

## **Fact Sheet for NPDES Permit WA0991016**

### **North Pacific Paper Company, LLC**

April 25, 2019

#### **Purpose of this fact sheet**

This fact sheet explains and documents the decisions the Department of Ecology (Ecology) made in drafting the proposed National Pollutant Discharge Elimination System (NPDES) permit for North Pacific Paper Company, LLC (NORPAC).

This fact sheet complies with Section 173-220-060 of the Washington Administrative Code (WAC), which requires Ecology to prepare a draft permit and accompanying fact sheet for public evaluation before issuing an NPDES permit.

Ecology makes the draft permit and fact sheet available for public review and comment at least thirty (30) days before issuing the final permit. Copies of the fact sheet and draft permit for NORPAC, NPDES permit WA0991016, are available for public review and comment from April 25, 2019 until May 28, 2019. For more details on preparing and filing comments about these documents, please see **Appendix A - Public Involvement Information**.

NORPAC reviewed the draft permit and fact sheet for factual accuracy. Ecology corrected any errors or omissions regarding the facility's location, history, discharges, or receiving water prior to publishing this draft fact sheet for public notice.

After the public comment period closes, Ecology will summarize substantive comments and provide responses to them. Ecology will include the summary and responses to comments in this fact sheet as **Appendix E - Response to Comments**, and publish it when issuing the final NPDES 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**

NORPAC operates a thermo-mechanical pulp, secondary fiber deink and non-deink, and packaging, newsprint, printing, and writing paper mill located in Longview, Washington. The process wastewater from NORPAC is discharged to Nippon Dynawave Packaging Company, LLC's Industrial Wastewater Treatment Plant (Nippon Dynawave Industrial Treatment Plant). Sanitary wastewater from NORPAC is discharged to Nippon Dynawave Packaging Company, LLC's Sanitary Wastewater Treatment Plant (Nippon Dynawave Sanitary Treatment Plant). NORPAC's discharges are currently regulated by NPDES Permit WA0000124, the main purpose of the proposed permit is to separate these discharges from that permit as a result of a change in ownership of the facilities.

The majority of the stormwater from NORPAC's site is discharged to Weyerhaeuser NR Company's stormwater system, which ultimately discharges to the Consolidated Diking Improvement District (CDID) Ditch #3.

This permit includes limits and other conditions for NORPAC's process wastewater discharges to the Nippon Dynawave Industrial Treatment Plant and for stormwater discharges to Weyerhaeuser NR Company's stormwater system.

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## I. Introduction

The Federal Clean Water Act (FCWA, 1972, and later amendments in 1977, 1981, and 1987) established water quality goals for the navigable (surface) waters of the United States. One mechanism for achieving the goals of the Clean Water Act is the National Pollutant Discharge Elimination System (NPDES), administered by the federal Environmental Protection Agency (EPA). The EPA authorized the state of Washington to manage the NPDES permit program in our state. Our state legislature accepted the delegation and assigned the power and duty for conducting NPDES permitting and enforcement to Ecology. The Legislature defined Ecology's authority and obligations for the wastewater discharge permit program in 90.48 RCW (Revised Code of Washington).

The following regulations apply to industrial NPDES permits:

- Procedures Ecology follows for issuing NPDES permits (chapter 173-220 WAC)
- Water quality criteria for surface waters (chapter 173-201A WAC)
- Water quality criteria for ground waters (chapter 173-200 WAC)
- Whole effluent toxicity testing and limits (chapter 173-205 WAC)
- Sediment management standards (chapter 173-204 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 an NPDES permit before discharging wastewater to state waters. They also help define the basis for limits on each discharge and for performance requirements imposed by the permit.

Under the NPDES permit program and in response to a complete and accepted permit application, Ecology must prepare a draft permit and accompanying fact sheet, and make them available for public review before final issuance. Ecology must also publish an announcement (public notice) telling people where they can read the draft permit, and where to send their comments, during a period of thirty days (WAC 173-220-050). (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 NPDES permit in response to comment(s). Ecology will summarize the responses to comments and any changes to the permit in **Appendix E**.

## II. Background Information

**Table 1 General Facility Information**

<b>Facility Information</b>	
Applicant:	North Pacific Paper Company, LLC
Facility Name and Address	NORPAC 3001 Industrial Way Longview, Washington 98632
Contact at Facility	Name: Mike Crawford Telephone #: (360) 636-6423
Responsible Official	Name: Craig Anneberg Title: Chief Executive Officer Address: PO Box 2069 Longview, Washington 98632 Telephone #: (360) 626-6319
Industry Type	Thermo-Mechanical Pulping, Secondary Fiber Deinking and Non-Deinking, Packaging, Newsprint, Printing, and Writing Paper Manufacturing
Categorical Industry	40 CFR Part 430 Subparts G, I, J, and K
Type of Treatment	Process Wastewater – treated at Nippon Dynawave Industrial Treatment Plant  Sanitary Wastewater – treated at Nippon Dynawave Sanitary Treatment Plant
SIC Codes	26 (Pulp and Allied Products)
NAICS Codes	322 (Pulp and Paper Mills)
Facility Location (NAD83/WGS84 reference datum)	Latitude: 46.125627° Longitude: 122.976294°
Discharge Point Name and Location (NAD83/WGS84 reference datum)	<u>Nippon Dynawave Industrial Treatment Plant (Columbia River – WRIA 25):</u>  Outfall 001A Latitude: 46.125883° Longitude: -122.978181°  <u>Weyerhaeuser NR Company (Consolidated Diking Improvement District Ditch #3 – WRIA 25):</u>

Facility Information	
	East Ditch (Outfall 002A) Latitude: 46.123552° Longitude: -122.971583°  West Ditch (Outfall 003A) Latitude: 46.127806° Longitude: -122.978571°
Permit Status	
Renewal Date of Previous Permit	November 1, 2014 (WA0000124)
Application for Permit Renewal Submittal Date	November 4, 2016 with revisions received June 5, 2017 and March 12, 2018

**Figure 1 Facility Location Map**



**Figure 2 Outfall and Process Locations**



## A. Facility Description

### *History*

In 1979, the North Pacific Paper Corporation (NORPAC) began operation of its Phase I project, consisting of a thermo-mechanical pulp (TMP) mill and newsprint paper machine. Additional NORPAC projects (Phases II and III) added capacity and newsprint recycling capabilities to the operation in 1981 and 1991, respectively.

NORPAC is part of a larger 700+ acre site composed of multiple industries. These industries include a Kraft pulp and paper mill (with industrial and sanitary wastewater treatment plants), a log export yard and dimensional lumber plant, various inorganic chemical manufacturers, and a short-line railway. Prior to August 2016, Weyerhaeuser NR Company (Weyerhaeuser) owned and operated the Kraft pulp and paper mill, the log export yard and dimensional lumber plant, and NORPAC was operated as a 50/50 joint venture between Weyerhaeuser and Nippon Paper Industries.

The discharges associated with the Kraft pulp and paper mill, the log export yard and dimensional lumber plant, and NORPAC were permitted with a single NPDES Permit (WA0000124) issued to Weyerhaeuser. On August 31, 2016 Weyerhaeuser sold the Kraft pulp and paper mill to Nippon Paper Industries. The Kraft pulp and paper mill currently operates under the name Nippon Dynawave Packaging Company, LLC (Nippon Dynawave). On November 1, 2016 NORPAC was sold to One Rock Capital Partners, LLC.

NPDES Permit No. WA0000124 currently authorizes the discharges associated with Nippon Dynawave, Weyerhaeuser, and NORPAC. Due to the changes in ownership at the Kraft pulp and paper mill and at NORPAC, new NPDES permits will be issued. However, the discharges which will be authorized by the new NPDES permits are not new discharges. Nippon Dynawave will continue to discharge under NPDES Permit No. WA0000124.

NORPAC and Weyerhaeuser will be issued new NPDES permits to authorize the existing discharges at each facility. NORPAC is classified as a minor facility.

#### *Industrial Processes*

NORPAC's operations include thermo-mechanical pulping, secondary fiber deinking and non-deinking, and three paper machines. The deinking and non-deinking operation includes the repulping of recycled old newsprint (ONP), old magazine (OMG), sorted office paper (SOP), old corrugated containers (OCC), and mixed paper. In the deinking process ink is removed and separated from recycled pulp and is dewatered. Non-deinked secondary fiber does not require ink removal. The deinked and non-deinked pulp is screened, washed, bleached, and stored before being distributed to the paper machines.

The TMP mill operations include the pulping of wood chips with heat, pressure, and chemicals. Wood chips are preheated and compressed to remove extractives and then saturated with pulping liquor (peroxide, caustic, silicate, chelant, and other chemicals as needed). The saturated wood chips react with the pulping liquor and are then compressed again to remove additional extractives and unreacted pulping liquor. The chips are then heated with steam and fed to the primary refiners, followed by bleaching, if necessary, and processing in the secondary refiners. Both bleached and unbleached pulp is screened and stored before being distributed to the paper machines.

NORPAC also purchases bleached and unbleached Kraft pulp from Kraft pulp mills. The deink or non-deink pulp, TMP, and purchased Kraft pulp are blended, along with other filler material, to achieve the correct mix ratio. The pulp is then sent to the three paper machines where it is formed and dried. The final product is packaged and shipped via truck, rail, or ship to its destination.

#### *Process Wastewater Discharges*

Process wastewater is produced from numerous operations at NORPAC. Wastewater from the two TMP mills, three paper machines, and secondary fiber plant are collected and discharged to the Nippon Dynawave Industrial Treatment Plant (Industrial Treatment Plant) for biological treatment. Stormwater runoff from process areas is also collected and sent to the Nippon Dynawave Industrial Treatment Plant for further treatment.

#### *Stormwater Discharges*

The majority of stormwater from non-process areas flows to one of two stormwater ditches and is discharged to Weyerhaeuser NR Company's stormwater system (Weyerhaeuser's Stormwater System). A minor amount of stormwater flows through other conveyance ditches or storm sewers and drains to Weyerhaeuser's Stormwater System. All of the stormwater from NORPAC's site that discharges to Weyerhaeuser's Stormwater System discharges through Weyerhaeuser's Outfall 004B. NORPAC has implemented a Stormwater Pollution Prevention Plan (SWPPP) and Best Management Practices (BMPs) to reduce contaminants in the stormwater runoff which discharges to Weyerhaeuser's Outfall 004B.

NORPAC owns and operates a cargo dock along the Columbia River. Historically there has been a stormwater outfall located near the cargo dock, Outfall 008A.

There has not been an observed or reported discharge from Outfall 008A since before 2011. Outfall 008A will be removed from the permit.

Sheetflow and roof drains from the cargo dock discharge to the Columbia River. The volume of stormwater discharged from this area is minor. NORPAC is required to implement and maintain all necessary BMPs identified in the SWPPP for the cargo dock area.

### *Outfall Descriptions*

The permit issued to Weyerhaeuser on October 15, 2014 authorizes discharges from nine direct discharge streams and two internal discharge streams. Ecology is proposing to divide these discharges streams into three separate permits. To provide clarity, the letter A has been added to the end of the outfall numbers for NORPACs discharges and the letter B has been added to the end of the outfall numbers for Weyerhaeuser Lumber's discharges. The table below is a list of all of the discharges with the current outfall number, if applicable, and the proposed outfall number. The table is sorted by proposed permittee.

**Table 2 Outfall Descriptions**

Type of discharge	Discharge Point	Current Outfall Number	Proposed Outfall Number	Proposed Permittee
Process/ Stormwater	Columbia River	001/002	001/002	Nippon Dynawave
Process (Bleach Plant)	Industrial Treatment Plant	Wastewater Treatment Plant	Wastewater Treatment Plant	Nippon Dynawave
Sanitary	Columbia River	005 (Internal)	005 (Internal)	Nippon Dynawave
Stormwater	CDID Ditch #3 <sup>a</sup>	006	006	Nippon Dynawave
Stormwater	CDID Ditch #3 <sup>a</sup>	010	010	Nippon Dynawave
Stormwater	CDID Ditch #3 <sup>a</sup>	011	011	Nippon Dynawave
Stormwater	CDID Ditch #3 <sup>a</sup>	003	003B	Weyerhaeuser Lumber
Stormwater	CDID Ditch #3 <sup>a</sup>	004	004B	Weyerhaeuser Lumber
Stormwater	Columbia River	007	007B	Weyerhaeuser Lumber
Stormwater	Columbia River	009	009B	Weyerhaeuser Lumber

Type of discharge	Discharge Point	Current Outfall Number	Proposed Outfall Number	Proposed Permittee
Process	Industrial Treatment Plant	N/A	001B, 002B, 005B, 006B, 008B	Weyerhaeuser Lumber
Stormwater	Columbia River	008	008A (proposing to remove)	NORPAC
Process/ Stormwater	Industrial Treatment Plant	N/A	001A	NORPAC
Stormwater	Weyerhaeuser's Stormwater System	N/A	002A	NORPAC
Stormwater	Weyerhaeuser's Stormwater System	N/A	003A	NORPAC

a. Consolidated Diking Improvement District (CDID) Ditch #3

*Solid Wastes*

NORPAC generates solid waste at the facility. Solid waste at the facility is primarily deink rejects from secondary fiber. NORPAC operates a solid waste transfer pad located along the southern edge of the facility. Solid wastes are stored on the transfer pad until they are hauled to the landfill. Any stormwater runoff or liquid from the solid waste transfer pad flows to a drainage located in the northern corner of the transfer pad and is discharged to the Nippon Dynawave Industrial Treatment Plant.

NORPAC has developed and submitted a Solid Waste Control Plan. The permit requires NORPAC to review the Solid Waste Control Plan and submit updates as necessary.

**B. Discharge Location to the Nippon Dynawave Industrial Treatment Plant**

Process wastewater from the deink plant, the TMP mills, and the paper machines flows to the Nippon Dynawave Industrial Treatment Plant. Process wastewater is sampled using a composite sampler and flow is measured prior to flowing to the Nippon Dynawave Industrial Treatment Plant. Discharges from the solid waste transfer pad do not pass through the composite sampler prior to discharging to the Nippon Dynawave Industrial Treatment Plant. However, discharges from the solid waste transfer pad are expected to be minimal.

The Nippon Dynawave Industrial Treatment Plant consists of one primary clarifier with a total capacity of 8.3 million gallons, three deep aeration tanks with capacities of 5.0 million gallons (aeration tank 1) and 9.4 million gallons (aeration tanks 2 and 3), and four secondary clarifiers each having a capacity of 3.9 million gallons. The west pond, which is located on the northwestern-most portion of Nippon Dynawave's site, has a capacity of approximately 11 million gallons, and is used as an additional clarifier if necessary.

The Nippon Dynawave Industrial Treatment Plan has a maximum hydraulic loading capacity of approximately 65 million gallons per day (MGD), a maximum organic loading capacity of approximately 325,000 lbs/day, and a maximum solids loading capacity of approximately 800,000 lbs/day. The Nippon Dynawave Industrial Treatment Plant has an average hydraulic load of 41.4 MGD and has approximate removal efficiencies of 97% for organics and 96% for solids.

According to Nippon Dynawave's Fact Sheet (WA0000124) and information provided to Ecology by NORPAC and Nippon Dynawave, NORPAC contributes approximately one-third of the total flow, two-thirds of the total organic loading, and half of the total solids loading to the Nippon Dynawave Industrial Treatment Plant.

### **C. Discharge Location to Weyerhaeuser's Stormwater System**

The majority of the stormwater from NORPAC discharges to Weyerhaeuser's Stormwater System through one of two conveyance ditches: East Ditch (Outfall 002A) and West Ditch (Outfall 003A). Compliance samples are collected at East Ditch and West Ditch as grab samples prior to discharging to Weyerhaeuser's Stormwater System through conveyance pipes.

Some stormwater from NORPAC discharges to Weyerhaeuser's Stormwater System through smaller conveyance ditches or storm drains. The stormwater discharges from East Ditch and West Ditch are expected to be representative of all stormwater discharges from NORPAC to Weyerhaeuser's Stormwater System. The *Stormwater Sampling Manual: A guide for the Industrial Stormwater General Permit* (December 2015) allows for representative sampling of stormwater discharges that have similar industrial activities, BMPs, and stormwater runoff characteristics. These stormwater discharges ultimately discharge through Weyerhaeuser's Outfall 004B, which is monitored at the same frequency as East Ditch and West Ditch and has discharge limits. Therefore, no monitoring is required for the smaller conveyance ditches and storm drains at this time. However, NORPAC must comply with the discharge prohibitions included in Special Condition S5.C. of the permit for all stormwater discharges to Weyerhaeuser's Stormwater System. If Ecology determines that these smaller stormwater discharges may be contributing to exceedances of Weyerhaeuser's discharge limits at Outfall 004B, the permit may be modified to include discharge limits or monitoring for the smaller stormwater discharges.

NORPAC's stormwater discharges are expected to be approximately one-quarter to one-third of the total flow from Outfall 004B, based on discharge data reported in NORPAC's updated permit application and Weyerhaeuser's DMR data from November 2014 through January 2018. Prior to discharging through Outfall 004B, all stormwater flows through open conveyance ditches where some settling occurs.

### **D. Process Wastewater Characterization**

NORPAC reported the concentration of pollutants in the wastewater discharge in the permit application and in supplemental data provided to Ecology during the permit drafting process.

The data for five-day biochemical oxygen demand (BOD<sub>5</sub>), chemical oxygen demand (COD), and volatile organic acids (VOAs) was provided to NORPAC by Nippon Dynawave. The data for total suspended solids (TSS) and flow were collected by NORPAC. The tabulated data represents the quality of the wastewater effluent discharged from January 2014 through January 2018. Data for VOAs is for May through December 2017. The process wastewater discharge to the Nippon Dynawave Industrial Treatment Plant is characterized as follows:

**Table 3 Process Wastewater Characterization**

Parameter	Units	# of Samples	Average Value	Maximum Value	Minimum Value
Biochemical Oxygen Demand (BOD <sub>5</sub> )	mg/L	608	1047	2022	308
	lbs/day	608	136,773	251,182	15,032
Chemical Oxygen Demand (COD)	mg/L	832	1777	2884	256
	lbs/day	832	231,558	413,072	10,026
Total Suspended Solids (TSS)	mg/L	1482	2016.8	54,673.8	418.4
	lbs/day	1482	243,104.6	461,958.3	19,779.9
Volatile Organic Acids (VOAs)	mg/L	116	501	813	48
Flow	MGD	1492	15.72	21.11	0.626

### **E. Stormwater Characterization**

The previous permit (WA0000124) did not require monitoring of the stormwater outfalls for NORPAC because they were considered internal stormwater streams. Therefore, the stormwater discharges from NORPAC have not been characterized.

### **F. Summary of Compliance with Previous Permit Issued**

NORPAC's discharge was previously covered by NPDES Permit WA0000124. These discharges did not have effluent limits or monitoring requirements included in the permit because they were considered internal streams at the time of permit issuance.

NORPAC has complied with the permit conditions throughout the duration of the permit issued on October 15, 2014 (WA0000124). Ecology assessed compliance based on its review of the facility's information in the Ecology Permitting and Reporting Information System (PARIS) and on inspections.

The following table summarizes compliance with report submittal requirements over the permit term. The report submittals evaluated include only those required to be submitted by NORPAC.

**Table 4 Permit Submittals**

Submittal Name	Submittal Status	Due Date	Received Date
Spill Plan	Submitted	11/1/2016	1/8/2015
Stormwater Pollution Prevention Plan	Submitted	4/30/2015	4/29/2015
Solid Waste Control Plan	Received	11/1/2018	1/11/2018
Reporting Permit Violations – Written Report	Received	-	4/17/2018

**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. While the proposed permit is a new permit, the discharge is an existing discharge which was previously authorized under NPDES Permit No. WA0000124. Therefore, the proposed permit is exempt from the SEPA process.

**III. Proposed Permit Limits**

Federal and state regulations require that effluent limits in an NPDES permit must be either technology- or water quality-based.

- Technology-based limits are based upon the treatment methods available to treat specific pollutants. Technology-based limits are set by the EPA and published as a regulation, or Ecology develops the limit on a case-by-case basis (40 CFR 125.3, and chapter 173-220 WAC).
- Water quality-based limits are calculated so that the effluent will comply with the Surface Water Quality Standards (chapter 173-201A WAC), Ground Water Standards (chapter 173-200 WAC), Sediment Quality Standards (chapter 173-204 WAC), or the National Toxics Rule (40 CFR 131.36).
- Ecology must apply the most stringent of these limits to each parameter of concern. These limits are described below.

The limits in this permit reflect information received in the application and from supporting reports (engineering, hydrogeology, 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, are not listed in regulation, and do not have a reasonable potential to cause a water quality violation.

Ecology does not usually develop limits for pollutants not reported in the permit application but may be present in the discharge. The permit does not authorize 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 [40 CFR 122.42(a)]. 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 173-220-150 (1)(g), neither flows nor waste loadings may exceed approved design criteria, however, Ecology does not have an engineering report that specifies the design criteria for Nippon Dynawave's wastewater treatment plant.

#### **B. Technology-Based Effluent Limits**

Ecology must ensure that facilities provide all known, available, and reasonable methods of prevention, control, and treatment (AKART) when it issues a permit.

Existing federal categorical limits for this facility are found under 40 CFR Part 430 – The Pulp, Paper, and Paperboard Point Source Category. The following subcategories apply to this facility: Mechanical Pulp (Subpart G), Secondary Fiber Deink (Subpart I), Secondary Fiber Non-Deink (Subpart J), and Fine and Lightweight Papers from Purchased Pulp (Subpart K).

##### *Process Wastewater Limits*

The pretreatment standards for process wastewater discharges to publicly owned treatment works (POTWs) included in Subparts G, I, J, and K place effluent limits on pentachlorophenol, trichlorophenol, and zinc. These limits are required for all facilities which use chlorophenolic-containing biocides or zinc hydrosulfite. NORPAC does not use chlorophenolic-containing biocides and zinc hydrosulfite is not used as a bleaching agent. Furthermore, pretreatment standards do not apply to discharges to privately owned treatment systems. Therefore, the pretreatment standards included in Subparts G, I, J, and K are not included in the permit.

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 sewage systems; however, Ecology has applied the pH prohibition to this facility using best professional judgment.

Performance-based effluent limitations have been developed for biochemical oxygen demand (5-day) (BOD<sub>5</sub>) and total suspended solids (TSS) using process wastewater discharge data from January 2014 through October 2017. Maximum daily and average monthly BOD<sub>5</sub> and TSS limitations are included to prevent overloading to Nippon Dynawave’s Industrial Treatment Plant, which could contribute to an upset at the treatment plant. Because Nippon Dynawave’s Industrial Treatment Plant experienced five TSS violations during the January 2014 through October 2017 timeframe, the discharge data for those time periods were not used to calculate performance-based effluent limits. Calculations for the performance-based limits are included in Appendix D.

Ecology determined the facility meets the minimum requirements demonstrating compliance with the AKART standard for the process wastewater discharge if NORPAC complies with the effluent limitations and develops and implements a slug discharge control plan and an operations and maintenance manual.

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

**Table 5 Technology-Based Process Wastewater Limits**

Parameter	Average Monthly Limit	Maximum Daily Limit
Biochemical Oxygen Demand (5-day) (BOD <sub>5</sub> )	1,231 milligrams per liter (mg/L) 182,052 pounds per day (lbs/day)	1,715 milligrams per liter (mg/L) 304,194 pounds per day (lbs/day)
Total Suspended Solids (TSS)	2,296 mg/L 284,980 lbs/day	4,278 mg/L 481,665 lbs/day
Parameter	Daily Minimum	Daily Maximum
pH	5.0 standard units	11.0 standard units

*Stormwater Discharges*

Occasionally EPA will promulgate federal effluent guidelines for stormwater discharges associated with specific industries. Subparts G, I, J, and K do not include federal effluent guidelines for stormwater discharges.

Weyerhaeuser submitted a final *AKART Analysis Report* (Report) for the stormwater discharges from Outfalls 003 and 004 on May 18, 2016.

Ecology approved the final Report on December 14, 2016. The approval determined that AKART for Weyerhaeuser's Outfall 004 required the following:

1. Increased level of housekeeping and chip management to reduce the loading to Outfall 004.
2. The process water discharge from NORPAC (TMP washdown) must be eliminated.

NORPAC eliminated the process water discharge from the TMP washdown area following the submittal of the Report. The discharge of process water to Weyerhaeuser's Stormwater System is prohibited (Special Condition S5.C.). NORPAC must implement and maintain BMPs for housekeeping and chip management. This requirement is included in Special Condition S12 in the permit.

The discharge limitations for Weyerhaeuser's Outfall 004B have been applied to NORPAC's East Ditch (Outfall 002A) and West Ditch (Outfall 003A) as discharge benchmarks. This is based on the expected flow contribution and the anticipated treatment prior to discharging through Weyerhaeuser's Outfall 004B.

As described previously, the stormwater discharges from NORPAC's East Ditch and West Ditch have previously been an internal stormwater discharge. Because of this, discharge data has not been collected for these outfalls. The proposed permit includes benchmarks and required corrective actions rather than discharge limits for the stormwater discharges from NORPAC's East Ditch and West Ditch. The proposed permit also requires the implementation of best management practices (BMPs) to minimize pollutant levels in the discharges and the requirement to implement AKART. These BMPs must be included in the facility's Stormwater Pollutant Prevention Plan.

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

**Table 6 Technology-Based Stormwater Benchmarks**

Parameter	Average Monthly Limit	Maximum Daily Limit
Biochemical Oxygen Demand (5-day) (BOD <sub>5</sub> )	7.1 milligrams per liter (mg/L)	20.0 milligrams per liter (mg/L)
Settleable Solids (SS)	N/A	0.1 milliliters per liter (mL/L)
Turbidity	45 NTU	103 NTU
Oil & Grease	10 mg/L	15 mg/L

  

Parameter	Average Monthly Minimum	Minimum Daily
Dissolved Oxygen	2.5 mg/L	1.8 mg/L

  

Parameter	Daily Minimum	Daily Maximum
pH	6.0 standard units	9.0 standard units

### **C. Comparison of Effluent Limits with the Previous Permit Issued on October 15, 2014**

NORPAC's discharges were previously permitted under NPDES Permit No. WA0000124. NPDES Permit No. WA0000124 did not include effluent limits for NORPAC's discharges because discharges from Outfalls 001A, 002A, and 003A in the proposed permit were considered internal streams at the time of permit issuance. A comparison of previous and proposed effluent limits for Outfall 001A, 002A, and 003A was not completed because no previous effluent limits were established for NORPAC's discharges at these outfalls. Refer to the fact sheet for Weyerhaeuser Lumber's proposed permit (WA0991014) for a comparison of their stormwater discharge limits.

Stormwater discharge benchmarks were included in the previous permit (WA0000124) for Outfall 008 (Cargo Dock). This outfall has been removed from the permit and stormwater discharges from this outfall location are not authorized in the permit.

## **IV. Monitoring Requirements**

Ecology requires monitoring, recording, and reporting (WAC 173-220-210 and 40 CFR 122.41) to verify that the treatment process is functioning 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. Wastewater Monitoring**

The monitoring schedule is detailed in the proposed permit under Special Condition S2. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

### **B. 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).

## **V. Other Permit Conditions**

### **A. Reporting and Record Keeping**

Ecology based Special Condition S3 on its authority to specify any appropriate reporting and record keeping requirements to prevent and control waste discharges (WAC 173-220-210).

### **B. Operation and Maintenance Manual**

Ecology requires industries to take all reasonable steps to properly operate and maintain their wastewater collection system and any other system or controls installed to achieve compliance with the terms and conditions of the permit in accordance with state and federal regulations [40 CFR 122.41(e) and WAC 173-220-150 (1)(g)]. The facility will prepare and submit an operation and maintenance manual as required by state regulation for the construction of wastewater treatment facilities (WAC 173-240-150). Implementation of the procedures in the operation and maintenance 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 privately owned treatment system. These include substances which cause pass-through or interference, pollutant which may cause damage to the privately owned treatment system or harm to the treatment system workers (chapter 173-216 WAC) and the discharge of designated dangerous wastes not authorized by this permit (chapter 173-303 WAC). The permit includes discharge prohibitions to the Nippon Dynawave Industrial Treatment Plant.

Discharges of process wastewaters into the Nippon Dynawave Sanitary Treatment Plant are prohibited. This prohibition is included to prevent interference in the sanitary treatment plant.

Discharges of process wastewater, stormwater from process areas, oil, or trash or floating debris to the Weyerhaeuser Stormwater System is prohibited. This prohibition is based on the *AKART Analysis Report* (May 2016) and Special Conditions S5.E. and S5.F. of the *Industrial Stormwater General Permit* (2015).

### **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. Solid Waste Control Plan**

NORPAC could cause pollution of the waters of the state through inappropriate disposal of solid waste or through the release of leachate from solid waste.

This proposed permit requires this facility to submit a facility specific solid waste control plan designed to prevent solid waste from causing pollution of waters of the state or from entering Nippon Dynawave's Industrial Treatment Plant or Weyerhaeuser NR Company's stormwater system.

The facility must submit the facility specific plan to Ecology for approval (RCW 90.48.080). The facility must also update the plan. You can obtain an Ecology guidance document, which describes how to develop a Solid Waste Control Plan, at:

<https://fortress.wa.gov/ecy/publications/publications/0710024.pdf>.

#### **F. Non Routine and Unanticipated Wastewater**

Occasionally, this facility may generate wastewater which was not characterized in the permit application because it is not a routine discharge and was not anticipated 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. Additionally, the facility must provide documentation that Nippon Dynawave is willing to accept the non-routine and unanticipated wastewater. 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 wastewater.
- Require the facility to treat the wastewater.
- Require the facility to reuse the wastewater.

#### **G. Spill Control Plan**

This facility stores a quantity of chemicals on-site that have the potential to cause water pollution if accidentally released. Ecology can require a facility to develop best management plans to prevent this accidental release [Section 402(a)(1) of the Federal Water Pollution Control Act (FWPCA) and RCW 90.48.080].

NORPAC has developed a plan for preventing the accidental release of pollutants to state waters and for minimizing damages if such a spill occurs. The proposed permit requires the facility to update this plan and submit it to Ecology.

#### **H. Slug Discharge Control Plan**

Ecology determined that NORPAC has the potential for a batch discharge or a spill that could adversely affect the receiving wastewater treatment plant, therefore the proposed permit requires a slug discharge control plan.

## **I. Stormwater Pollution Prevention Plan (SWPPP)**

In accordance with 40 CFR 122.44(k) the proposed permit includes requirements for the development and implementation of a SWPPP along with BMPs to minimize or prevent the discharge of pollutants to waters of the state. BMPs constitute Best Conventional Pollutant Control Technology (BCT) and Best Available Technology Economically Achievable (BAT) for stormwater discharges.

Ecology has determined that NORPAC must develop a SWPPP and implement adequate BMPs in order to meet the requirements of “all known, available, and reasonable methods of prevention, control, and treatment” (AKART). A SWPPP requires a facility to implement actions necessary to manage stormwater to comply with the state’s requirement under chapter 90.48 RCW to protect the beneficial uses of waters of the state.

The SWPPP must identify potential sources of stormwater contamination from industrial activities and identify how it plans to manage those sources of contamination to prevent or minimize contamination of stormwater. NORPAC must continuously review and revise the SWPPP as necessary to assure that stormwater discharges do not degrade water quality. It must retain the SWPPP on-site or within reasonable access to the site and available for review by Ecology. The Permittee must also conduct inspections weekly and retain the results of the inspections on-site.

### *Best Management Practices (BMPs)*

BMPs are the actions identified in the SWPPP to manage, prevent contamination of, and treat stormwater. BMPs include 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 also include treatment systems, operating procedures, and practices used to control plant site runoff, spillage or leaks, sludge or waste disposal, and drainage from raw material storage. NORPAC must ensure that its SWPPP includes the operational and structural source control BMPs listed as “applicable” in Ecology’s stormwater management manuals. Many of these “applicable” BMPs are sector-specific or activity-specific, and are not required at facilities engaged in other industrial sectors or activities.

### *Ecology-Approved Stormwater Management Manuals*

Consistent with RCW 90.48.555 (5) and (6), the proposed permit requires the facility to implement BMPs contained in the Stormwater Management Manual for Western Washington (2005 edition), or any revisions thereof, or practices that are demonstrably equivalent to practices contained in stormwater technical manuals approved by Ecology. This should ensure that BMPs will prevent violations of state water quality standards, and satisfy the state AKART requirements and the federal technology-based treatment requirements under 40 CFR part 125.3. The SWPPP must document that the BMPs selected provide an equivalent level of pollution prevention, compared to the applicable Stormwater Management Manuals, including: The technical basis for the selection for all stormwater BMPs (scientific, technical studies, and/or modeling) which support the performance claims for the BMPs selected.

An assessment of how the BMPs will satisfy AKART requirements and the applicable technology-based treatment requirements under 40 CFR part 125.3.

#### *Operational Source Control BMPs*

Operational source control BMPs include a schedule of activities, prohibition of practices, maintenance procedures, employee training, good housekeeping, and other managerial practices to prevent or reduce the pollution of waters of the state.

These activities do not require construction of pollution control devices but are very important components of a successful SWPPP. Employee training, for instance, is critical to achieving timely and consistent spill response. Pollution prevention is likely to fail if the employees do not understand the importance and objectives of BMPs. Prohibitions might include eliminating outdoor repair work on equipment and certainly would include the elimination of intentional draining of crankcase oil on the ground. Good housekeeping and maintenance schedules help prevent incidents that could result in the release of pollutants. Operational BMPs represent a cost-effective way to control pollutants and protect the environment. The SWPPP must identify all the operational BMPs and how and where they are implemented. For example, the SWPPP must identify what training will consist of, when training will take place, and who is responsible to assure that employee training happens.

#### *Structural Source Control BMPs*

Structural source control BMPs include physical, structural, or mechanical devices or facilities intended to prevent pollutants from entering stormwater. Examples of source control BMPs include erosion control practices, maintenance of stormwater facilities (e.g., cleaning out sediment traps), construction of roofs over storage and working areas, and direction of equipment wash water and similar discharges to the sanitary sewer or a dead end sump. Structural source control BMPs likely include a capital investment but are cost effective compared to cleaning up pollutants after they have entered stormwater.

#### *Treatment BMPs*

Operational and structural source control BMPs are designed to prevent pollutants from entering stormwater. However, even with an aggressive and successful program, stormwater may still require treatment to achieve compliance with water quality standards. Treatment BMPs remove pollutants from stormwater. Examples of treatment BMPs are detention ponds, oil/water separators, biofiltration, and constructed wetlands.

#### *Volume/Flow Control BMPs*

Ecology recognizes the need to include specific BMP requirements for stormwater runoff quantity control to protect beneficial water uses, including fish habitat. New facilities and existing facilities undergoing redevelopment must implement the requirements for peak runoff rate and volume control identified by volume 1 of the *Western Washington SWMM* and chapter 2 in the *Eastern Washington SWMM* as applicable to their development. Chapter 3 of volume 3 *Western Washington SWMM* and chapter 6 in the *Eastern Washington SWMM* lists BMPs to accomplish rate and volume control.

Existing facilities in western Washington should also review the requirements of volumes 1 (Minimum Technical Requirements) and chapter 3 of volume 3 in the *Western Washington SWMM*. Chapter 2 (Core Elements for New Development and Redevelopment) in the *Eastern Washington SWMM* contains the minimum technical requirements for facilities east of the Cascades. Although not required to implement these BMPs, controlling rate and volume of stormwater discharge maintains the health of the watershed. Existing facilities should identify control measures that they can implement over time to reduce the impact of uncontrolled release of stormwater.

#### *Fecal Coliform Contamination Reduction BMPs*

NORPAC must implement BMPs to reduce the potential for fecal coliform contamination in the stormwater discharge. BMPs include inspections to identify potential cross-connections of the stormwater system and the sanitary sewer and source control BMPs to address potential sources of bacteria.

### **J. Annual Certification Letter**

EPA has promulgated effluent limitations for discharges associated with the pulp, paper, and paperboard point source category (40 CFR Part 430). NORPAC is subject to the following subcategories: Mechanical Pulp (Subpart G), Secondary Fiber Deink (Subpart I), Secondary Fiber Non-Deink (Subpart J), and Fine & Lightweight Papers from Purchased Pulp (Subpart K). Pretreatment standards for pentachlorophenol and trichlorophenol are included in Subparts G, I, J, and K for facilities which utilize chlorophenolic-containing biocides. Subpart G includes pretreatment standards for zinc for facilities which use zinc hydrosulfite as a bleaching agent.

NORPAC must submit an annual letter certifying that chlorophenolic-containing biocides are not used at the facility and zinc hydrosulfite is not used as a bleaching agent. This annual letter is due by February 15 each year. This requirement is based on best professional judgement.

### **K. Wastewater Treatment Plant Impact Study**

As mention in Section II.B above, NORPAC contributes approximately one-third of the total flow and two-thirds of the total organic loading to the Nippon Dynawave Industrial Treatment Plant. As such, they can have a significant impact on the operation of the treatment plant. The proposed permit requires NORPAC to conduct a wastewater impact study to assess operating scenarios that could negatively impact the operation of the treatment plant (high variability in pollutant loading, changes in flow, etc.) and evaluate ways to minimize those impacts. The study must include, but is not limited to, an analysis of the discharge characteristics of each operating scenario, a review of the potential impacts to the treatment system, and an analysis of technology and best management practices available to reduce the possible impacts.

**L. General Conditions**

Ecology bases the standardized General Conditions on state and federal law and regulations. They are included in all individual industrial NPDES permits issued by Ecology.

## **VI. Permit Issuance Procedures**

### **A. Permit Modifications**

Ecology may modify this permit to impose numerical limits, if necessary to comply with water quality standards for surface waters, with sediment quality standards, or with water quality standards for groundwaters, after obtaining new information from sources such as inspections, effluent monitoring, outfall studies, and effluent mixing studies.

Ecology may also modify this permit to comply with new or amended state or federal regulations.

### **B. Proposed Permit Issuance**

This proposed permit includes all statutory requirements for Ecology to authorize a wastewater discharge. The permit includes limits and conditions to protect human health and aquatic life, and the beneficial uses of waters of the state of Washington. Ecology proposes to issue this permit for a term of 5 years.

## **VII. REFERENCES FOR TEXT AND APPENDICES**

Environmental Protection Agency (EPA)

1992. National Toxics Rule. Federal Register, V. 57, No. 246, Tuesday, December 22, 1992.

1991. *Technical Support Document for Water Quality-based Toxics Control*. EPA/505/2-90-001.

1988. *Technical Guidance on Supplementary Stream Design Conditions for Steady State Modeling*. USEPA Office of Water, Washington, D.C.

1985. *Water Quality Assessment: A Screening Procedure for Toxic and Conventional Pollutants in Surface and Ground Water*. EPA/600/6-85/002a.

1983. *Water Quality Standards Handbook*. USEPA Office of Water, Washington, D.C.

Tsivoglou, E.C., and J.R. Wallace.

1972. *Characterization of Stream Reaeration Capacity*. EPA-R3-72-012. (Cited in EPA 1985 op.cit.)

Washington State Department of Ecology.

January 2015. *Permit Writer's Manual*. Publication Number 92-109.  
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October 2010 (revised). *Water Quality Program Guidance Manual – Procedures to Implement the State's Temperature Standards through NPDES Permits*. Publication Number 06-10-100. (<https://fortress.wa.gov/ecy/publications/summarypages/0610100.html>)

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December 2015. *Stormwater Sampling Manual: A guide for the Industrial Stormwater General Permit*. Publication Number 15-03-044. (<https://fortress.wa.gov/ecy/publications/documents/1503044.pdf>)

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October 2014. *Fact Sheet for NPDES Permit WA0000124*.

Wright, R.M., and A.J. McDonnell.

1979. *In-stream Deoxygenation Rate Prediction*. Journal Environmental Engineering Division, ASCE. 105(EE2). (Cited in EPA 1985 op.cit.)

## **Appendix A--Public Involvement Information**

Ecology proposes to issue a permit to NORPAC. 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 April 25, 2019 in The Daily News to inform the public and to invite comment on the proposed draft National Pollutant Discharge Elimination System 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 NPDES permit.
- Explains the next step(s) in the permitting process.

Ecology has published a document entitled *Frequently Asked Questions about Effective Public Commenting* which is available on our website at

<https://fortress.wa.gov/ecy/publications/SummaryPages/0307023.html>.

You may obtain further information from Ecology by telephone, (360) 407-6916, 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.

### **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**

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

**BOD<sub>5</sub>** -- 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 BOD<sub>5</sub> 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<sub>5</sub> 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  $(1,2,\text{or } 5) \times 10^n$ , 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<sub>5</sub>** -- 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<sub>5</sub> 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<sub>5</sub> 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--Technical Calculations

### Performance-Based Limits

Limits for Outfall 001A were established using sample data reported to Ecology for January 2014 through October 2017. The data set provided by NORPAC included results during three separate time periods which coincided with upset conditions at Nippon Dynawave's Industrial Wastewater Treatment Plant. These results were removed from the data set prior to developing performance-based limits. The reported sample data included biochemical oxygen demand (5-day) (BOD<sub>5</sub>) concentration (in mg/L), flow rates (in million gallons per day), and total suspended solids (TSS) loading (in metric tons per day). Based on the flow data, TSS concentrations (in mg/L) and BOD<sub>5</sub> loadings (in lbs/day) were calculated using the following formulas:

$$\text{Loading} \left( \frac{\text{lbs}}{\text{day}} \right) = \text{Flow (MGD)} * \text{Concentration} \left( \frac{\text{mg}}{\text{L}} \right) * 8.34$$

$$\text{Concentration} \left( \frac{\text{mg}}{\text{L}} \right) = \frac{\text{Loading} \left( \frac{\text{lbs}}{\text{day}} \right)}{\text{Flow (MGD)} * 8.34}$$

Concentration and loading data for BOD<sub>5</sub> and TSS were non-normally distributed. The data sets were natural-log transformed to determine the standard deviation and variance of the data. The monthly average limits and the daily maximum limits were developed using the formulas in Appendix E of EPA's *Technical Support Document for Water Quality-based Toxics Control* (EPA 1991).

**Table 7 Process Wastewater Performance-Based Limits**

	<b>BOD<sub>5</sub> mg/L</b>	<b>BOD<sub>5</sub> lbs/day</b>	<b>TSS mg/L</b>	<b>TSS lbs/day</b>
LogNormal Transformed Mean	6.932	11.790	7.529	12.395
LogNormal Transformed Variance	0.049	0.129	0.128	0.088
<b>Maximum Daily Effluent Limit</b>	<b>1,714.51</b>	<b>304,193.54</b>	<b>4,277.72</b>	<b>481,664.51</b>
<b>Average Monthly Effluent Limit</b>	<b>1,231.46</b>	<b>182,051.75</b>	<b>2,295.69</b>	<b>284,979.80</b>

## **Appendix E--Response to Comments**

Ecology published notice of an opportunity to comment on draft NPDES Permit No. WA0991016 in The Daily News on April 25, 2019. The proposed permit will allow NORPAC to discharge process wastewater to Nippon Dynawave's Wastewater Treatment Plant and stormwater to Weyerhaeuser NR Company. In the notice, Ecology invited public review of the proposed permit and provided a 34-day public comment period. The deadline for submittal of written comments was May 28, 2019. During the comment period, Ecology received written comments from two entities electronically via email.

Changes were made to the permit, where appropriate, to improve clarity and address the comments. The significant changes that were made to the permit are summarized below and all of the changes are discussed in detail in this response to comments. The comments and Ecology's responses to comments are presented below. Comments appear in regular text, followed by Ecology's response in italicized text.

Ecology will send a copy of this response to comments to each individual who provided comments. A copy of the final permit will be sent to all interested parties upon issuance and posted on the Industrial Section website at <https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Industrial-facilities-permits>.

Ecology has separated comments into two sections: Weyerhaeuser NR Company Comments and Nippon Dynawave Packaging Company, LLC Comments.

### **Weyerhaeuser NR Company Comments**

#### **1. Stormwater discharge monitoring**

As this permit is structured, stormwater discharges from the NORPAC property (through Outfalls 002A and 003A) will be directed to the Weyerhaeuser NR stormwater conveyance system where treatment will be provided and then discharged to the Weyerhaeuser NR Outfall 004B drainage. In a proposed NPDES permit WA-0991014, Weyerhaeuser NR will be authorized to discharge wastewaters at its Outfall 004B.

There have been occasions in the past when process upsets at NORPAC have resulted in wastewater drainage through surface ditches to Outfall 004B. While the proposed NORPAC NPDES permit includes some regulatory oversight by including Benchmark Values and monitoring requirements for their Outfalls 002A and 003A (Special Conditions S1.B. and S2.A., respectively), we are concerned NORPAC process and/or stormwater discharges could result in violations of the Weyerhaeuser NR permit.

Our request is that the process and stormwater monitoring requirements in Special Condition S2. be enhanced to include Chemical Oxygen Demand and/or Total Organic Carbon, and that all of the NORPAC East Ditch (Outfall 002A) and West Ditch (Outfall 003A) monitoring data be routinely shared with Weyerhaeuser NR, at least as frequently as the data is provided to Ecology.

Further, that the Special Conditions S3.F Immediate Notification, S3.J Spill Notification, S4.B Bypass Procedures, and S.9 Non-Routine and Unanticipated Wastewater be amended to require prompt notice to Weyerhaeuser NR should any process or stormwater discharge to the Weyerhaeuser NR conveyance system occur that triggers the reporting requirements in these conditions.

**Response to Comment:** *Ecology agrees that COD monitoring could provide a quicker indication of potential spills and may be beneficial for these discharges, especially if a correlation can be established over time. Monitoring requirements for COD have been added to NORPAC's stormwater outfalls (Outfalls 002A and 003A) and Weyerhaeuser's stormwater outfalls (Outfalls 003B and 004B) at the same frequency as 5-day biochemical oxygen demand (BOD<sub>5</sub>) monitoring.*

*Monitoring data and documents that are submitted to Ecology via the Water Quality Web Portal are available publicly via Ecology's Water Quality Permitting and Reporting Information System (PARIS) at the following website:*

***<https://fortress.wa.gov/ecy/paris/PermitLookup.aspx>***

*Special Condition S3.J. requires NORPAC to notify Weyerhaeuser of any discharge that could cause problems to Weyerhaeuser's stormwater system. Discharges which could cause problems to Weyerhaeuser's stormwater system includes, but is not limited to, discharges which exceed the benchmark values, unauthorized discharges, process spills, etc. Special Conditions S4.B. and S9 both require notification or approval by Ecology. Ecology will not approve a bypass or a non-routine discharge if it is likely to result in a violation of permit limits for either Weyerhaeuser or Nippon Dynawave. Additionally, an unanticipated bypass or an unauthorized discharge which has the potential to reach surface waters via Weyerhaeuser's stormwater system or Nippon Dynawave's treatment systems would trigger Special Condition S3.J., which requires NORPAC to notify the receiving facility immediately.*

*The NPDES discharge permit does not preclude Weyerhaeuser and NORPAC from agreeing to additional actions or measures through contracts or other mechanisms associated with Weyerhaeuser accepting NORPAC's stormwater to ensure Weyerhaeuser is able to maintain compliance with their permit limits.*

## 2. Stormwater Discharges to Weyerhaeuser NR Company

A proposed NPDES permit for the North Pacific Paper Company (NORPAC) and proposed modification of the Nippon NPDES permit authorize stormwater discharges from those companies into the Weyerhaeuser NR stormwater conveyance/treatment and discharge systems. There is some history of process upsets from those companies that could adversely impact Weyerhaeuser's ability to continuously comply with WA-0991014 permit requirements. While Ecology has imposed some monitoring and reporting obligations on their process/stormwater discharges, Weyerhaeuser remains concerned that the proposed permit shifts to Weyerhaeuser the responsibility to diagnose the cause and effect of an upset event from these other facilities without any mechanism that will ensure that Weyerhaeuser receives timely notice of and cooperation during these events.

For instance, although Ecology has proposed that NORPAC monitor for BOD, that is inefficient and insufficient in an upset event because BOD test results take five days to process. We have separately recommended in our comments on the NORPAC proposed permit that NORPAC monitor for COD and/or TOC, which would offer more timely information. Weyerhaeuser also requests that Ecology impose in the NORPAC and Nippon permits a requirement that those facilities provide immediate notice to Weyerhaeuser of any spills/upsets that might affect the stormwater system. Should permit violations occur at Outfalls 003B or 004B, there will not only be a need to apportion or assign responsibility, there will be a need for the appropriate facility to investigate and correct the cause of the upset. Obtaining this information in a timely fashion will better ensure that this occurs.

*Response to Comment: See response to comment 1 above and response to comment 13 in Appendix F of Weyerhaeuser NR Company's 2019 Fact Sheet (WA0991014).*

### **Nippon Dynawave Packaging Company, LLC Comments**

#### **3. Location/Concern – Permit Page 6 Condition S1 – BOD<sub>5</sub> & TSS load limits**

The proposed Performance-Based BOD and TSS limits are flawed and arguably overly generous. The Fact Sheet presents the proposed BOD and TSS limitations as, “Included to prevent overloading to Nippon Dynawave’s Industrial Treatment Plant”; however, no factual, narrative or logical information is provided in the Fact Sheet or Permit to show that the limits proposed are actually protective of the plant. Consider the following issues:

- Daily maximum and monthly average limits appear to be higher than the daily maxima or monthly averages found in the data set used to generate the limits.
- Significant process changes at NORPAC both during and subsequent to the data set time period cast doubt on how well these data represent current operations and future loading.
- The proposed daily maximum BOD<sub>5</sub> loading represents 93% of the expected maximum organic loading capacity of the Industrial Treatment Plant as listed on Page 11 of the Fact Sheet. That plant is concurrently responsible for treating load from the Nippon Dynawave Packaging Company pulp mill and other businesses.
- The proposed limits were purportedly developed using the formulas in Appendix E of EPA’s Technical support Document for Water Quality-Based Toxics Control (EPA 1991). The use of the processes specified in Technical support Document for Water Quality-Based Toxics Control seem inappropriate in that the Technical Support Document is intended for Toxics Control, not the control of Conventional Pollutants such as TSS and BOD and the document is intended to control impacts on receiving waters rather than impacts or load to a treatment facility.

Suggested change – Ecology is to be commended for establishing defensible limits for a highly atypical permitting effort despite the flaws listed above. However, for the reasons listed above, the Industrial Treatment Plant cannot rely on such limits to protect the system from overload or other upsets leading to non-compliance. The permit must therefore require NORPAC to respond expeditiously to reasonable requests from the Industrial Treatment Plant operator for NORPAC to curtail load or take other actions needed to protect the health of the Plant.

This requirement is implied in Condition S4 regarding the Operations and Maintenance Manual but is not made explicit. A brief review of POTW Pretreatment Standards including those found in the Municipal Code of Vancouver finds that directors at analogous POTW's are authorized to direct the reduction or curtailment of such discharges. An analogous authority is needed to protect the Industrial Treatment Plant.

**Response to Comment:** *Nippon Dynawave's industrial treatment plant does not fall into the federal pretreatment regulations and therefore is not comparable to the City of Vancouver publicly owned treatment works (POTW). The federal pretreatment regulations are designed specifically for POTWs, not privately owned treatment works. However, General Condition G8 requires NORPAC to control production and/or discharges upon reduction of the treatment plant, which may include reduced treatment capabilities.*

*The NPDES discharge permit does not preclude Nippon Dynawave and NORPAC from agreeing to additional actions or measures through contracts or other mechanisms associated with Nippon Dynawave accepting NORPAC's process wastewater to ensure Nippon Dynawave is able to maintain compliance with their permit limits.*

*No changes to the permit were made as a result of this comment.*

#### 4. Location/Concern – **Permit Page 11 – Condition S2.A Monitoring Schedule**

Comment – Inlet loading variability increases the risk of upsets in an activated sludge WWTS such as the receiving Industrial Treatment Plant. The receiving Industrial Treatment Plant operator identified inlet loading variability as a contributing factor in recent significant filamentous bulking upsets and the resulting compliance issues. Inadequate weekly monitoring of the inlet stream which represents ~80% of the organic loading to the Industrial Treatment Plant puts that facility at risk of overload and process upset due to food to mass imbalances. EPA regulations allow for “reduced monitoring frequency” when certain conditions are met. (See, for example, Special Condition S2.E.). There seems to be no reason to establish a new permit with the minimum weekly monitoring for organic loading when monitoring may be reduced in the future when more frequent monitoring is shown to not add value.

Suggested improvement – Increase the required BOD monitoring to 5 days/week. Require the installation of an alternate organic loading parameter such as online TOC able to provide near real-time loading information to the Industrial Treatment Plant. When installed, require NORPAC to make that real-time data available to the Industrial Treatment Plant. Require NORPAC to report daily production by weight and grade such that a database of loading values associated with each grade can be established. Such a database would enable future permits to better reflect actual pollutant loads and enable the Industrial Treatment Plant to more effectively manage load changes.

**Response to Comment:** *Ecology based the required BOD monitoring schedule on the required monitoring frequency for Nippon Dynawave. NPDES Permit No. WA0000124 requires weekly BOD monitoring for the discharge. Currently NORPAC is not required to monitor the process wastewater discharge to Nippon Dynawave. Weekly monitoring will provide data to determine if more frequent monitoring may be necessary.*

*If more frequent monitoring, or alternative monitoring methods, is determined to be necessary Ecology may modify the permit or issue an Administrative Order. The permit also requires NORPAC to monitor weekly for chemical oxygen demand (COD) rather than total organic carbon (TOC). COD results are available much quicker than BOD results and NORPAC has historical COD data. This information will allow NORPAC to determine if a discharge has the potential to cause problems at the wastewater treatment plant.*

*Special Condition S4.A. specifies that the O&M Manual must include procedures for determining the anticipated organic, solids, and hydraulic loading to the treatment plant. The O&M Manual also requires NORPAC to develop procedures for notifying Nippon Dynawave of possible significant loading changes.*

*No changes were made to the permit as a result of this comment.*

5. Location/Concern – **Permit Page 12 – Condition S2.A.3 Effluent Characterization**

Comment – NORPAC’s recent grade structure is highly variable and includes new grades and new fiber furnishes. The Industrial Treatment Plant has little history of how the effluents associated with these new grades and furnishes affect the treatment system. A single annual composite sample scanned for priority pollutants will show Ecology and the Industrial Treatment Plant the pollutant loading on the day of the sample collection but will not fully characterize the pollutant loading typical of the variety of grades and furnishes.

Suggested improvement – Require the collection and ‘priority pollutant scan’ of effluents representative of each primary type of effluent generated at NORPAC by furnish type and grade produced. Ensure that the first such round of scans is completed during calendar 2019. Note that to our knowledge, NORPAC has not as yet completed any such effluent characterization scan. In the first year of the permit these scans will be completed, a year’s worth of new TSS and BOD loading information attributable to specific mill production scenarios will be generated and a Wastewater Treatment Plant Impact Study will be completed. At that point a permit modification based on this information would be appropriate. A specific clause authorizing a permit, “re-opener” or permit modification based upon such new information therefore should be added to this permit.

**Response to Comment:** *Priority pollutant data is generally used in Ecology’s reasonable potential analysis to determine if a discharge to a surface water body will cause or contribute to an exceedance of a water quality standard. Since NORPAC’s samples will be collected prior to any treatment and the reasonable potential analysis will be conducted using Nippon Dynawave’s priority pollutant scan results, NORPAC’s priority pollutant scan data is considered to be supplemental data that will help inform future permitting requirements, if it is determined that the final treated effluent discharge has a reasonable potential to cause or contribute to an exceedance of the water quality standards. The permit requires NORPAC to complete a priority pollutant scan annually, with the first scan being completed in 2019, which is the same frequency required for the final effluent discharge to the Columbia. Special Condition S14 requires NORPAC to characterize the discharge for each paper grade which is produced.*

*This characterization includes flow rates, BOD, TSS, and any other pollutants which have the potential to cause or contribute to upsets at the treatment system or to pass-through the treatment system with little to no treatment.*

*Ecology has modified General Condition G3 to specifically allow for modification of the permit if a violation of any permit term or condition occurs, if a material change in quantity or type of waste disposal, or if Ecology determines that good and valid cause exists to modify the permit. The added language is included in all State Waste Discharge Permits and therefore is appropriate in NORPAC's permit.*

6. Location/Concern – **Permit Pages 18,19,20,21,22,23,24 – Immediate reporting of violations and spills**

Comment – Reports of permit violations, spills, bypasses, etc., which could upset the health of the Industrial Treatment Plant or cause any violation of the that plant's NPDES permit must be immediately communicated to the Industrial Treatment Plant as well as Ecology.

Suggested improvement – Adjust all pertinent 'reporting' language to reflect the Industrial Treatment Plant operator's need to understand and respond to changes in the influent they will be treating, the potential non-compliant situations the operator may subsequently be responsible for and the current upstream process status. Specifically modify condition S3.F.b to include reporting to the Treatment Facility any "Prohibited discharge" listed in S5.A.

**Response to Comment:** *Special Condition S3.J. requires NORPAC to notify the receiving treatment plant of all discharges that could cause problems to the treatment plant. This includes, but is not limited to, process spills, unauthorized discharges, slug discharges, and discharges with significant changes in loading. Any discharge that is listed as a prohibited discharge in Special Condition S5 would be an unauthorized discharge.*

*No changes to the permit were made as a result of this comment.*

7. Location/Concern – **Permit Pages 27-28, Condition S10, Permit Page 26, Condition S11, Spill Control and Slug Discharge Control Plans.**

Comment – Requiring these plans is appropriate. The real regulatory and performance-outcome value will occur if the Industrial Treatment Plant has the opportunity to review and comment on these plans during development and later adjustment.

Suggested improvement – These plans should be shared with NDP before being finalized such that the Industrial Treatment Plant better understands the risks to the plant and may offer advice or comments on the set of practices needed to mitigate the impact of any future spills and slug discharges. Updates to such plans must be similarly shared with the Industrial Treatment Plant operator.

**Response to Comment:** *While Ecology appreciates the interest of Nippon Dynawave in participating in the development of the plans, it would be very difficult for Ecology to require and enforce such collaboration as part of the permit.*

*The mentioned plans will be publicly available upon submission online via Ecology's Water Quality Permitting and Reporting Information System (PARIS) at the following address: <https://apps.ecology.wa.gov/paris/PermitLookup.aspx>.*

*No changes were made to the permit as a result of this comment.*

8. Location/Concern – **Permit Pages 24, Condition S5, Prohibited Discharges**

Comment – Past discharges of paper additive coagulant/flocculant chemistries have caused significant upsets to the Industrial Treatment Plant.

Suggested improvement – Add S5.A 10 – “Coagulant or flocculant chemicals at a concentration or volume that upset the collection and recycle of primary or secondary sludges.”

*Response to Comment: This discharge prohibition has been added to the permit.*

9. Location/Concern – **Permit Pages 33, Condition S14, Wastewater Treatment Plant Impact Study**

Comment – NDP strongly supports this condition. An effective and complete study will help both NORPAC and NDP ensure consistent compliance. In order to effectively evaluate the “impact of the discharge on the receiving wastewater treatment plant” the operators of that plant must be given the opportunity to review and offer comments and appropriate suggestions regarding the study scope, the interim results and final conclusions.

Suggested improvement – Ensure that the Industrial Treatment Plant operator is able to review and comment on the study scope and study results.

*Response to Comment: Special Condition S14 includes the scope of the study. Ecology is not requiring NORPAC to submit a study plan prior to initiation of the study.*

*Ecology will work with Nippon Dynawave's environmental staff during the review of the submitted study to determine if the study sufficiently addresses potential impacts to Nippon Dynawave's industrial treatment plant.*

*No changes were made to the permit as a result of this comment.*

10. Location/Concern – **Fact Sheet Page 15 AKART determination**

Comment - The Fact Sheet states that Ecology determined the facility meets the minimum requirements demonstrating compliance with AKART [...] if NORPAC complies with the effluent limitations and develops and implements a Slug Discharge Control Plan and an Operations and Maintenance Manual. NORPAC's effluent presents not only a slug load risk but also the treatment facility compliance risks linked to highly variable organic and solids loading. Flow, grade mix balancing, chip specie choices and pulp mill run rates can all be used to reduce the variability of such loading. Thus, the development of a Load Variability Management Plan is a reasonable expectation and should be considered, “AKART.”

Suggested improvements – Require the development and ongoing use of a Load Variability Management Plan.

***Response to Comment:*** *The Operation and Maintenance (O&M) Manual required by Special Condition S4.A. requires NORPAC to develop procedures for determining the anticipated organic, solids, and hydraulic loading to the receiving treatment plant, and procedures for notifying the receiving treatment plant of possible significant changes in organic, solids, or hydraulic loading. Ecology's intent for the development of these procedures was to address the variability of the loading in NORPAC's discharge.*

*No changes were made to the permit as a result of this comment.*