Fact Sheet for State Waste Discharge Permit ST0045520

Columbia and Cowlitz Railway, LLC

January 11, 2019

Purpose of This Fact Sheet

This fact sheet explains and documents the decisions the Department of Ecology (Ecology) made in drafting the proposed State Waste Discharge permit for Columbia and Cowlitz Railway, LLC (Columbia and Cowlitz Railway) that will allow discharge of wastewater to Nippon Dynawave Packaging Company, LLC.

State law requires any commercial or industrial facility to obtain a permit before discharging waste or chemicals to municipal sanitary sewer collection and treatment systems or private wastewater treatment systems.

Ecology makes the draft permit and fact sheet available for public review and comment at least thirty (30) days before it issues the final permit to the facility operator. Copies of the fact sheet and draft permit for Columbia and Cowlitz Railway, State Waste Discharge permit ST0045520, are available for public review and comment from January 15, 2019 until the close of business February 15, 2019. For more details on preparing and filing comments about these documents, please see **Appendix A - Public Involvement Information**.

Columbia and Cowlitz Railway reviewed the draft permit and fact sheet for factual accuracy. Ecology corrected any errors or omissions about the facility's location, history, product type, production rate, or discharges prior to publishing this draft fact sheet for public notice.

After the public comment period closes, Ecology will summarize substantive comments and our responses to them. Ecology will include our summary and responses to comments to this fact sheet as **Appendix D - Response to Comments**, and publish it when we issue the final State Waste Discharge permit. Ecology generally will not revise the rest of the fact sheet. The full document will become part of the legal history contained in the facility's permit file.

Summary

Columbia and Cowlitz Railway operates a short-line freight railway in the Longview, Washington area. Freight includes aggregate, chemicals, dimensional lumber, industrial products, newsprint, plastic resin, plywood chips, pulpboard, and specialty packaging products. Columbia and Cowlitz Railway also operates a locomotive repair and maintenance facility located adjacent to Nippon Dynawave Packaging Company, LLC (Nippon Dynawave) on the former Weyerhaeuser NR Company site.

Process wastewater from the locomotive repair and maintenance facility flows through an oil-water separator and is then sent to Nippon Dynawave's industrial wastewater treatment plant (Nippon Dynawave Treatment Plant) for further treatment. Treated wastewater from the Nippon Dynawave Treatment Plant is ultimately discharged to the Columbia River.

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I. Introduction

The legislature defined Ecology's authority and obligations for the wastewater discharge permit program in the Water Pollution Control law, chapter 90.48 RCW (Revised Code of Washington).

Ecology adopted rules describing how it exercises its authority:

- State waste discharge program (chapter 173-216 WAC)
- Submission of plans and reports for construction of wastewater facilities (chapter 173-240 WAC)

These rules require any industrial facility owner/operator to obtain a State Waste Discharge permit before discharging wastewater to state waters. This rule includes commercial or industrial discharges to sewerage systems operated by municipalities, other public entities, or private entities which discharge into public waters of the state. They also help define the basis for limits on each discharge and for other performance requirements imposed by the permit.

Under the State Waste Discharge permit program and in response to a complete and accepted permit application, Ecology generally prepares a draft permit and accompanying fact sheet, and makes it available for public review before final issuance. If the volume of the discharge has not changed or if the characteristics of the discharge have not changed Ecology may choose not to issue a public notice. When Ecology publishes an announcement (public notice); it tells people where they can read the draft permit, and where to send their comments, during a period of thirty days. (See **Appendix A-Public Involvement Information** for more detail about the public notice and comment procedures). After the public comment period ends, Ecology may make changes to the draft State Waste Discharge permit in response to comment(s). Ecology will summarize the responses to comments and any changes to the permit in **Appendix D**.

II. Background Information

Table 1 General Facility Information

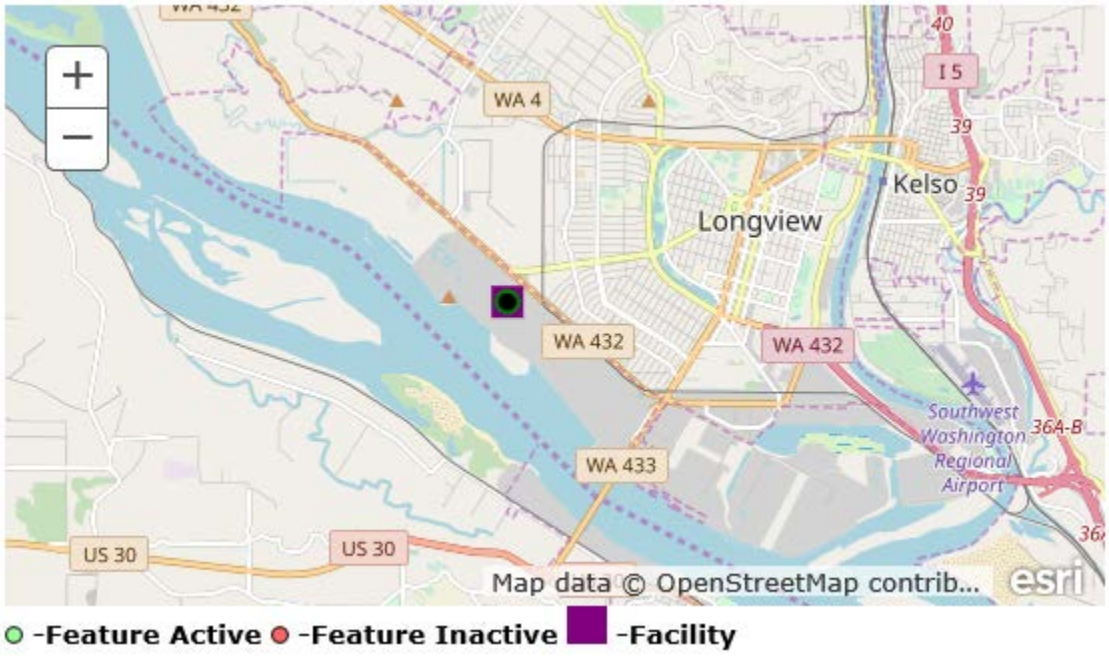
Facility Information	
Applicant	Columbia and Cowlitz Railway, LLC
Facility Name and Address	Columbia and Cowlitz Railway 3401 Industrial Way Longview, WA 98632
Contact at Facility	Name: Jon Judd Telephone #: (801) 732-8906
Responsible Official	Name: Dennis Marzec Title: President Address: P.O. Box 2817 Longview, WA 98632 Telephone #: (904) 421-6914
Industrial User Type	Minor Industrial User

Facility Information	
Industry Type	Vehicle Maintenance and Freight Transfer
Type of Treatment by Industry	Oil/Water Separator
SIC Codes	4013 (Railroad Switching and Terminal Establishments) 4011 (Railroads, Line-Haul Operating Establishments)
Facility Location (NAD83/WGS84 reference datum)	Latitude: 46.127778° Longitude: -122.978333°
Treatment Plant Receiving Discharge	Nippon Dynawave Packaging Company, LLC
Discharge Location (NAD83/WGS84 reference datum)	Latitude: 46.128612° Longitude: -122.974396°

Permit Status	
Effective Date of Temporary Permit	October 18, 2011
Updated Application Submittal Date	May 8, 2017 with revision received on November 27, 2017
Date of Ecology Acceptance of Application	November 30, 2017

Inspection Status	
Date of Last Non-Sampling Inspection	April 19, 2018

Figure 1 Facility Location Map



A. Facility Description

History

Columbia and Cowlitz Railway operates a short-line freight railway in the Longview, Washington area. Freight includes aggregate, chemicals, dimensional lumber, industrial products, newsprint, plastic resin, plywood chips, pulpboard, and specialty packaging products.

The railway's headquarters are located on the former Weyerhaeuser Longview site. The headquarters location includes an administrative building, three tracks, a wash pad, and a locomotive repair and maintenance facility. The headquarters location was previously owned and operated by Weyerhaeuser NR Company. As of 2011 this site is owned and operated by Columbia and Cowlitz Railway.

All process wastewater generated at the headquarters facility is sent to the Nippon Dynawave Treatment Plant. Stormwater discharges from the site are covered by the Industrial Stormwater General Permit (Permit No. WAR125111).

Columbia and Cowlitz Railway submitted a State Waste Discharge Permit application on August 19, 2011 after purchasing the railway and headquarters location from Weyerhaeuser NR Company. A temporary permit based on the information included in the original permit application became effective on October 18, 2011, in accordance with RCW 90.48.200. An updated permit application was received from Columbia and Cowlitz Railway on May 8, 2017. A revision to the updated permit application was received from Columbia and Cowlitz Railway on November 27, 2017.

Industrial Process(es)

Standard Industrial Classifications (SIC) Codes associated with Columbia and Cowlitz Railway include 4013 – Railroad Switching and Terminal Establishments, and 4011 – Railroads, Line-Haul Operating Establishments. The facility generally operates year-round six days a week.

Columbia and Cowlitz Railway is a Minor Industrial User which discharges process wastewater to the Nippon Dynawave Treatment Plant. Process wastewater is primarily generated in two areas of the site. There is a wash pad located directly outside of the locomotive repair and maintenance facility. Locomotives and parts are steam-cleaned on the wash pad. Cleaning water drains to the process wastewater line. Process wastewater is also generated in the locomotive repair and maintenance facility from maintenance activities. A portion of the stormwater runoff from the site drains to the process wastewater discharge line.

Wastewater Pretreatment

Process wastewater and oil generated from the locomotive repair and maintenance facility flows to one of two oil pits. When the oil pits are full, they are pumped to an oil-water separator. Separated water is discharged to the Nippon Dynawave Treatment Plant for further treatment. Process wastewater from the wash pad drains through the oil-water separator and is discharged to the Nippon Dynawave Treatment Plant for further treatment.

Solid Wastes

When the oil pits are pumped to the oil-water separator, some oily sludge residue remains in the bottom of the pits. Columbia and Cowlitz Railway hires a contractor to remove and dispose of the sludge. This activity is typically completed one to two times per year. Sludge build-up can also occur in the oil-water separator.

The operation and maintenance procedures included in Special Condition S4.A. require Columbia and Cowlitz Railway to remove sludge and solids from the oil pits and the oil-water separator as needed. The removed sludge and solids must be disposed of in accordance with all applicable laws and regulations.

Sanitary Wastewater

Columbia and Cowlitz Railway discharges sanitary wastewater to Nippon Dynawave's sanitary wastewater treatment system (Nippon Dynawave Sanitary Treatment System). All sanitary wastewaters must be discharged to the Nippon Dynawave Sanitary Treatment System. The discharge of process wastewaters to the Nippon Dynawave Sanitary Treatment System is prohibited.

B. Discharge Location to the Nippon Dynawave Treatment Plant

Columbia and Cowlitz Railway discharges process wastewater to the Nippon Dynawave Treatment Plant. Process wastewater undergoes pre-treatment through an oil-water separator and then gravity flows to Pump Station 2.

Pump Station 2 collects process wastewater from multiple industrial facilities and is located on an adjacent industrial site.

Process wastewater is pumped from Pump Station 2 to Nippon Dynawave's "F Sump". The "F Sump" discharges to the primary clarifier and subsequently undergoes secondary treatment prior to discharging to the Columbia River.

The Nippon Dynawave Treatment Plant treats an average of approximately 60 million gallons per day (MGD) of industrial wastewater generated from industrial processes at multiple industrial facilities located near the treatment facility. Columbia and Cowlitz Railway discharges approximately 100 gallons per day (gpd) of process wastewater to the Nippon Dynawave Treatment Plant. Columbia and Cowlitz Railway does not anticipate an increase in the amount of process wastewater discharged to the Nippon Dynawave Treatment Plant.

C. Wastewater Characterization

Columbia and Cowlitz Railway has not previously had coverage under an individual State Waste Discharge Permit and no monitoring has been required for the facility to date. Therefore, Columbia and Cowlitz Railway does not have sample data for the process wastewater stream which is discharged to the Nippon Dynawave Treatment Plant.

Based on the information in Columbia and Cowlitz Railway's updated application and the SIC codes for the facility, the following pollutants are reasonably expected to be present in the process wastewater discharge to the Nippon Dynawave Treatment Plant: Total Suspended Solids (TSS) and Oil and Grease.

D. Summary of Compliance with Previous Permit Issued

Prior to 2011, Weyerhaeuser NR Company owned and operated the locomotive repair and maintenance facility. Columbia and Cowlitz Railway submitted an application for a State Waste Discharge Permit in 2011, and was granted coverage under a temporary permit in October 2011. The temporary permit required the facility to discharge in accordance with the information provided in the initial permit application. Effluent limits were not established and monitoring was not required for the facility. Columbia and Cowlitz Railway has complied with the applicable requirements of the temporary permit.

E. State Environmental Policy Act (SEPA) Compliance

State law exempts the issuance, reissuance or modification of any wastewater discharge permit from the SEPA process as long as the permit contains conditions that are no less stringent than federal and state rules and regulations (RCW 43.21C.0383). The exemption applies only to existing discharges, not to new discharges. As described in the application, the discharge of process wastewater from the operations at the facility, currently owned and operated by Columbia and Cowlitz Railway, to the treatment plant that is currently owned and operated by Nippon Dynawave has occurred for more than 30 years. As such, this is not a new discharge.

III. Proposed Permit Limits

State regulations require that Ecology base limits in a State Waste Discharge permit on the:

- Technology and treatment methods available to treat specific pollutants (technology-based). Technology-based limits are set by the EPA and published as a regulation (40 CFR 400 - 471), or Ecology develops limits on a case-by-case basis (40 CFR 125.3, and RCW 90.48). Dischargers must treat wastewater using all known, available, reasonable methods of prevention, control, and treatment (AKART).
- Effects of the pollutants on the publicly-owned treatment works (POTW) or privately owned treatment system. Wastewater must not interfere with the operation of the POTW or privately owned treatment systems. Ecology considers local limits in developing permit limits.
- Applicable requirements of other local, state and federal laws.

Ecology applies the most stringent of these limits to each parameter of concern and further describes the proposed limits below.

The limits in this permit reflect information received in the application and from supporting reports (engineering, hydrogeology, monitoring, etc.). Ecology evaluated the permit application and determined the limits needed to comply with the rules adopted by the state of Washington. Ecology does not develop effluent limits for all reported pollutants. Some pollutants are not treatable at the concentrations reported, are not controllable at the source, and are not listed in regulation.

Ecology does not usually develop permit limits for pollutants not reported in the permit application but may be present in the discharge. The permit does not authorize the discharge of the non-reported pollutants. During the five-year permit term, the facility's effluent discharge conditions may change from those conditions reported in the permit application. The facility must notify Ecology if significant changes occur in any constituent. Until Ecology modifies the permit to reflect additional discharge of pollutants, a permitted facility could be violating its permit.

A. Design Criteria

According to WAC 173-216-110 (4), neither flows nor waste loadings may exceed approved design criteria. Ecology has not established design criteria for this facility.

According to Columbia and Cowlitz Railway's State Waste Discharge Permit Application, process wastewater is discharged at an average monthly rate of 100 gpd to the Nippon Dynawave Treatment Plant. On average, the discharge makes up less than 1 percent of the total flow discharged from the Nippon Dynawave Treatment Plant.

As such, Ecology has determined that Columbia and Cowlitz Railway's discharge has minimal impacts in terms of waste loading and flow to the Nippon Dynawave Treatment Plant. An engineering report to establish design criteria for the pre-treatment facility will not be required at this time.

B. Technology-Based Effluent Limits

Waste discharge permits issued by Ecology specify conditions requiring all available and reasonable methods of prevention, control, and treatment (AKART) of discharges to waters of the state (RCW 90.48).

Existing federal categorical limits that could potentially apply for this facility are found under 40 CFR Part 442 – Transportation Equipment Cleaning Point Source Category. The maximum total annual discharge from Columbia and Cowlitz Railway is approximately 26,000 gallons, based on the reported maximum daily flow rate and the hours of operation of the facility. Because Columbia and Cowlitz Railway discharges less than 100,000 gallons per year the federal categorical limits included in 40 CFR Part 442 do not apply. Regardless, federal pretreatment standards do not apply to discharges to a privately owned treatment works. However, they may be used on a best-professional-judgement basis when they exist for an industrial facility.

The state waste discharge permit regulations include restrictions and prohibitions to protect publicly-owned sewerage systems. A facility may not discharge any wastewater having a pH less than 5.0 or greater than 11.0 or having any other corrosive property capable of causing damage or hazard to structures, equipment, or personnel unless the:

- System is specifically designed to accommodate such discharge.
- Discharge is authorized by a permit (WAC 173-216-060).

Federal regulations (40 CFR 403.5b) also prohibits the discharge of pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, unless the collection and treatment system is designed to accommodate such discharges. These rules **do not** apply to privately owned treatment works. For this reason, Ecology has established pH limits on a best-professional-judgement basis, prohibiting the discharge of wastewater with pH lower than 6.0 or greater than 12.4. It has been demonstrated, based on other process wastewater discharges to the Nippon Dynawave Treatment Plant, that pH discharges within this range will not cause damage or hazard to structures, equipment, or personnel at the receiving wastewater treatment plant.

Oil and grease is a pollutant of concern which is expected in the discharge. Ecology requires the Permittee to reduce the discharge of oil and grease in a manner which meets AKART. Ecology has determined that, for this discharge, AKART constitutes best management practices (BMPs), including the use of an oil-water separator, good housekeeping practices, and operation and maintenance procedures as further detailed in the Operations and Maintenance section of this Fact Sheet. No oil and grease limits will be included in the permit.

The following permit limits are necessary to satisfy the requirement for AKART:

Table 2 Technology Based Effluent Limit

Effluent Limit Parameter	Daily Minimum	Daily Maximum
pH	6.0 standard units	12.4 standard units

IV. Monitoring Requirements

Ecology requires monitoring, recording, and reporting (WAC 173-216-110) to verify that the treatment process functions correctly and that the discharge complies with the permit's effluent limits.

If a facility uses a contract laboratory to monitor wastewater, it must ensure that the laboratory uses the methods and meets or exceeds the method detection levels required by the permit. The permit describes when facilities may use alternative methods. It also describes what to do in certain situations when the laboratory encounters matrix effects. When a facility uses an alternative method as allowed by the permit, it must report the test method, detection level (DL), and quantitation level (QL) on the discharge monitoring report or in the required report.

A. Lab Accreditation

Ecology requires that facilities must use a laboratory registered or accredited under the provisions of chapter 173-50 WAC, Accreditation of Environmental Laboratories, to prepare all monitoring data (with the exception of certain parameters).

B. Wastewater Monitoring

Ecology details the proposed monitoring schedule under Special Condition S2. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, significance of pollutants, and cost of monitoring.

V. Other Permit Conditions

A. Reporting and Recordkeeping

Ecology based Special Condition S3 on its authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges [WAC 173-216-110 and CFR 403.12 (e),(g), and (h)].

B. Operations and Maintenance

Ecology requires dischargers to take all reasonable steps to properly operate and maintain their wastewater treatment system in accordance with state regulations (WAC 173-240-080 and WAC 173-216-110).

The facility must prepare and submit an operation and maintenance (O&M) manual for the O&M activities included in Special Condition S4.A.

Implementation of the procedures in the O&M manual ensures the facility's compliance with the terms and limits in the permit.

C. Prohibited Discharges

Ecology prohibits certain pollutants from being discharged to the Nippon Dynawave Treatment Plant. These include substances which cause pass-through or interference, pollutants which may cause damage to the Nippon Dynawave Treatment Plant or harm to the Nippon Dynawave Treatment Plant workers (chapter 173-216 WAC) and the discharge of designated dangerous wastes not authorized by this permit (chapter 173-303 WAC).

D. Dilution Prohibited

Ecology prohibits the facility from diluting its effluent as a partial or complete substitute for adequate treatment to achieve compliance with permit limits.

E. Non Routine and Unanticipated Wastewater

Occasionally, this facility may generate wastewater not characterized in the permit application because it is not a routine discharge and the facility did not anticipate it at the time of application. These wastes typically consist of waters used to pressure-test storage tanks or fire water systems or of leaks from drinking water systems.

The permit authorizes the discharge of non-routine and unanticipated wastewater under certain conditions. The facility must characterize these waste waters for pollutants and examine the opportunities for reuse. Depending on the nature and extent of pollutants in this wastewater and on any opportunities for reuse, Ecology may:

- Authorize the facility to discharge the water.
- Require the facility to treat the wastewater.
- Require the facility to reuse the wastewater.

F. General Conditions

Ecology bases the standardized general conditions on state law and regulations. They are included in all state waste discharge permits issued by Ecology.

VI. Public Notification of Noncompliance

Ecology may annually publish a list of all industrial users in significant noncompliance with Pretreatment Standards or Requirements during any of the previous four quarters in a local newspaper. Accordingly, this permit Special Condition informs the Facility that noncompliance with this permit may result in publication of the noncompliance.

VII. Permit Issuance Procedures

A. Permit Modifications

Ecology may modify this permit to impose or change the numerical limits, if necessary to comply with changes in the pretreatment requirements, conditions in local sewer ordinances, or based on new information from sources such as inspections and effluent monitoring. It may also modify this permit to comply with new or amended state or federal regulations.

B. Proposed Permit Issuance

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limits and conditions believed necessary to control toxics. Ecology proposes that the permit be issued for 5 years.

VIII. References for Text and Appendices

Washington State Department of Ecology.

Permit and Wastewater Related Information (https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Water-quality-permits-guidance/)

July 2018. *Permit Writer's Manual*, Publication Number 92-109 (https://fortress.wa.gov/ecy/publications/summarypages/92109.html)

Appendix A--Public Involvement Information

Ecology proposes to issue a permit to Columbia and Cowlitz Railway. The permit includes wastewater discharge limits and other conditions. This fact sheet describes the facility and Ecology's reasons for requiring permit conditions.

Ecology will place a Public Notice of Draft on January 15, 2019 in The Daily News (Longview) to inform the public and to invite comment on the proposed draft State Waste Discharge permit and fact sheet.

The notice:

- Tells where copies of the draft Permit and Fact Sheet are available for public evaluation (a local public library, the closest Regional or Field Office, posted on our website).
- Offers to provide the documents in an alternate format to accommodate special needs.
- Urges people to submit their comments, in writing, before the end of the Comment Period
- Tells how to request a public hearing of comments about the proposed state waste discharge permit.
- Explains the next step(s) in the permitting process.

Ecology's document *Frequently Asked Questions about Effective Public Commenting*, is available on our website at https://fortress.wa.gov/ecy/publications/SummaryPages/0307023.html.

You may obtain further information from Ecology by telephone or by writing to the address listed below.

Water Quality Permit Coordinator
Department of Ecology
Industrial Section
P.O. Box 47600
Olympia, WA 98504-7600

The primary author of this permit and fact sheet is Kelsey Holbrook, 360-407-6355.

Appendix B --Your Right to Appeal

You have a right to appeal this permit to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of the final permit. The appeal process is governed by chapter 43.21B RCW and chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2) (see glossary).

To appeal you must do the following within 30 days of the date of receipt of this permit:

- File your appeal and a copy of this permit with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and this permit on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.

You must also comply with other applicable requirements in chapter 43.21B RCW and chapter 371-08 WAC.

ADDRESS AND LOCATION INFORMATION

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503 **Pollution Control Hearings Board** 1111 Israel Road SW STE 301 Tumwater, WA 98501	**Department of Ecology** Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608 **Pollution Control Hearings Board** PO Box 40903 Olympia, WA 98504-0903

Appendix C--Glossary

1-DMax or 1-day maximum temperature -- The highest water temperature reached on any given day. This measure can be obtained using calibrated maximum/minimum thermometers or continuous monitoring probes having sampling intervals of thirty minutes or less.

7-DADMax or 7-day average of the daily maximum temperatures -- The arithmetic average of seven consecutive measures of daily maximum temperatures. The 7-DADMax for any individual day is calculated by averaging that day's daily maximum temperature with the daily maximum temperatures of the three days prior and the three days after that date.

Acute toxicity --The lethal effect of a compound on an organism that occurs in a short time period, usually 48 to 96 hours.

AKART -- The acronym for "all known, available, and reasonable methods of prevention, control and treatment." AKART is a technology-based approach to limiting pollutants from wastewater discharges, which requires an engineering judgment and an economic judgment. AKART must be applied to all wastes and contaminants prior to entry into waters of the state in accordance with RCW 90.48.010 and 520, WAC 173-200-030(2)(c)(ii), and WAC 173-216-110(1)(a).

Alternate point of compliance -- An alternative location in the groundwater from the point of compliance where compliance with the groundwater standards is measured. It may be established in the groundwater at locations some distance from the discharge source, up to, but not exceeding the property boundary and is determined on a site specific basis following an AKART analysis. An "early warning value" must be used when an alternate point is established. An alternate point of compliance must be determined and approved in accordance with WAC 173-200-060(2).

Ambient water quality -- The existing environmental condition of the water in a receiving water body.

Ammonia -- Ammonia is produced by the breakdown of nitrogenous materials in wastewater. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect wastewater.

Annual average design flow (AADF -- average of the daily flow volumes anticipated to occur over a calendar year.

Average monthly (intermittent) discharge limit-- The average of the measured values obtained over a calendar month's time taking into account zero discharge days.

Average monthly discharge limit -- The average of the measured values obtained over a calendar month's time.

Background water quality -- The concentrations of chemical, physical, biological or radiological constituents or other characteristics in or of groundwater at a particular point in time upgradient of an activity that has not been affected by that activity, [WAC 173-200-020(3)]. Background water quality for any parameter is statistically defined as the 95% upper tolerance interval with a 95% confidence based on at least eight hydraulically upgradient water quality samples. The eight samples are collected over a period of at least one year, with no more than one sample collected during any month in a single calendar year.

Best management practices (BMPs) -- Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the state. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

BOD5 -- Determining the five-day Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD5 is used in modeling to measure the reduction of dissolved oxygen in receiving waters after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD_5 is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.

Bypass -- The intentional diversion of waste streams from any portion of a treatment facility.

Categorical pretreatment standards -- National pretreatment standards specifying quantities or concentrations of pollutants or pollutant properties, which may be discharged to a POTW by existing or new industrial users in specific industrial subcategories.

Chlorine -- A chemical used to disinfect wastewaters of pathogens harmful to human health. It is also extremely toxic to aquatic life.

Chronic toxicity -- The effect of a compound on an organism over a relatively long time, often 1/10 of an organism's lifespan or more. Chronic toxicity can measure survival, reproduction or growth rates, or other parameters to measure the toxic effects of a compound or combination of compounds.

Clean water act (CWA -- The federal Water Pollution Control Act enacted by Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, 97-117; USC 1251 et seq.

Compliance inspection-without sampling -- A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

Compliance inspection-with sampling -- A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations. In addition it includes as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Ecology may conduct additional sampling.

Composite sample -- A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples.

May be "time-composite" (collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots).

Construction activity -- Clearing, grading, excavation, and any other activity, which disturbs the surface of the land. Such activities may include road building; construction of residential houses, office buildings, or industrial buildings; and demolition activity.

Continuous monitoring -- Uninterrupted, unless otherwise noted in the permit.

Critical condition -- The time during which the combination of receiving water and waste discharge conditions have the highest potential for causing toxicity in the receiving water environment. This situation usually occurs when the flow within a water body is low, thus, its ability to dilute effluent is reduced.

Date of receipt – This is defined in RCW 43.21B.001(2) as five business days after the date of mailing; or the date of actual receipt, when the actual receipt date can be proven by a preponderance of the evidence. The recipient's sworn affidavit or declaration indicating the date of receipt, which is unchallenged by the agency, constitutes sufficient evidence of actual receipt. The date of actual receipt, however, may not exceed forty-five days from the date of mailing.

Detection limit -- The minimum concentration of a substance that can be measured and reported with 99 percent confidence that the pollutant concentration is above zero and is determined from analysis of a sample in a given matrix containing the pollutant.

Dilution factor (DF) -- A measure of the amount of mixing of effluent and receiving water that occurs at the boundary of the mixing zone. Expressed as the inverse of the percent effluent fraction, for example, a dilution factor of 10 means the effluent comprises 10% by volume and the receiving water 90%.

Distribution uniformity -- The uniformity of infiltration (or application in the case of sprinkle or trickle irrigation) throughout the field expressed as a percent relating to the average depth infiltrated in the lowest one-quarter of the area to the average depth of water infiltrated.

Early warning value -- The concentration of a pollutant set in accordance with WAC 173-200-070 that is a percentage of an enforcement limit. It may be established in the effluent, groundwater, surface water, the vadose zone or within the treatment process. This value acts as a trigger to detect and respond to increasing contaminant concentrations prior to the degradation of a beneficial use.

Enforcement limit -- The concentration assigned to a contaminant in the groundwater at the point of compliance for the purpose of regulation, [WAC 173-200-020(11)]. This limit assures that a groundwater criterion will not be exceeded and that background water quality will be protected.

Engineering report -- A document that thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report must contain the appropriate information required in WAC 173-240-060 or 173-240-130.

Fecal coliform bacteria -- Fecal coliform bacteria are used as indicators of pathogenic bacteria in the effluent that are harmful to humans. Pathogenic bacteria in wastewater discharges are controlled by disinfecting the wastewater. The presence of high numbers of fecal coliform bacteria in a water body can indicate the recent release of untreated wastewater and/or the presence of animal feces.

Grab sample -- A single sample or measurement taken at a specific time or over as short a period of time as is feasible.

Groundwater -- Water in a saturated zone or stratum beneath the surface of land or below a surface water body.

Industrial user -- A discharger of wastewater to the sanitary sewer that is not sanitary wastewater or is not equivalent to sanitary wastewater in character.

Industrial wastewater -- Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business; from the development of any natural resource; or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated stormwater and, also, leachate from solid waste facilities.

Interference -- A discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

- Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and

- Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), sludge regulations appearing in 40 CFR Part 507, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

Local limits -- Specific prohibitions or limits on pollutants or pollutant parameters developed by a POTW.

Major facility -- A facility discharging to surface water with an EPA rating score of > 80 points based on such factors as flow volume, toxic pollutant potential, and public health impact.

Maximum daily discharge limit -- The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.

Maximum day design flow (MDDF) -- The largest volume of flow anticipated to occur during a one-day period, expressed as a daily average.

Maximum month design flow (MMDF) -- The largest volume of flow anticipated to occur during a continuous 30-day period, expressed as a daily average.

Maximum week design flow (MWDF) -- The largest volume of flow anticipated to occur during a continuous 7-day period, expressed as a daily average.

Method detection level (MDL) -- See Detection Limit.

Minor facility -- A facility discharging to surface water with an EPA rating score of < 80 points based on such factors as flow volume, toxic pollutant potential, and public health impact.

Mixing zone -- An area that surrounds an effluent discharge within which water quality criteria may be exceeded. The permit specifies the area of the authorized mixing zone that Ecology defines following procedures outlined in state regulations (chapter 173-201A WAC).

National pollutant discharge elimination system (NPDES) -- The NPDES (Section 402 of the Clean Water Act) is the federal wastewater permitting system for discharges to navigable waters of the United States. Many states, including the state of Washington, have been delegated the authority to issue these permits. NPDES permits issued by Washington State permit writers are joint NPDES/State permits issued under both state and federal laws.

pH -- The pH of a liquid measures its acidity or alkalinity. It is the negative logarithm of the hydrogen ion concentration. A pH of 7 is defined as neutral and large variations above or below this value are considered harmful to most aquatic life.

Pass-through -- A discharge which exits the POTW into waters of the State in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation), or which is a cause of a violation of State water quality standards.

Peak hour design flow (PHDF) -- The largest volume of flow anticipated to occur during a one-hour period, expressed as a daily or hourly average.

Peak instantaneous design flow (PIDF) -- The maximum anticipated instantaneous flow.

Point of compliance -- The location in the groundwater where the enforcement limit must not be exceeded and a facility must comply with the Ground Water Quality Standards. Ecology determines this limit on a site-specific basis. Ecology locates the point of compliance in the groundwater as near and directly downgradient from the pollutant source as technically, hydrogeologically, and geographically feasible, unless it approves an alternative point of compliance.

Potential significant industrial user (PSIU) --A potential significant industrial user is defined as an Industrial User that does not meet the criteria for a Significant Industrial User, but which discharges wastewater meeting one or more of the following criteria:

a. Exceeds 0.5 % of treatment plant design capacity criteria and discharges <25,000 gallons per day or;

b. Is a member of a group of similar industrial users which, taken together, have the potential to cause pass through or interference at the POTW (e.g. facilities which develop photographic film or paper, and car washes).

Ecology may determine that a discharger initially classified as a potential significant industrial user should be managed as a significant industrial user.

Quantitation level (QL) -- Also known as Minimum Level of Quantitation (ML) – The lowest level at which the entire analytical system must give a recognizable signal and acceptable calibration point for the analyte. It is equivalent to the concentration of the lowest calibration standard, assuming that the lab has used all method-specified sample weights, volumes, and cleanup procedures. The QL is calculated by multiplying the MDL by 3.18 and rounding the result to the number nearest to (1,2,or 5) x 10^n, where n is an integer. (64 FR 30417).
ALSO GIVEN AS:
The smallest detectable concentration of analyte greater than the Detection Limit (DL) where the accuracy (precision & bias) achieves the objectives of the intended purpose. (Report of the Federal Advisory Committee on Detection and Quantitation Approaches and Uses in Clean Water Act Programs Submitted to the US Environmental Protection Agency December 2007).

Reasonable potential -- A reasonable potential to cause a water quality violation, or loss of sensitive and/or important habitat.

Responsible corporate officer -- A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures (40 CFR 122.22).

Sample Maximum -- No sample may exceed this value.

Significant industrial user (SIU) --

1) All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N and;

2) Any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blow-down wastewater); contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority* on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement [in accordance with 40 CFR 403.8(f)(6)].

Upon finding that the industrial user meeting the criteria in paragraph 2, above, has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Control Authority* may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such industrial user is not a significant industrial user.

*The term "Control Authority" refers to the Washington State Department of Ecology in the case of non-delegated POTWs or to the POTW in the case of delegated POTWs.

Slug discharge -- Any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge to the POTW. This may include any pollutant released at a flow rate that may cause interference or pass through with the POTW or in any way violate the permit conditions or the POTW's regulations and local limits.

Soil scientist -- An individual who is registered as a Certified or Registered Professional Soil Scientist or as a Certified Professional Soil Specialist by the American Registry of Certified Professionals in Agronomy, Crops, and Soils or by the National Society of Consulting Scientists or who has the credentials for membership. Minimum requirements for eligibility are: possession of a baccalaureate, masters, or doctorate degree from a U.S. or Canadian institution with a minimum of 30 semester hours or 45 quarter hours professional core courses in agronomy, crops or soils, and have 5,3,or 1 years, respectively, of professional experience working in the area of agronomy, crops, or soils.

Solid waste -- All putrescible and non-putrescible solid and semisolid wastes including, but not limited to, garbage, rubbish, ashes, industrial wastes, swill, sewage sludge, demolition and construction wastes, abandoned vehicles or parts thereof, contaminated soils and contaminated dredged material, and recyclable materials.

Soluble BOD_5 -- Determining the soluble fraction of Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of soluble organic material present in an effluent that is utilized by bacteria. Although the soluble BOD_5 test is not specifically described in Standard Methods, filtering the raw sample through at least a 1.2 um filter prior to running the standard BOD_5 test is sufficient to remove the particulate organic fraction.

State waters -- Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

Stormwater--That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a stormwater drainage system into a defined surface water body, or a constructed infiltration facility.

Technology-based effluent limit -- A permit limit based on the ability of a treatment method to reduce the pollutant.

Total coliform bacteria--A microbiological test, which detects and enumerates the total coliform group of bacteria in water samples.

Total dissolved solids--That portion of total solids in water or wastewater that passes through a specific filter.

Total maximum daily load (TMDL) --A determination of the amount of pollutant that a water body can receive and still meet water quality standards.

Total suspended solids (TSS) -- Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

Upset -- 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, lack of preventative maintenance, or careless or improper operation.

Water quality-based effluent limit -- A limit imposed on the concentration of an effluent parameter to prevent the concentration of that parameter from exceeding its water quality criterion after discharge into receiving waters.

Appendix D--Response to Comments

Ecology received two comments regarding the draft NPDES permit and the fact sheet for Columbia and Cowlitz Railway, LLC. The comments were from Patriot Rail (Columbia & Cowlitz Railway). The comments and Ecology's responses are included below.

PATRIOT RAIL (COLUMBIA AND COWLITZ RAILWAY) COMMENTS

1. Facility Contact and Responsible Official

Patriot Rail provided an updated contact for the facility and the responsible official.

Ecology Response to Comment:

The contact information has been updated in the fact sheet to reflect the most current information.

2. pH Sampling Frequency

Due to the extremely small portion of wastewater we contribute to the overall Nippon facility, we believe a 1x month sampling should be OK. This is also in line with the frequency of the Oil & Grease and the TSS samplings. Our portion of the wastewater is 100 GPD out of the 60,000,000 GPD.

Ecology Response to Comment:
The proposed permit requires weekly monitoring for pH. Special Condition S2.E. allows for a reduction in sampling frequency after twelve months of monitoring. The discharge from Columbia and Cowlitz Railway to the Nippon Dynawave treatment plant has not previously been monitored. While this discharge is a small portion of the overall influent to the industrial treatment plant, significantly high or low pH can have an adverse effect on the collection system and the treatment plant even at small volumes. Additionally, changes in pH can be an indicator of spills or improper operation and maintenance. The weekly pH monitoring requirement will remain in the permit. Following twelve months of monitoring Columbia and Cowlitz Railway can request a reduction in monitoring for pH in accordance with Special Condition S2.E.