immediately notify DEQ of the results. DEQ will work with the permittee to determine the appropriate course of action to evaluate and address the toxicity.

h. Quality Assurance / Reporting

- (1) Quality assurance criteria, statistical analyses, and data reporting for the WET tests must be in accordance with the EPA documents stated in this condition.
- (2) A bioassay laboratory report for each test must be prepared according to the EPA method documents referenced in this Schedule. The report must include all QA/QC documentation, statistical analysis for each test performed, standard reference toxicant test (SRT) conducted on each species required for the toxicity tests, and completed Chain of Custody forms for the samples including time of sample collection and receipt. Reports must be submitted to DEQ within 30 days of receiving test results.
- (3) The report must include all endpoints measured in the test, i.e. NOEC, LOEC, and IC<sub>25</sub>.
- (4) The permittee must make available to DEQ upon request the written standard operating procedures they, or the laboratory performing the WET tests, use for all toxicity tests required by DEQ.

i. Reopener

- (1) The Department may reopen and modify this permit to include new limitations, monitoring requirements, and/or conditions as determined by the Department to be appropriate, and in accordance with procedures outlined in Oregon Administrative Rules, Chapter 340, Division 45, if:
  - a. WET testing data indicate acute and/or chronic toxicity.
  - b. The facility undergoes any process changes.
  - c. Discharge monitoring data indicate a change in the reasonable potential to exhibit toxicity.

**SCHEDULE F**  
**NPDES GENERAL CONDITIONS – INDUSTRIAL FACILITIES**

**SECTION A. STANDARD CONDITIONS**

**A1. Duty to Comply with Permit**

The permittee must comply with all conditions of this permit. Failure to comply with any permit condition is a violation of Oregon Revised Statutes (ORS) 468B.025 and the federal Clean Water Act and is grounds for an enforcement action. Failure to comply is also grounds for DEQ to terminate, modify and reissue, revoke, or deny renewal of a permit.

**A2. Penalties for Water Pollution and Permit Condition Violations**

The permit is enforceable by DEQ or EPA, and in some circumstances also by third-parties under the citizen suit provisions 33 USC § 1365. DEQ enforcement is generally based on provisions of state statutes and Environmental Quality Commission (EQC) rules, and EPA enforcement is generally based on provisions of federal statutes and EPA regulations.

ORS 468.140 allows DEQ to impose civil penalties up to \$10,000 per day for violation of a term, condition, or requirement of a permit. The federal Clean Water Act provides for civil penalties not to exceed \$32,500 and administrative penalties not to exceed \$11,000 per day for each violation of any condition or limitation of this permit.

Under ORS 468.943, unlawful water pollution, if committed by a person with criminal negligence, is punishable by a fine of up to \$25,000, imprisonment for not more than one year, or both. Each day on which a violation occurs or continues is a separately punishable offense. The federal Clean Water Act provides for criminal penalties of not more than \$50,000 per day of violation, or imprisonment of not more than 2 years, or both for second or subsequent negligent violations of this permit.

Under ORS 468.946, a person who knowingly discharges, places, or causes to be placed any waste into the waters of the state or in a location where the waste is likely to escape into the waters of the state is subject to a Class B felony punishable by a fine not to exceed \$250,000 and up to 10 years in prison per ORS chapter 161. The federal Clean Water Act provides for criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment of not more than 3 years, or both for knowing violations of the permit. In the case of a second or subsequent conviction for knowing violation, a person is subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both.

**A3. 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. In addition, upon request of DEQ, the permittee must correct any adverse impact on the environment or human health resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

**A4. Duty to Reapply**

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and have the permit renewed. The application must be submitted at least 180 days before the expiration date of this permit.

DEQ may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date.

**A5. Permit Actions**

This permit may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

- a. Violation of any term, condition, or requirement of this permit, a rule, or a statute.
- b. Obtaining this permit by misrepresentation or failure to disclose fully all material facts.
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- d. The permittee is identified as a Designated Management Agency or allocated a wasteload under a total maximum daily load (TMDL).
- e. New information or regulations.

- f. Modification of compliance schedules.
- g. Requirements of permit reopener conditions.
- h. Correction of technical mistakes made in determining permit conditions.
- i. Determination that the permitted activity endangers human health or the environment.
- j. Other causes as specified in 40 CFR §§ 122.62, 122.64, and 124.5.

The filing of a request by the permittee for a permit modification, revocation or reissuance, termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

A6. Toxic Pollutants

The permittee must comply with any applicable effluent standards or prohibitions established under Oregon Administrative Rules (OAR) 340-041-0033 and 307(a) of the federal Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the federal Clean Water Act within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

A7. Property Rights and Other Legal Requirements

The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege, or authorize any injury to persons or property or invasion of any other private rights, or any infringement of federal, tribal, state, or local laws or regulations.

A8. Permit References

Except for effluent standards or prohibitions established under section 307(a) of the federal Clean Water Act and OAR 340-041-0033 for toxic pollutants, and standards for sewage sludge use or disposal established under section 405(d) of the federal Clean Water Act, all rules and statutes referred to in this permit are those in effect on the date this permit is issued.

A9. Permit Fees

The permittee must pay the fees required by OAR.

**SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS**

B1. Proper 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 or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

B2. Need to Halt or Reduce Activity Not a Defense

For industrial or commercial facilities, upon reduction, loss, or failure of the treatment facility, the permittee must, to the extent necessary to maintain compliance with its permit, control production or all discharges or both until the facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power of the treatment facility fails or is reduced or lost. It is not a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

B3. Bypass of Treatment Facilities

a. Definitions

- (1) "Bypass" means intentional diversion of waste streams from any portion of the treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, provided the diversion is to allow essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs b and c of this section.
- (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b. Prohibition of bypass.

- (1) Bypass is prohibited and DEQ may take enforcement action against a permittee for bypass unless:

- i. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
  - ii. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventative maintenance; and
  - iii. The permittee submitted notices and requests as required under General Condition B3.c.
- (2) DEQ may approve an anticipated bypass, after considering its adverse effects and any alternatives to bypassing, when DEQ determines that it will meet the three conditions listed above in General Condition B3.b(1).
- c. Notice and request for bypass.
- (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, a written notice must be submitted to DEQ at least ten days before the date of the bypass.
  - (2) Unanticipated bypass. The permittee must submit notice of an unanticipated bypass as required in General Condition D5.

#### B4. Upset

- a. 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 operation error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.
- b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of General Condition B4.c are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- c. Conditions necessary for a demonstration of upset. 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 causes(s) of the upset;
  - (2) The permitted facility was at the time being properly operated;
  - (3) The permittee submitted notice of the upset as required in General Condition D5, hereof (24-hour notice); and
  - (4) The permittee complied with any remedial measures required under General Condition A3 hereof.
- d. Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

#### B5. Treatment of Single Operational Upset

For purposes of this permit, a single operational upset that leads to simultaneous violations of more than one pollutant parameter will be treated as a single violation. A single operational upset is an exceptional incident that causes simultaneous, unintentional, unknowing (not the result of a knowing act or omission), temporary noncompliance with more than one federal Clean Water Act effluent discharge pollutant parameter. A single operational upset does not include federal Clean Water Act violations involving discharge without a NPDES permit or noncompliance to the extent caused by improperly designed or inadequate treatment facilities. Each day of a single operational upset is a violation.

#### B6. Public Notification of Effluent Violation

If effluent limitations specified in this permit are exceeded or an overflow occurs that threatens public health, the permittee must take such steps as are necessary to alert the public, health agencies and other affected entities (for example, public water systems) about the extent and nature of the discharge in accordance with the notification procedures developed under General Condition B7. Such steps may include, but are not limited to, posting of the river at access points and other places, news releases, and paid announcements on radio and television.

#### B7. Emergency Response and Public Notification Plan

The permittee must develop and implement an emergency response and public notification plan that identifies measures to protect public health from bypasses or upsets that may endanger public health. At a minimum the plan must include mechanisms to:

- a. Ensure that the permittee is aware (to the greatest extent possible) of such events;
- b. Ensure notification of appropriate personnel and ensure that they are immediately dispatched for investigation and response;

- c. Ensure immediate notification to the public, health agencies, and other affected entities (including public water systems). The response plan must identify the public health and other officials who will receive immediate notification;
- d. Ensure that appropriate personnel are aware of and follow the plan and are appropriately trained;
- e. Provide emergency operations; and
- f. Ensure that DEQ is notified of the public notification steps taken.

**B8. Removed Substances**

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters must be disposed of in such a manner as to prevent any pollutant from such materials from entering waters of the state, causing nuisance conditions, or creating a public health hazard.

**SECTION C. MONITORING AND RECORDS**

**C1. Representative Sampling**

Sampling and measurements taken as required herein must be representative of the volume and nature of the monitored discharge. All samples must be taken at the monitoring points specified in this permit, and must be taken, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points must not be changed without notification to and the approval of DEQ.

**C2. Flow Measurements**

Appropriate flow measurement devices and methods consistent with accepted scientific practices must be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices must be installed, calibrated and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected must be capable of measuring flows with a maximum deviation of less than  $\pm 10$  percent from true discharge rates throughout the range of expected discharge volumes.

**C3. Monitoring Procedures**

Monitoring must be conducted according to test procedures approved under 40 CFR part 136 or, in the case of sludge use and disposal, approved under 40 CFR part 503 unless other test procedures have been specified in this permit.

**C4. Penalties of Tampering**

The federal 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 may, upon conviction, be punished by a fine of not more than \$10,000 per violation, imprisonment for not more than two years, or both. If a conviction of a person is for a violation committed after a first conviction of such person, punishment is a fine not more than \$20,000 per day of violation, or by imprisonment of not more than four years, or both.

**C5. Reporting of Monitoring Results**

Monitoring results must be summarized each month on a discharge monitoring report form approved by DEQ. The reports must be submitted monthly and are to be mailed, delivered or otherwise transmitted by the 15th day of the following month unless specifically approved otherwise in Schedule B of this permit.

**C6. Additional Monitoring by the Permittee**

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR part 136 or, in the case of sludge use and disposal, approved under 40 CFR part 503 or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the discharge monitoring report. Such increased frequency must also be indicated. For a pollutant parameter that may be sampled more than once per day (for example, total residual chlorine), only the average daily value must be recorded unless otherwise specified in this permit.

**C7. Averaging of Measurements**

Calculations for all limitations that require averaging of measurements must utilize an arithmetic mean, except for bacteria which must be averaged as specified in this permit.

**C8. Retention of Records**

Records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities must be retained for a period of at least 5 years (or longer as required by 40 CFR part 503). Records of all monitoring information including all calibration and maintenance records, all original strip chart 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 must be retained for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of DEQ at any time.

C9. Records Contents

Records of monitoring information must include:

- a. The date, exact place, time, and methods of sampling or measurements;
- b. The individual(s) who performed the sampling or measurements;
- c. The date(s) analyses were performed;
- d. *The individual(s) who performed the analyses;*
- e. The analytical techniques or methods used; and
- f. The results of such analyses.

C10. Inspection and Entry

The permittee must allow DEQ or EPA upon the presentation of credentials to:

- a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by state law, any substances or parameters at any location.

C11. Confidentiality of Information

Any information relating to this permit that is submitted to or obtained by DEQ is available to the public unless classified as confidential by the Director of DEQ under ORS 468.095. The permittee may request that information be classified as confidential if it is a trade secret as defined by that statute. The name and address of the permittee, permit applications, permits, effluent data, and information required by NPDES application forms under 40 CFR § 122.21 are not classified as confidential [40 CFR § 122.7(b)].

**SECTION D. REPORTING REQUIREMENTS**

D1. Planned Changes

The permittee must comply with OAR 340-052, "Review of Plans and Specifications" and 40 CFR § 122.41(l)(1). Except where exempted under OAR 340-052, no construction, installation, or modification involving disposal systems, treatment works, sewerage systems, or common sewers may be commenced until the plans and specifications are submitted to and approved by DEQ. The permittee must give notice to DEQ as soon as possible of any planned physical alternations or additions to the permitted facility.

D2. Anticipated Noncompliance

The permittee must give advance notice to DEQ of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

D3. Transfers

This permit may be transferred to a new permittee provided the transferee acquires a property interest in the permitted activity and agrees in writing to fully comply with all the terms and conditions of the permit and EQC rules. No permit may be transferred to a third party without prior written approval from DEQ. DEQ may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under 40 CFR § 122.61. The permittee must notify DEQ when a transfer of property interest takes place.

D4. Compliance Schedule

Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date. Any reports of noncompliance must include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirements.

D5. Twenty-Four Hour Reporting

The permittee must report any noncompliance that may endanger health or the environment. Any information must be provided orally (by telephone) within 24 hours from the time the permittee becomes aware of the circumstances, unless a shorter time is specified in the permit. During normal business hours, the DEQ regional office must be called. Outside of normal business hours, DEQ must be contacted at 1-800-452-0311 (Oregon Emergency Response System).

The following must be included as information that must be reported within 24 hours under this paragraph:

- a. Any unanticipated bypass that exceeds any effluent limitation in this permit;
- b. Any upset that exceeds any effluent limitation in this permit;
- c. Violation of maximum daily discharge limitation for any of the pollutants listed by DEQ in this permit; and
- d. Any noncompliance that may endanger human health or the environment.

A written submission must also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission must contain:

- e. A description of noncompliance and its cause;
- f. The period of noncompliance, including exact dates and times;
- g. The estimated time noncompliance is expected to continue if it has not been corrected;
- h. Steps taken or planned to reduce, eliminate and prevent reoccurrence of the noncompliance; and
- i. Public notification steps taken, pursuant to General Condition B7.

DEQ may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

D6. Other Noncompliance

The permittee must report all instances of noncompliance not reported under General Condition D4 or D5, at the time monitoring reports are submitted. The reports 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; and
- d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

D7. Duty to Provide Information

The permittee must furnish to DEQ within a reasonable time any information that DEQ may request to determine compliance with the permit or to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit. The permittee must also furnish to DEQ, upon request, copies of records required to be kept by this permit.

Other Information: When the permittee becomes aware that it has failed to submit any relevant facts or has submitted incorrect information in a permit application or any report to DEQ, it must promptly submit such facts or information.

D8. Signatory Requirements

All applications, reports or information submitted to DEQ must be signed and certified in accordance with 40 CFR § 122.22.

D9. Falsification of Information

Under ORS 468.953, any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, is subject to a Class C felony punishable by a fine not to exceed \$125,000 per violation and up to 5 years in prison per ORS chapter 161. Additionally, according to 40 CFR § 122.41(k)(2), any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit including monitoring reports or reports of compliance or non-compliance will, upon conviction, be punished by a federal civil penalty not to exceed \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

D10. Changes to Discharges of Toxic Pollutant

The permittee must notify DEQ as soon as it knows or has reason to believe the following:

- a. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:
  - (1) One hundred micrograms per liter (100 µg/l);

- (2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
  - (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR § 122.21(g)(7); or
  - (4) The level established by DEQ in accordance with 40 CFR § 122.44(f).
- b. That any activity has occurred or will occur that would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
- (1) Five hundred micrograms per liter (500 µg/l);
  - (2) One milligram per liter (1 mg/l) for antimony;
  - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR § 122.21(g)(7); or
  - (4) The level established by DEQ in accordance with 40 CFR § 122.44(f).

#### SECTION E. DEFINITIONS

- E1. *BOD* or *BOD<sub>5</sub>* means five-day biochemical oxygen demand.
- E2. *CBOD* or *CBOD<sub>5</sub>* means five-day carbonaceous biochemical oxygen demand.
- E3. *TSS* means total suspended solids.
- E4. *Bacteria* means but is not limited to fecal coliform bacteria, total coliform bacteria, *Escherichia coli* (*E. coli*) bacteria, and *Enterococcus* bacteria.
- E5. *FC* means fecal coliform bacteria.
- E6. *Total residual chlorine* means combined chlorine forms plus free residual chlorine
- E7. *Technology based permit effluent limitations* means technology-based treatment requirements as defined in 40 CFR § 125.3, and concentration and mass load effluent limitations that are based on minimum design criteria specified in OAR 340-041.
- E8. *mg/l* means milligrams per liter.
- E9. *µg/l* means microgram per liter.
- E10. *kg* means kilograms.
- E11. *m<sup>3</sup>/d* means cubic meters per day.
- E12. *MGD* means million gallons per day.
- E13. *Average monthly effluent limitation* as defined at 40 CFR § 122.2 means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
- E14. *Average weekly effluent limitation* as defined at 40 CFR § 122.2 means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.
- E15. *Daily discharge* as defined at 40 CFR § 122.2 means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge must be calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge must be calculated as the average measurement of the pollutant over the day.
- E16. *24-hour composite sample* means a combination of at least six discrete sample aliquots of at least 100 milliliters, collected at periodic intervals from the same location, during the operating hours of the facility over a 24 hour period. Four (rather than six) aliquots should be collected for volatile organics analyses. The composite must be flow or time proportional, whichever is more appropriate. The sample aliquots must be collected and stored in accordance with procedures prescribed in the most recent edition of *Standard Methods for the Examination of Water and Wastewater*.
- E17. *Grab sample* means an individual discrete sample collected over a period of time not to exceed 15 minutes.
- E18. *Quarter* means January through March, April through June, July through September, or October through December.
- E19. *Month* means calendar month.
- E20. *Week* means a calendar week of Sunday through Saturday.