



North Pacific Paper Company LLC

**Title V Basis Statement
SW18-22-R0-A**

July 15, 2021

Southwest Clean Air Agency
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I. GENERAL INFORMATION AND CERTIFICATION

1. **Company Name:** North Pacific Paper Company LLC
2. **Facility Name:** North Pacific Paper Company - Longview
3. **Facility Address:** 3001 Industrial Way, Longview, WA 98632
4. **Mailing Address:** PO Box 2069, Longview, WA 98632
5. **Parent Company/Address:** One Rock Capital Partners
PO Box 2069, Longview, WA 98632
6. **Standard Industrial Classification:** 2621
7. **North American Industrial Classification System:** 322122
8. **Aerometric Information Retrieval System Number:** TBD
9. **Unified Business Identification:** 600209377
10. **Responsible Official:** Robert Buckingham, Co-President
11. **Facility Contact Person:** Mike Crawford, Environmental Manager
12. **Permit Engineer:** Wess Safford, Air Quality Engineer
13. **Reviewed by:** Paul Mairose, Chief Engineer
Uri Papish, Executive Director
14. **Basis for Title V Applicability:**
North Pacific Paper Company - Longview (NORPAC) is subject to the Title V Air Operating Permit (AOP) program because the facility is a major source as defined in WAC 173-401-200(19) with potential emissions greater than 100 tpy of a regulated air pollutant and 10 tpy of a single hazardous pollutant.
15. **Current Permitting Action:**
The purpose of the current permitting action is to incorporate the terms of ADP 21-3452 as an administrative permit amendment. ADP 21-3452 approved installation of a new recovered fiber pulp line.
16. **Attainment Area:**
NORPAC is located in an area which is in attainment for all criteria pollutants.

17. Facility Description:

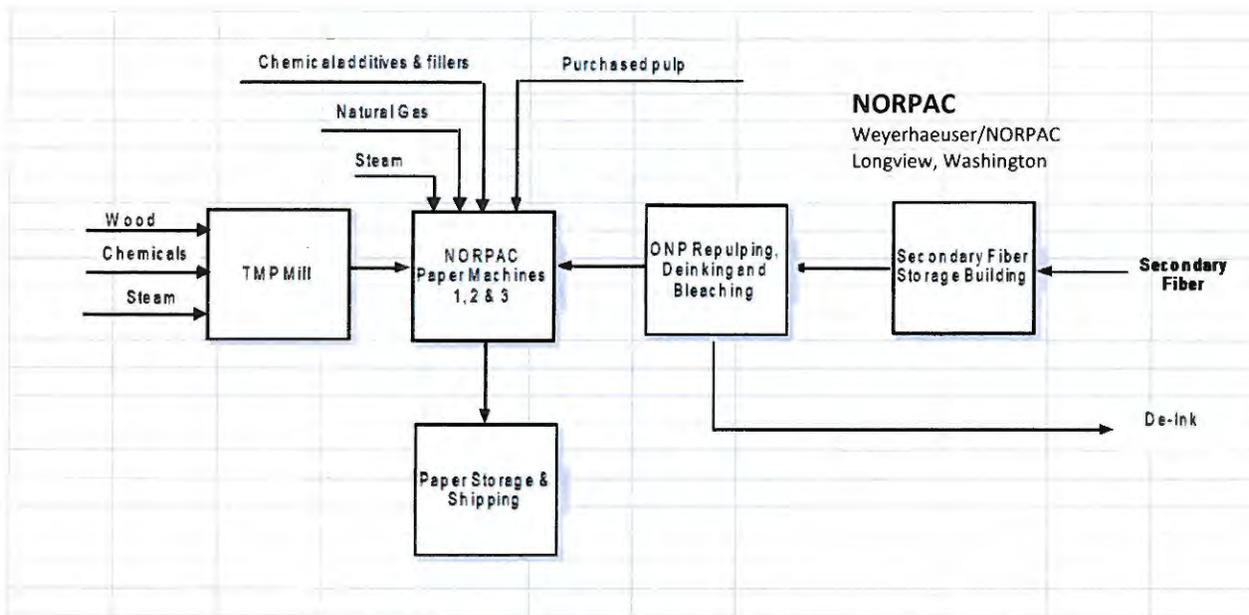
NORPAC is located in Longview, Washington. The facility produces newsprint and writing papers. The facility operates thermomechanical pulping (TMP) and de-ink pulping processes. Pulp is made from virgin and secondary fiber materials. Processes at the facility are generally designed to operate continuously.

NORPAC began operation in 1979 with construction of a thermomechanical pulp (TMP) mill and newsprint paper machine (NORPAC I). A second thermomechanical pulp (TMP) mill and newsprint paper machine (NORPAC II) were installed at the facility in 1981. A newsprint recycling operation and paper machine (NORPAC III) were installed at the facility in 1991. The facility currently operates a total of 9 refiner lines and 3 paper machines.

NORPAC is part of a larger 700+ acre site that includes a kraft pulp and paper mill, wastewater treatment plant, log export yard, and dimensional lumber plant. These separate sources have historically been considered as a single major source for Title V permitting due to common ownership and control. On November 1, 2016 NORPAC was sold to One Rock Capital Partners, LLC and is no longer under the same ownership or control as other facilities at the site. The Department of Ecology has issued a disaggregation memo to document the status of NORPAC as a separate stationary source for the purposes of the AOP Program.



NORPAC (Longview, Washington)



NORPAC Process Flow Diagram

II. EMISSION UNIT DESCRIPTIONS

ID	Generating Equipment/Activity	Emission Control
EU1	Thermomechanical Pulping Mill	Process Enclosure
EU2	Paper Machine #1	Process Enclosure, Fabric Filtration, Low NO _x Burners (<i>air cap dryers</i>)
EU3	Paper Machine #2	Process Enclosure, Low NO _x Burners (<i>air cap dryers</i>)
EU4	Paper Machine #3	Process Enclosure, Low NO _x Burners (<i>air cap dryers</i>)
EU5	De-inking Pulp Plant	Process Enclosure, Fabric Filtration
EU6	Old Newsprint Baghouse	Building Enclosure, Fabric Filtration
EU7	Recovered Fiber Pulping Line	Low VOC process additives

EU1 Thermomechanical Pulping Mill

The TMP Mill has an estimated production capacity of 749,980 bone dry metric tons per year (BDMT/yr) (PSD 97-01-A3).

The TMP Mill processes wood chips into virgin fiber for use in the facility's paper machines. Wood chips are received from a neighboring chip yard operated by Weyerhaeuser and stored in NORPAC chip silos. Wood chips are washed, drained, and then conveyed to either the TMP #1 or the TMP #2 Atmospheric Pre-steaming (APS) Bin. Chips are discharged from the APS Bins to an associated plug screw feeder, which compress the chips to remove extractives such as pitch and water. Compressed chips are discharged to chip impregnators, where the chips absorb pulping liquor (peroxide, caustic, silicate and chelant) to saturation. Saturated chips are discharged into an associated Reaction Bin, providing residence time for the chemicals to fully react with the chips. Chips are discharged from the Reaction Bins into a second plug screw

feeder unit that compresses the chips again, removing more extractives and any unreacted chemicals from the impregnation stage. Extracted fluid is sent counter-current back to the chip washers as make up volume. Spent fluid is eventually sewered and treated.

Pre-treated chips are discharged onto an enclosed conveyor for transport and distribution into individual chip surge bins that feed each primary refiner. Wood chips are fed from the surge bins to steaming tubes. After steaming, wood chips are fed to the primary refiners, bleached using peroxide, and processed in the secondary refiners. Bleached stock is screened and stored before being used in the paper machines. Higher-pressure direct contact steam from the primary refining process is fed to a reboiler for heat recovery. Atmospheric pressure steam from the primary and secondary refining process is sent to the hot water heating system for heat recovery. NORPAC does not currently generate any primary steam onsite. Primary steam for the TMP Mill is sourced from the adjacent kraft pulp mill operated by Nippon Paper.

As originally proposed, the TMP Mill utilized a sodium hydrosulfite bleaching process, supported by sodium triphosphate and SO₂ handling/storage systems. These systems were removed from service when the TMP Mill switched to a hydrogen peroxide bleaching process in the mid 1980's.

The principal emission points from this unit are the TMP Decker Exhausts, heat recovery vents, and pulp tank vents. There are no emission control devices in the TMP Mill, but various heat recovery processes reduce emissions by condensing out VOC and scrubbing out particulate in exhaust streams from the refiners.

The Thermomechanical Pulping (TMP) Mill is part of the functional groups commonly referred to as NORPAC I and NORPAC II.

This emission unit is not subject to any requirements from 40 CFR Part 60, 61 or 63.

EU2 Paper Machine #1

Paper Machine #1 is a Beloit Bel Baie II paper making machine with a nominal capacity of 250,000 metric tons per year (MT/yr). The machine was installed in 1979 and rebuilt in 2005. Improvement projects since original installation have increased potential production capacity. Potential production in combination with Paper Machine #2 is estimated to be 762,850 air dried metric tons per year (ADMT/yr) (PSD 97-01-A3).

Paper Machine #1 blends thermomechanical pulp, de-ink pulp, bleached Kraft pulp and filler material into a suspension, which is then formed into a sheet. The sheet is pressed and dried with a combination of natural gas fired (air cap dryers) and steam heated dryers. Excess pulp suspension from the forming section of the machine is processed through a system of saveall chests and deckers. There are repulping pits under all sections of the machine.

A bulk material handling silo is installed in the Paper Machine #1 process area. The silo is referred to as the Wet End Starch Silo and is capable of supplying starch to all three paper machines at the facility. Emissions from material transfer in the silo are controlled with process enclosure and fabric filtration. The unit was installed in 2003. Ecology did not require new source review for the installation. The unit is considered to be an insignificant emission unit.

The principal emission points from this unit are the Paper Machine No. 1 Vacuum Vent, Wet End Vents and Exhausts, and Dryer Vents. The paper machine is equipped with mist eliminators to help to reduce PM and VOC emissions associated with the loss of process water droplets. The mist eliminators are not considered to be control devices for purposes of compliance with any applicable emission standards.

Paper Machine #1 is part of the functional group commonly referred to as NORPAC I.

This emission unit is not subject to any requirements from 40 CFR Part 60, 61 or 63.

EU3 Paper Machine #2

Paper Machine #2 is a Beloit Bel Baie II paper making machine with a nominal capacity of 260,000 MT/yr. The machine was installed in 1981 and rebuilt in 1996. Improvement projects since original installation have increased potential production capacity. Potential production in combination with Paper Machine #1 is estimated to be 762,850 ADMT/yr (*PSD 97-01-A3*).

Paper Machine #2 blends thermomechanical pulp, de-ink pulp, bleached Kraft pulp and filler material into a suspension, which is then formed into a sheet. The sheet is pressed and dried with a combination of natural gas fired (air cap dryers) and steam heated dryers. Excess pulp suspension from the forming section of the machine is processed through a system of saveall chests and deckers. There are repulping pits under all sections of the machine.

The principal emission points from this unit are the Paper Machine No. 2 Vacuum Vent, Wet End Vents and Exhausts, and Dryer Vents. The paper machine is equipped with mist eliminators to help to reduce PM and VOC emissions associated with the loss of process water droplets. The mist eliminators are not considered to be control devices for purposes of compliance with any applicable emission standards.

Paper Machine #2 is part of the functional group commonly referred to as NORPAC II.

This emission unit is not subject to any requirements from 40 CFR Part 60, 61 or 63.

EU4 Paper Machine #3

Paper Machine #3 is a Beloit Bel Baie II.5 paper making machine with a nominal capacity of 240,000 MT/yr. The machine was installed in 1991.

Paper Machine #3 blends thermomechanical pulp, de-ink pulp, bleached Kraft pulp and filler material into a suspension, which is then formed into a sheet. The sheet is pressed and dried with a combination of natural gas fired (air cap dryers) and steam heated dryers. Excess pulp suspension from the forming section of the machine is processed through a system of saveall chests and deckers. There are repulping pits under all sections of the machine.

The principal emission points from this unit are the Paper Machine No. 3 Vacuum Vent, Wet End Vents and Exhausts, and Dryer Vents. The paper machine is equipped with mist eliminators to help to reduce PM and VOC emissions associated with the loss of process water droplets. The mist eliminators are not considered to be control devices for purposes of compliance with any applicable emission standards.

Paper Machine #3 is part of the functional group commonly referred to as NORPAC III.

This emission unit is not subject to any requirements from 40 CFR Part 60, 61 or 63.

EU5 De-inking Pulp Plant

The De-inking Pulp Plant has an estimated production capacity of 200,750 MT/yr (97AQ-I041).

ONP and other recycled feedstocks are fed from storage to the repulping plant. Feedstock is mixed with water and repulped. The pulp is processed through the flotation units to remove ink. Process water is treated in clarifiers. Rejects from pulp cleaning and the inky mass from the flotation units are separated from the pulp mixture and dewatered. De-inked pulp is screened, washed, bleached, and stored for final distribution to the paper machines. The de-inking process discharges to the ambient atmosphere through exhausts from presses, washers, pulp tanks, flotation units, and the clarifier.

As originally proposed, operations at the De-inking Pulp Plant were supported by two bulk material handling silos (starch, soap). Each material silo was equipped with a dedicated baghouse to control particulate emissions caused by material transfer activity. At the current time, the soap silo is still in place, but has not been operated in years. It is considered out of service. The starch silo is in operation and is referred to as the Size Press Starch Silo.

The De-inking Pulp Plant is part of the functional group commonly referred to as NORPAC III.

This emission unit is not subject to any requirements from 40 CFR Part 60, 61 or 63.

EU6 ONP Baghouse

NORPAC receives old newsprint (ONP) to use as a recycled fiber supply. The handling of ONP at the pulper house generates airborne particulate in sufficient quantity to be a potential industrial hygiene concern. NORPAC has installed a dust evacuation system to control the level of airborne particulate. The dust evacuation system is vented to a dedicated baghouse, referred to as the ONP Baghouse.

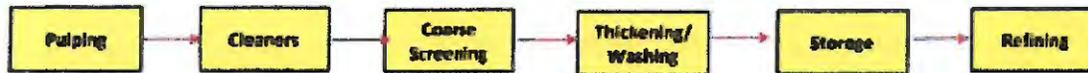
The ONP Baghouse is described as follows:

Make/Model:	Western Pneumatic model 318
Flowrate:	45,700 acfm
Filtration Area:	4,163 ft ²
Filter Bags:	318 bags (4.5" dia x 120" length)
Filter Material:	Polypropylene
Filter Cleaning:	Reverse air

This emission unit is not subject to any requirements from 40 CFR Part 60, 61 or 63.

EU7 Recovered Fiber Pulping Line

NORPAC receives old, corrugated cardboard (OCC) and mixed paper (MP) material streams at the facility via truck and railcar. The material is stored in warehouses prior to processing. Stored material is processed into recovered fiber pulp using a process line configured around a single FibreFlow drum pulper. Finished pulp is stored in an existing storage tower. The pulping line includes cleaners, deckers, a dump tower, screens, chests, and thickeners operating in support of the FibreFlow drum pulper. Recovered fiber pulp is used to manufacture packaging grade paper in existing paper machines. Pulp production from this line is expected to support production of 346,750 tpy of paper.



Pulping line process flow diagram.

III. EXPLANATION OF INSIGNIFICANT EMISSION UNIT DETERMINATIONS

In accordance with WAC 173-401-530, an emission unit or activity is considered insignificant if:

- The emission unit or activity generates only fugitive emissions and is not subject to applicable requirements other than generally applicable requirements of the state implementation plan. [WAC 173-401-530(1)(d)]
- Actual emissions of all regulated air pollutants from an emission unit or activity are less than the emission thresholds established in WAC 173-401-530(4).
- The emission unit or activity is listed as categorically exempt in WAC 173-401-532.
- The emission unit or activity is listed in WAC 173-401-533 and its size or production rate based on maximum rated capacity is below the specified level.

Identified insignificant emission units at this facility are listed in the table below.

IEU Name/Description	IEU Basis
Haul roads & traffic activities.	173-401-530(1)(d)
Maintenance Shops	173-401-530(4)

IV. EXPLANATION OF SELECTED PERMIT PROVISIONS AND GENERAL TERMS AND CONDITIONS

P13. Excess Emissions

SWCAA 400-107

SWCAA 400-107 establishes criteria and procedures for determining when excess emissions are considered unavoidable. Emissions that meet the requirements to be classified as unavoidable are still considered excess emissions and are reportable but are excused and not subject to penalty. Notification of excess emissions is required as soon as possible and shall occur by the next business day following the excess emissions event. Excess emissions due to startup or shutdown conditions are considered unavoidable if the permittee adequately demonstrates the excess emissions could not have been prevented through careful planning and design. Upset

excess emissions are considered unavoidable if the permittee adequately demonstrates the upset event was not caused by poor or inadequate design, operation, maintenance, or other reasonably preventable condition, and the permittee takes appropriate corrective action that minimizes emissions during the event, taking into account the total emissions impact of that corrective action.

G5. Permit Renewal **WAC 173-401-710(1)**

An Air Operating Permit has an effective term of 5 years from the date of final issuance. Pursuant to WAC 173-401-710(1), the permit specifies a date by which a renewal application is required to be submitted to SWCAA.

A preliminary renewal application for this facility must be submitted no later than 12 months prior to permit expiration. A complete renewal application must be received no later than 6 months prior to permit expiration. Early submittal of a preliminary application is intended to provide SWCAA with the opportunity to review the application for completeness and allow the permittee sufficient time to amend the application, if necessary, prior to the final submission date.

WAC 173-400-117, WAC 173-400-700
WAC 173-460 (Effective 8/21/1998)
SWCAA 400-109, SWCAA 400-110

G8. New Source Review

Construction or modification of an air pollution source is subject to review to ensure that applicable emission standards are met, and appropriate control technology is employed. The program under which a new source or modification is reviewed depends on the type and quantity of potential air emissions associated with the project. New sources or modifications meeting the definition of a 'major stationary source' and located in attainment or unclassified areas are subject to review under the Prevention of Significant Deterioration (PSD) program administered by the Department of Ecology. New sources or modifications meeting the definition of a 'major stationary source' and located in a nonattainment area and minor (area) sources are subject to review under SWCAA's new source review program. New sources or modification of existing sources that increase the emission of toxic air pollutants are subject to review under SWCAA's toxic air pollutant program, which implements the February 14, 1994 version of WAC 173-460.

G9. Portable Sources **SWCAA 400-110(6)**

SWCAA 400-110(6) establishes procedures for approving the operation of portable sources of air emissions that locate temporarily at project sites. These requirements are general standards and apply to all portable sources of air contaminants. Equipment commonly subject to these conditions include emergency generators, engine-powered pumps, rock crushers, concrete batch plants, and hot mix asphalt plants that operate for a short time period at a site to fulfill the needs of a specific contract. Portable sources exempt from registration under SWCAA 400-101 are also exempt from SWCAA 400-110 and not subject to the portable source requirements.

G16. Chemical Accident Prevention Provisions **40 CFR 68**

None of the processes at the facility currently store or handle affected substances in quantities large enough to trigger applicability of the provisions in 40 CFR 68. However, the regulation has been included in the general terms of the permit in order to address future operations that may store or handle substances that are subject to the regulation.

V. EXPLANATION OF OPERATING TERMS AND CONDITIONS

Reqs 1-8

General Standards for Maximum Emissions

SWCAA 400-040

Req 1 through Req 8 incorporate general maximum emission standards for various air contaminants established in SWCAA 400-040. These standards apply to all emission units at the facility, both EU and IEU. Pursuant to WAC 401-530(2)(c), the permit does not contain any testing, monitoring, recordkeeping, or reporting requirements for affected IEUs except those specifically identified by the underlying requirements. General monitoring provisions have been created for EUs under 'gap-filling' to provide reasonable compliance assurance.

Req 6 prohibits emissions of a gas containing in excess of 1,000 ppm (@ 7% O₂) of SO₂ from any emission unit. General process equipment at the facility is not capable of creating such emission concentrations and the only fuel burned onsite is natural gas so monitoring is limited to compliance certification by the responsible official.

Req 7 prohibits the installation or use of any means to conceal or mask an emission which would otherwise cause a violation. The Permittee does not operate any equipment capable of concealing or masking emissions, so monitoring is limited to compliance certification by the responsible official.

Req 9

Emission Standards for Combustion and Incineration Units

SWCAA 400-050

Req 9 incorporates particulate matter emission limit for combustion or incineration units established in SWCAA 400-050(1). This requirement applies to all combustion and incineration units at the facility, both EUs and IEUs. Pursuant to WAC 401-530(2)(c), the permit does not contain any testing, monitoring, recordkeeping, or reporting requirements for affected IEUs except those specifically identified by the underlying requirements. General monitoring provisions have been created for EUs under 'gap-filling' to provide reasonable compliance assurance.

Req 10

Emission Standards for General Process Units

SWCAA 400-060

Req 10 incorporates a particulate matter emission limit for general process units that applies to all general process units at the facility, both EUs and IEUs. Pursuant to WAC 401-530(2)(c), the permit does not contain any testing, monitoring, recordkeeping, or reporting requirements for affected IEUs except those specifically identified by the underlying requirements. General monitoring provisions have been created for EUs under 'gap-filling' to provide reasonable compliance assurance.

Req 11

Adjustment for Atmospheric Conditions

SWCAA 400-205

Req 11 incorporates a general prohibition on varying the emission rate of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant, except as directed by the air pollution episode regulations contained in SWCAA 400-230(5).

Req 12**O/A 78-326****SWCAA Orders****O/A 79-475**

Order of Approval 78-326 is the original approval order for NORPAC I, issued on March 16, 1978. Order of Approval 79-475 is the original approval order for NORPAC II, issued on August 23, 1979. These orders approved the installation of two thermomechanical pulping mills, two paper machines, and related equipment as proposed in the underlying notice of construction applications (CO-216, CO-242). The portions of each order relating to emissions of CO and VOC were superseded by issuance of PSD 97-01. The portions of each order relating to emissions of other regulated pollutants remain in effect.

Req 12 requires all wood chips used in the pulping process to be green. This requirement is taken from O/A 78-326 Whereas Section 3 and O/A 79-475 Whereas Section 3. Both orders cite the use of 'green' chip, but do not define the term. For the purposes of this permit, the term is interpreted to mean 'as received'.

Reqs 13-16**Ecology PSD Permit****PSD-97-01-A4**

PSD-97-01-A4 is the current PSD permit (major NSR) for this facility. PSD-03-03-A2 was issued final on April 20, 2017 and supersedes all previously issued PSD permits as described in the permitting history section of this document.

Reqs 13-15 incorporate BACT emission limits specific to NORPAC I and II operations. The emission limits apply to emissions of CO and VOC. PSD-97-01-A4 contains monitoring requirements for the CO and VOC emission limits established in the permit, which are sufficient to assure compliance and have been incorporated into the air operating permit.

Req 16 incorporates a general requirement to maintain and follow an operation and maintenance manual for each emission unit in NORPAC I and II. SWCAA has relied upon certification by the responsible official to provide compliance assurance.

Reqs 17-19**Ecology Order****97AQ-I041**

Ecology Order 97AQ-I041 was issued on May 14, 1997. This order applies to the equipment comprising NORPAC III and was issued to incorporate updated emission information and physical details regarding Paper Machine #3. This order formally revoked SWCAA O/A 89-1131 and incorporated major elements of that approval. This order did not establish any specific monitoring scheme for the requirements below so general monitoring provisions have been created under 'gap-filling' to provide reasonable compliance assurance.

Req 17 incorporates a general visible emissions limit applicable to NORPAC III operations.

Req 18 incorporates a general requirement to maintain and operate equipment in a manner consistent with good air pollution control practice.

Req 19 incorporates BACT requirements for the Starch and Soap Silos.

Req 20**Ecology Order****98AQ-I046**

Ecology Order 98AQ-I046 was issued on August 24, 1998. This order applies to the Old Newsprint Baghouse and the associated hoods, ductwork, and fan, and was issued to facilitate issuance of an AOP for the Weyerhaeuser kraft mill. This order formally revoked SWCAA O/A 94-1604 and incorporated some, but not all, of the associated approval conditions.

Req 20 incorporates a BACT emission limit for PM emissions from the Old Newsprint Baghouse.

Reqs 21-23**SWCAA Order****ADP 21-3452**

SWCAA Order ADP 21-3452 was issued on April 13, 2021. This order applies to

Reqs 21-23 incorporate BACT emission limits specific to the Recovered Fiber Pulping Line. The emission limits apply to VOC emissions, visible emissions, and annual pulp throughput.

VI. EXPLANATION OF MONITORING AND RECORDKEEPING TERMS AND CONDITIONS

The monitoring terms listed below incorporate formal monitoring taken from applicable regulations as well as 'gap-fill' monitoring designed to assure compliance for requirements that do not contain formal monitoring. For applicable requirements that have one-time applicability or apply primarily to equipment design or installation, SWCAA relies upon compliance certification by the responsible official to provide compliance assurance.

General**M1. Visible Emissions Monitoring****Reqs 1, 17**

This monitoring section is applicable to requirements drawn from SWCAA 400-040 and ADP 17-3230. These requirements limit visible emissions, but do not directly establish any specific regime of monitoring or recordkeeping. Consequently, SWCAA has implemented monitoring requirements under the "gap filling" provisions of WAC 173-401-615.

The monitoring scheme specified by this requirement is designed to provide periodic assurance of compliance and identify potential visible emission violations in a timely fashion, prompting corrective action when necessary. A monthly inspection frequency is considered adequate to assure compliance with applicable opacity requirements.

General**M2. Fugitive Emissions/Particulate Matter Monitoring****Reqs 2-3, 8-10, 20**

This monitoring section is applicable to general requirements drawn from SWCAA 400-040, 400-050 and 400-060. These requirements do not establish a specific regime of monitoring or recordkeeping so SWCAA has implemented monitoring requirements under the "gap filling" provisions of WAC 173-401-615.

This monitoring requirement is designed to assure compliance through periodic visual inspections of the facility and prompt corrective action. A lack of visual emissions or material accumulation is considered indicative of compliance with the applicable emission limits and work practices.

If visual emissions or evidence of a process upset is observed, corrective action requirements result in the affected unit being promptly repaired or taken out of operation.

General

M3. Complaint Monitoring

Reqs 4-5

This monitoring section is applicable to general requirements drawn from SWCAA 400-040. These requirements do not directly establish any specific regime of monitoring or recordkeeping. Consequently, SWCAA has implemented monitoring requirements under the "gap filling" provisions of WAC 173-401-615.

The affected requirements primarily involve unacceptable impacts on neighboring properties and/or surrounding populations. While many of the prohibited impacts might be observed from the facility itself, compliance with all provisions can not be assured by onsite observations alone (e.g., offsite odor impact). Therefore, this monitoring scheme relies on input from affected parties. The monitoring is designed to assure compliance through prompt complaint response and corrective action.

NORPAC I and II

M4. Emission Testing

Reqs 13-15

This monitoring section is drawn from PSD 97-01-A4, Conditions 4-6. The purpose of this testing is to verify emission factors developed in the 2008-2009 emission evaluation program. If a significant deviation in emission factors (± 20 percent) is found, Ecology or North Pacific Paper Company, LLC may initiate a technical discussion on the need to amend the emission factors presented in PSD 97-01-A4, Tables 1 and 2 or Ecology may require amendment of the emission factors.

The permittee is required to conduct periodic emission testing on a continuing three-year schedule depending on whether a significant deviation is found. PSD 97-01-A4 specifies a minimum of three test runs at each emission point and the use of selected EPA test methods. The emission points to be tested are based on the facility's 2008-2009 emission evaluation program and are not listed in PSD 97-01-A4. Emission testing was conducted in 2012 and 2015 and is scheduled for 2018.

NORPAC I and II

M5. Emission Monitoring

Reqs 13-15

This monitoring section is drawn from PSD 97-01-A4, Conditions 1-3 and 7. The purpose of this monitoring is to quantify air emissions from NORPAC I and II operations and demonstrate compliance with applicable CO and VOC emissions limits. The permittee is required to record selected operational parameters for NORPAC I and II operations. Recorded parameters and applicable emission factors are used to calculate air emissions.

NORPAC III

M6. Emission Monitoring

This monitoring section is drawn from Order 97AQ-I041, Condition 4. The purpose of this monitoring is to quantify air emissions associated with NORPAC III operations. The permittee is required to record selected operational parameters for NORPAC III operations. Recorded parameters and applicable emission factors are used to calculate air emissions.

Old Newsprint Baghouse**M7. Emission Testing and Monitoring****Req 20**

This monitoring section is drawn from Order 98AQ-I046, Appendix A. The purpose of this monitoring is to quantify particulate matter emissions from the Old Newsprint Baghouse. The permittee is required to conduct periodic emission testing on a continuing five-year schedule. The specified testing protocol is taken from Order 98AQ-I046, Appendix B. The permittee is required to record emission test results and hours of baghouse operation. Recorded information is used to calculate air emissions.

Recovered Fiber Pulping Line**M8. Emission Monitoring****Req 20**

This monitoring section is drawn from ADP 21-3452, Condition 11. The purpose of this monitoring is to quantify VOC and toxic emissions from operation of the Recovered Fiber Pulping Line. The permittee is required to record quantity of pulp production and hours of pulping line operation. Recorded information is used to calculate air emissions using specified emission factors.

Greenhouse Gas**M9. Emission Monitoring**

WAC 173-441 requires owners and operators to quantify and report emissions of greenhouse gases from applicable source categories if actual emissions from their facility are ten thousand metric tons CO₂e or more per year. Annual greenhouse gas emissions from this facility are greater than ten thousand tons so the facility is subject to the reporting program. The reporting program is administered by Ecology, and all required reports are to be submitted directly to that agency. SWCAA generally receives copies of each report, but report review and approval of calculation methodology is performed by Ecology.

M10. Compliance Certification**Reqs 6-7, 11-12, 16, 18-19**

Applicable requirements cited in this monitoring section are drawn from SWCAA 400-040, SWCAA 400-070, 40 CFR 60 Subpart Kb, O/A 78-326, O/A 79-475, PSD-97-01-A4, Order 97AQ-I041, and Order 98AQ-I046. The applicable requirements do not have a specific regime of monitoring or recordkeeping. SWCAA has implemented monitoring requirements under the "gap filling" provisions of WAC 173-401-615.

Applicable requirements cited in this section are divided into two broad categories, equipment configuration and operation restrictions and general work practice requirements. The equipment restrictions generally apply to fundamental equipment characteristics that do not change once installed (no masking, fuel type, use of control technology). Hence, periodic certification that no changes have been made to equipment function or design is an appropriate means of assuring compliance for these requirements. The general work practice requirements (maintain O&M manual, use good control practice, etc.) are primarily a function of worker training and process management. Compliance with these requirements is best ensured through active oversight by facility managers. The due diligence associated with periodic compliance certification will serve to confirm compliance.

K1. General Recordkeeping

The requirements cited in this recordkeeping section are drawn from provisions in WAC 173-401-615(2). Recordkeeping requirements have been separated into sub-categories for easier reference.

K2. Continuous Emission Data Recordkeeping

The requirements cited in this recordkeeping section are taken from applicable sections of 40 CFR 75. The Acid Rain Program requires that pertinent records be maintained for at least three years from the date of the record. This period has been extended to five years as required by the general recordkeeping provisions of WAC 173-401-615(2)(c). The type and format of data to be recorded is specified for operating conditions and emissions of Acid Rain affected units.

VII. EXPLANATION OF REPORTING TERMS AND CONDITIONS**R1. Deviations from Permit Conditions**

The permittee is required to promptly report all permit deviations pursuant to WAC 173-401-615(3), SWCAA 400-107, and PSD 97-01-A4, Condition 8. Reporting timelines vary depending on the type of deviation involved.

The general timeline for deviation reporting (within 30 days following the end of the month of discovery) is cited in WAC 173-401-615(3)(b) and PSD 97-01-A4, Condition 8. The timeline for reporting if the permittee wishes to claim excess emissions as unavoidable (within 48 hours of discovery) is defined in SWCAA 400-107. The timeline for deviations that pose a potential threat to human health and safety (within 12 hours of discovery) is taken directly from WAC 173-401-615(3).

In all cases, SWCAA may request a full written report of any deviation if determined to be necessary. Permit deviations are also to be identified in the subsequent semi-annual report.

R2. Complaint Reports

The permittee is required to report all complaints to SWCAA within three business days of receipt. This reporting section is based on WAC 173-401-615(3), ADP 21-3452, Condition 12, and SWCAA's definition of "prompt" for reporting of complaints. The intent is to ensure a timely and effective response to complaints by either the facility or SWCAA.

R3. Monthly Reports

This reporting requirement is taken from PSD 97-01-A4, Condition 7.4. The permittee is required to report CO and VOC emissions from NORPAC I and II operations on a monthly basis. Monthly reports are to include a cumulative summary for the preceding 12-month period. This purpose of this report is to demonstrate with applicable CO and VOC emission limits. Each report must be certified by a responsible official consistent with WAC 173-401-520.

R4. Semi-Annual Reports

WAC 173-401-615(3)(a) requires monitoring records and certification to be reported at least semi-annually. The type of data to be reported consists of general monitoring results, operating parameters, and a summary of facilitywide emissions. Each report must be certified by a responsible official consistent with WAC 173-401-520.

The permittee is also required to submit a list of all deviations from permit conditions that have occurred in the preceding semi-annual period consistent with WAC 173-401-615(3)(a).

R5. Emission Inventory Reports

This reporting requirement is drawn from SWCAA 400-105 and ADP 21-3452, Condition 17. The permittee is required to submit an emissions inventory report to SWCAA by March 15th for the previous calendar year. A complete emissions inventory includes quantification of emissions from all emission units at the facility. SWCAA's Executive Director may extend the submittal date by up to 60 days, pursuant to SWCAA 400-105(1).

R6. Greenhouse Gas Emission Reports

This reporting requirement is taken from WAC 173-441-050(2). The permittee is required to submit to Ecology an annual report containing the data elements identified in WAC 173-441-050(3). The report shall be submitted electronically in a format specified by Ecology pursuant to WAC 173-441-070 and certified by a designated representative pursuant to 173-441-060(5).

R7. Annual Compliance Certification

This reporting requirement is taken from SWCAA 401-630(5). The permittee is required to report and certify the compliance status of all permit terms and conditions on an annual basis. Insignificant emission units are not included in this requirement.

R8. Emission Test Reports

This reporting requirement is taken from SWCAA 400-106(1) and Order 98AQ-I046, Appendix A. The permittee is required to report emission test results and contemporaneous operational data to SWCAA within 45 days of test completion.

VIII. EXPLANATION OF FUTURE REQUIREMENTS

No future requirements identified.

IX. EXPLANATION OF OBSOLETE REQUIREMENTS**1. Obsolete PSD Permits**

The Department of Ecology has issued a total of five PSD permits for the NORPAC facility in Longview, Washington. As detailed in Section I.11. *Facility Permitting History*, the facility's current permit is PSD-97-01-A4. Previous permits have been superseded as described below.

PSD-97-01-A3 issued July 29, 2010	Superseded by PSD 97-01-A4
PSD-97-01-A2 issued April 24, 2004	Superseded by PSD 97-01-A3
PSD-97-01-A1 issued March 25, 2004	Superseded by PSD 97-01-A2
PSD-97-01 issued December 9, 1997	Superseded by PSD 97-01-A1

2. Obsolete/Revoked Orders of Approval

SWCAA has issued a total of six approval orders for the NORPAC facility in Longview, Washington. As detailed in Section I.11 *Facility Permitting History*, three of those orders are still active (*O/A 78-326, O/A 79-475, O/A 81-638*). The remaining approval orders are obsolete or have been revoked as described below.

O/A 94-1604 issued May 10, 1994
 O/A 89-1131 issued October 16, 1989
 O/A 87-919 issued August 9, 1987

Revoked by Order 98AQ-I046
 Revoked by Order 97AQ-I041
 Obsolete. Equipment removed.

X. EXPLANATION OF APPENDICES

Appendix A Old Newsprint Baghouse - Emission Testing Requirements

Appendix A contains an emission testing protocol to be used when conducting periodic testing of the Old Newsprint Baghouse. The testing protocol is taken directly from Order 98AQ-I046, Appendix B.

Appendix B NORPAC I and II Emission Factors

Appendix B contains CO and VOC emission factors to be used in calculating emissions from NORPAC I and II operations. The emission factors are taken directly from PSD 97-01-A4, Table 1 and 2.

XI. FACILITY HISTORY

Permit/Regulatory History

The following table lists each Air Discharge Permit (ADP) issued to the facility by SWCAA. Permits listed in italics are no longer in effect. Requirements in those permits may have been superseded, may have been of limited duration, or affected equipment may have been removed from service.

<u>Permit Number</u>	<u>Issue Date</u>	<u>Permitting Action Description</u>
SWCAA ADP 21-3452	April 13, 2021	This permitting action approved installation of a new independent pulping line to process old, corrugated cardboard (OCC) and mixed paper (MP) at the facility. The new recovered fiber pulping line is configured around a FibreFlow drum pulper.
PSD 97-01-A4	April 20, 2017	This permitting action was an administrative action to change the name of the facility owner and confirm existing emission factors for the NORPAC I and II process units.
Ecology Order 01-0612LET	June 12, 2001	This permitting action approved modifications to the 4 th dryer section of paper machine #2.
		CO and VOC emission increases from this project were incorporated in PSD 97-01-A1. (<i>See March 19, 2004 netting analysis</i>)

<u>Permit Number</u>	<u>Issue Date</u>	<u>Permitting Action Description</u>
Ecology Order 00AQIS-1704	October 20, 2000	This permitting action approved replacement of the drive system on paper machine #1. The action was subject to review for toxic air pollutants only. Criteria pollutant emission increases were de minimis for NSR purposes. CO and VOC emission increases from this project were incorporated in PSD 97-01-A1. (<i>See March 19, 2004 netting analysis</i>)
Ecology Order 00AQIS-1196	June 1, 2000	This permitting action approved the installation of a new suction box on paper machine #1. The action was subject to review for toxic air pollutants only. Criteria pollutant emission increases were de minimis for NSR purposes. CO and VOC emission increases from this project were incorporated in PSD 97-01-A1. (<i>See March 19, 2004 netting analysis</i>)
Ecology Order 98AQ-I046	October 8, 1998 August 24, 1998	This permitting action revised approval conditions for the dust control system in the pulper house for the purposes of facilitating issuance of an AOP for the facility. This order was originally issued on August 24, 1998. Amended pages were issued on October 8, 1998.
Ecology Order 97AQ-I041	May 14, 1997	This permitting action revised existing approval conditions for NORPAC III to incorporate emission information unavailable at the time of initial approval and to accurately reflect the physical configuration of paper machine #3.
SWCAA O/A 86-837	September 23, 1986	This permitting action approved the installation of a hydrogen peroxide pulp treatment system in the #2 TMP mill.
SWCAA O/A 81-638	January 19, 1982	This permitting action approved the installation of a new refiner line at the existing thermomechanical pulping mill. This unit is referred to as refiner line 6 and operates as an integral part of TMP-2. The portions of this order that relate to emissions of CO and VOC were superseded by PSD 97-01.

<u>Permit Number</u>	<u>Issue Date</u>	<u>Permitting Action Description</u>
SWCAA O/A 79-475	August 23, 1979	This permitting action approved the installation of a thermomechanical pulping mill (TMP-2), a new paper machine (PM-2), and related equipment. This project is commonly referred to as NORPAC II and includes refiner lines 5, 7-9 and paper machine #2. The portions of this order that relate to emissions of CO and VOC were superseded by PSD 97-01.
SWCAA O/A 78-326	March 16, 1978	This permitting action approved the installation of a thermomechanical pulping mill (TMP-1), a new paper machine (PM-1), and related equipment. This project is commonly referred to as NORPAC I. The portions of this order that relate to emissions of CO and VOC were superseded by PSD 97-01.
<u>Obsolete/Superseded</u> PSD 97-01-A3	July 29, 2010	<i>This permitting action incorporated the results of process improvements and energy conservation projects that reduced emissions after the issuance of PSD 97-01, Amendment 2. CO and VOC emission factors were revised consistent with the results of 2008 and 2009 source testing at the facility. CO and VOC emission limits were revised using updated emission factors and production projections. Source testing requirements for NORPAC I and II were revised to allow reduced testing frequency from once every three years to once every five years if two consecutive source tests indicate emission factor changes within +/- 20% of the 2008-2009 emission rates.</i> <i>This permit was superseded by PSD 97-01, Amendment 4.</i>
PSD 97-01-A2	April 24, 2004	<i>This permitting action was an administrative amendment to PSD 97-01, Amendment 1.</i> <i>This permit was superseded by PSD 97-01, Amendment 3.</i>
PSD 97-01-AI	March 25, 2004	<i>This permitting action revised CO and VOC emission limits and operating requirements established in PSD 97-01 to allow the facility to produce higher volumes of high brightness and high basis weight paper grades. This action did not constitute a major modification.</i> <i>This permit was superseded by PSD 97-01, Amendment 2.</i>

<u>Permit Number</u>	<u>Issue Date</u>	<u>Permitting Action Description</u>
PSD 97-01	December 9, 1997	<i>This permitting action approved CO and VOC emission increases associated with installation and operation of the NORPAC I and II facilities. PSD 97-01 established combined CO and VOC emission limits for NORPAC I and II and limited pulp and paper production rates. PSD 97-01 superseded those portions of SWCAA Orders 78-326, 79-475 and 81-638 that relate to emissions of CO and VOC.</i> <i>This permit was superseded by PSD 97-01, Amendment 1.</i>
Ecology Order 96AQ-I093	April 21, 1997 December 23, 1996	<i>This permitting action approved the installation of new and improved screening units in the thermomechanical pulping mill. This project increased the production capability of the mill. This order was originally issued on December 23, 1996. Amended pages were issued on April 21, 1997.</i> <i>This permit was superseded by PSD 97-01.</i>
Ecology Order 95AQ-I076	November 27, 1995	<i>This permitting action approved a rebuild of Paper Machine #2. This project increased the production capability of the unit.</i> <i>This permit was superseded by PSD 97-01.</i>
SWCAA O/A 94-I604	May 10, 1994	<i>This permitting action approved installation of a dust control system to control particulate emissions generated by the handling of old newsprint in the pulper house. Emissions were controlled with a dedicated baghouse.</i> <i>This order was revoked by 98AQ-I046.</i>
SWCAA O/A 89-1131	October 16, 1989	<i>This permitting action approved the installation a recycle newsprint de-inking plant, a new paper machine (PM-3), and related equipment. This project is commonly referred to as NORPAC III.</i> <i>This order was revoked by 97AQ-I041.</i>
SWCAA O/A 87-919	August 9, 1987	<i>This permitting action approved the installation of a sandblasting and painting operation.</i> <i>This order is obsolete. The approved equipment has been permanently removed service.</i>

Title V Permit Actions

The following Title V permitting actions have been taken at the facility:

Permit Amendment (SW18-22-R0-A)

Amendment request received:	April 28, 2021
Amended permit issued:	July 15, 2021

Renewal Permit (SW18-22-R0)

Application received:	March 8, 2018
Application complete:	April 27, 2018
Application sent to EPA:	April 27, 2018
Draft permit issued:	February 12, 2019
Proposed permit issued:	April 26, 2019
Final permit issued:	June 18, 2019

Renewal Permit (Ecology AOP 0000126)

Application received:	June 11, 2014
Draft permit issued:	May 25, 2017
Final permit issued:	October 6, 2017

Compliance History

SWCAA has issued the following Notices of Violation to NORPAC during the last five-year period:

<u>NOV #</u>	<u>Issue Date</u>	<u>Cited Violation</u>
I0380	12/24/2020	Failure to submit requested information regarding process changes and capital projects at the Longview Mill.