Public Notice

DEQ Requests Comments on Georgia-Pacific Consumer Operations LLC Proposed Air Quality Permit

The Oregon Department of Environmental Quality invites the public to submit written comments on the conditions of Georgia-Pacific Consumer Operations LLC proposed renewal air quality permit, known officially as a Standard Air Contaminant Discharge Permit.

Summary

The proposed permit is a renewal of the existing Standard Air Contaminant Discharge Permit which was scheduled to expire on August 1, 2019. The company submitted a timely renewal application on May 24, 2019. Therefore, the current permit remains in effect until the renewal is issued. Upon issuance, this permit will be effective for five years.

How do I participate?

To submit your comments for the public record, send them by mail, fax or email:

Suzy Luttrell,
DEQ Permit Coordinator
4026 Fairview Industrial Dr. SE
Salem, OR 97302
Fax: 503-378-4196
Email: luttrell.suzy@deq.state.or.us

Written comments are due by 5 p.m. Monday Oct. 29, 2020.

About the facility

The facility produces bath tissue and paper towels from purchased pulp and de-inked pulp made from recycled paper.

The paper is made on two paper machines and dried into large rolls. The rolls then go to converting operations which produce the bath tissue and paper towels. Wet scrubbers and baghouses are used to control emissions from the operations.

What air pollutants would the permit regulate?

This permit regulates emissions of the pollutants listed in the table at the end of this document.

How does DEQ determine permit requirements?

DEQ evaluates types and amounts of pollutants and the facility's location, and determines permit requirements according to state and federal regulations.

How does DEQ monitor compliance with the permit requirements?

This permit would require the facility to monitor pollutants using federally approved monitoring practices and standards.

What happens after the public comment period ends?

DEQ will schedule a public hearing if one is requested by 10 or more people, or by an authorized person representing an organization of at least 10 people. An additional public notice will be published to advertise the public hearing.

If a public hearing is not requested, DEQ will consider and provide responses to all comments received at the close of the comment period. DEQ may modify provisions in the proposed permit, but the permit writers can only modify conditions of the permit in accordance with the rules and statutes under the authority of DEQ. Participation in the rulemaking or the legislative process is the only way to change the rules or statutes. Ultimately, if a facility meets all legal requirements, DEQ will issue the facility's air quality permit.

Where can I get more information?

Find out more and view the application at https://www.oregon.gov/deq/Get-Involved/Pages/Public-Notices.aspx or contact Brian Hall, DEQ Permit Writer, at:
Phone: 503-378-5320 or 1-800-349-7677
Fax: 503-378-4196
Email: hall.Brian@deq.state.or.us

View the application and related documents in person at the DEQ office in Salem or at the Halsey Library, 773 W Halsey, in Halsey, Oregon. For a review appointment, call Suzy Luttrell at 503-378-5305.

Alternative Formats

DEQ can provide documents in an alternate format or in a language other than English upon request. Call DEQ at 800-452-4011 or email deqinfo@deq.state.or.us.

State of Oregon
Department of Environmental Quality

Western Region
4026 Fairview Industrial Dr. SE
Salem, OR 97302
Phone: 503-378-8240
800-349-7677
Fax: 503-378-4196
Contact: Brian Hall

www.oregon.gov/DEQ

DEQ is a leader in restoring, maintaining and enhancing the quality of Oregon's air, land and water.

Notice issued: 9/21/2020
By: Suzy Luttrell
Permit number: 22-6034

Emissions limits

Regulated Pollutants: Table 1 below presents maximum allowable emissions of regulated pollutants for the facility. The current emission limit reflects maximum emissions the facility can emit under the existing permit. The proposed emission limit reflects maximum emissions the facility would be able to emit under the proposed permit. Typically, a facility's actual emissions are less than maximum limits established in a permit; however, actual emissions can increase up to the permitted limit.

Table 1

Pollutant	Current Limit (tons/year)	Proposed Limit (tons/year)
Particulate matter (PM)	**69**	**70**
Small particulate matter (PM_{10})	**51**	**52**
Fine particulate matter ($PM_{2.5}$)	**41**	**42**
Nitrogen oxides (NO_x)	**39**	**39**
Carbon monoxide (CO)	**99**	**99**
Volatile organic compounds (VOC)	**39**	**47**
Greenhouse gases (GHG)	**74,000**	**74,000**

For more information about criteria pollutants, go to: https://www.epa.gov/criteria-air-pollutants

Hazardous air pollutants:
Georgia-Pacific Consumer Operations LLC is not a major source of hazardous air pollutants. However, the emergency fire pump is subject to National Emission Standards for Hazardous Air Pollutants in 40 CFR Part 63, Subpart ZZZZ. Table 2 lists the hazardous air pollutants which the source emits. More detailed information can be found in the review report.

Table 2

Hazardous Air Pollutants	Projected Emissions (tons/year)
Acetaldehyde	2.03
Biphenyl	2.78
Chloroform	3.05
Methanol	6.53
Toluene	1.64
All metal HAPs	0.002
Total	19.60

For more information about hazardous air pollutants, go to:
https://www.epa.gov/haps/health-effects-notebook-hazardous-air-pollutants

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

STANDARD

AIR CONTAMINANT DISCHARGE PERMIT

Western Region
4026 Fairview Industrial Drive SE
Salem, OR 97302

This permit is being issued in accordance with the provisions of ORS 468A.040 and based on the land use compatibility findings included in the permit record.

ISSUED TO:

Georgia-Pacific Consumer Operations LLC
PO Box 215
Halsey, OR 97348

INFORMATION RELIED UPON:

Application No.: 30761
Date Received: 5/24/2019
Additional Info: 6/1/2020

PLANT SITE LOCATION:

Halsey Mill
30470 American Drive
Halsey, OR 97348

LAND USE COMPATIBILITY FINDING:

Approving Authority: Linn County
Approval Date: 01/31/1995

ISSUED BY THE DEPARTMENT OF ENVIRONMENTAL QUALITY

Claudia Davis, Western Region Air Quality Manager — Dated

Source(s) Permitted to Discharge Air Contaminants (OAR 340-216-8010):

Table 1 Code	Source Description	SIC/NAICS
Part B, #69 Part C, #3	Pulp, paper, and paperboard mills Source elected to keep Netting Basis Emissions	2621 / 322121 n/a

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1.0 DEVICE, PROCESS AND POLLUTION CONTROL DEVICE (PCD) IDENTIFICATION

The devices, processes, and pollution control devices regulated by this permit are the following:

Devices and Processes Description	Device ID	Pollution Control Device Description	PCD ID
Paper machine #1 economizer	PM11	None	NA
Paper machine #2 economizer	PM6	None	NA
Paper mill production vents	PM2-10,12,13,16	None	NA
Paper mill vacuum flume	PM18	None	NA
Converting operation vents	C2, 9, 14, 16, 31, 32, 36, 41-46	None	NA
Paper machine #1 dry end	PM17A	Venturi scrubber	PM17A
Paper machine #1 dry end pulper	PM17B	Venturi scrubber	PM17B
Paper machine #2 dry end	PM1	Venturi scrubber	PM1
Tissue 8 rewinder	C101	Venturi scrubber	C101
Converting operations NG heaters (4)		None	NA
Secondary fiber fugitive VOC	H2F	None	NA
Aggregate Insignificant Sources	AI		
Baghouse 5		Baghouse	BH5
Baghouse 6		Baghouse	BH6
Baghouse 7		Baghouse	BH7
Wastewater treatment plant fugitive VOC		None	NA

2.0 GENERAL EMISSION STANDARDS AND LIMITS

2.1. Visible Emissions

The permittee must comply with the following visible emission limits from air contaminant sources other than fugitive emission sources, as applicable. Opacity must be measured as a six-minute block average using EPA Method 9, a continuous opacity monitoring system (COMS) installed and operated in accordance with the DEQ Continuous Monitoring Manual or 40 CFR

part 60, or an alternative monitoring method approved by DEQ that is equivalent to EPA Method 9.

a. Emissions from PM11, PM6, PM18, PM17A, PM17B, PM1, C101, BH5, BH6, BH7, paper mill production area vents, converting operation vents, and natural gas heaters must not equal or exceed 20% opacity. [OAR 340-208-0110(3)(b) and (4)]

2.2. Fugitive Emissions

a. The permittee must take reasonable precautions to prevent fugitive dust emissions from leaving the property of a source. Reasonable precautions include, but are not limited to: [OAR 340-208-0210(1)]
   i. Using, where possible, water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;
   ii. Applying water or other suitable chemicals on unpaved roads, materials stockpiles, and other surfaces which can create airborne dusts;
   iii. Enclosing (full or partial) materials stockpiles in cases where application of water or other suitable chemicals are not sufficient to prevent particulate matter, including dust, from becoming airborne;
   iv. Installing and using hoods, fans, and fabric filters to enclose and vent the handling of dusty materials;
   v. Installing adequate containment during sandblasting or other similar operations;
   vi. Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne;
   vii. Promptly removing earth or other material that does or may become airborne from paved streets.
b. If requested by DEQ, the permittee must:
   i. Prepare and submit a fugitive emission control plan within 60 days of the request;
   ii. Implement the DEQ approved plan whenever fugitive emissions leave the property for more than 18 seconds in a six-minute period; and
   iii. Keep the plan on site and make the plan available upon request [OAR 340-208-0210(3)]
c. In no case may fugitive dust emissions leave the property of a source for a period or periods totaling more than 18 seconds in a six-minute period. Fugitive emissions must be measured by EPA Method 22 with the minimum observation time of six minutes.

2.3. Particulate Matter Emissions

The permittee must comply with the following particulate matter emission limits:

a. Particulate matter emissions from Paper Machine Economizers #1 and #2 must not exceed 0.14 grains per dry standard cubic foot. [OAR 340-228-0210(2)(b)(B)].
b. Particulate matter emissions from Converting NG Heaters must not exceed 0.10 grains per dry standard cubic foot. [OAR 340-228-0210(2)(c)].
c. Particulate matter emissions from Paper Mill Vents and the Paper Mill Vacuum Flume

must not exceed 0.14 grains per dry standard cubic foot. [OAR 340-226-0210(2)(b)(B)].

d. Particulate matter emissions from Converting Building Vents, Tissue 8 Scrubber, #1 Paper Machine Scrubber, #2 Paper Machine Scrubber, and #1 Paper Machine Pulper Scrubber must not exceed 0.10 grains per dry standard cubic foot. [OAR 340-226-0210(2)(b)(A)].

e. Particulate matter emissions from any fuel burning equipment (except solid fuel burning devices that have been certified under OAR 340-262-0500) that is installed, constructed or modified on or after April 16, 2015 must not exceed 0.10 grains per dry standard cubic foot, corrected to 12% CO2 or 50% excess air. [OAR 340-228-0210(2)(c)]

f. Particulate matter emissions from any device or process (other than fugitive emissions sources, fuel burning equipment, refuse burning equipment, or solid fuel burning devices certified under OAR 340-262-0500) that is installed, constructed or modified after April 16, 2015 must not exceed 0.10 grains per dry standard cubic foot. [OAR 340-226-0210(2)(c)]

2.4. Particulate Matter Fallout

The permittee must not cause or permit the deposition of any particulate matter larger than 250 microns in size at sufficient duration or quantity as to create an observable deposition upon the real property of another person. [OAR 340-208-0450]

2.5. Nuisance and Odors

The permittee must not cause or allow air contaminants from any source to cause a nuisance. Nuisance conditions will be verified by DEQ personnel. [OAR 340-208-0300] The permittee must maintain a log of each nuisance complaint received by the permittee. A plant representative must immediately investigate the condition following the receipt of the nuisance complaint and provide a response to the complainant within 24 hours, if possible.

2.6. Fuels and Fuel Sulfur Content

a. The permittee must not use any fuels other than natural gas, propane, butane or any of the ASTM grade fuel oils listed below. The sulfur content cannot exceed:
   i. 0.0015% sulfur by weight for ultra low sulfur diesel;
   ii. 0.3% sulfur by weight for ASTM Grade 1 distillate oil; [OAR 340-228-0110]
   iii. 0.5% sulfur by weight for ASTM Grade 2 distillate oil; [OAR 340-228-0110]
   iv. 1.75% sulfur by weight for residual oil; [OAR 340-228-0100]

b. The permittee is allowed to use on-specification used oil as fuel which contains no more than 0.5% sulfur by weight. The permittee must obtain analyses from the marketer or, if generated on site, have the used oil analyzed, to demonstrate that each shipment of oil does not exceed the used oil specifications contained in 40 CFR Part 279.11, Table 1. The permittee may not use used oil as fuel that does not meet the used oil specifications in 40 CFR Part 279.11, Table 1. [OAR 340-228-0130]

3.0 OPERATION AND MAINTENANCE REQUIREMENTS

3.1. Operation of Pollution Control Devices and Processes

The permittee must operate and ensure proper functioning of all air pollution control devices and components at all times when the associated emission source is operating. [OAR 340-226-0120]

3.2. Operating Conditions for Emergency Stationary RICE

The permittee must operate the emergency stationary RICE fire pump in compliance with the following conditions: [40 CFR 63.6640(f)]

a. There is no time limit on the use of emergency stationary RICE in emergency situations.

b. In order for the engine to beconsidered an emergency stationary RICE, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year is prohibitied. The mergency RICE may be operated for any combination of purposes for a maximum of 100 hours per calendar year. Any operation for non-emergency purposes counts as part of the 100 hours per calendar year. Non-emergency operation such as required maintenance and testing of such units is limited to 50 hours per year.

c. The permittee is prohibited from using any emergency stationary RICE for any non-

emergency use including but not limited to peak shaving, demand response operation, and/or generation of income from the sale of power. To perform such activity, the permittee must first obtain a modified permit in accordance with Condition 8.2 or a separate permit for power generation that appropriately addresses and allows this activity.

3.3. Operation and Maintenance for Emergency Stationary RICE

The permittee must comply with the following requirements for the emergency stationary RICE fire pump: [40 CFR 63.6640(f)]

a. At all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. [40 CFR 63.6605(b)]
b. Change oil and filter every 500 hours of operation or annually, whichever comes first; [40 CFR 63. 6603(a), table 2d(4)(a)]
c. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first. [40 CFR 63. 6603(a), table 2d(4)(b)] The permittee may elect to comply with the oil analysis requirements of §63.6625(i) in lieu of the oil change requirement. Oil analyses must be conducted at the same frequency as the oil change requirement;
d. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary; [40 CFR 63. 6603(a), table 2d(4)(c)]
e. The permittee must operate and maintain each stationary RICE according to the manufacturer's emission-related written instructions, including operation and maintenance instructions. If the permittee develops their own maintenance plan and it is approved by DEQ, that plan may substitute for the manufacturer's instructions. [40 CFR 63.6625(e) and 40 CFR 63.6640(a), Table 6(9)]]
f. During periods of startup, minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply; and [40 CFR 63. 6625(h)]
g. The permittee must install a non-resettable hour meter on each emergency stationary RICE, if one is not already installed. [40 CFR 63.6625(f)]

3.4. Highest and Best Practicable Treatment and Control

The permittee must provide the highest and best practicable treatment and control of air contaminant emissions in every case so as to maintain overall air quality at the highest possible levels, and to maintain contaminant concentrations, visibility reduction, odors, soiling, and other deleterious factors at the lowest possible levels as provided below. [OAR 340-226-0100]

a. The permittee must comply with the following baghouse operation and maintenance requirements:
   i. When replacing bags in a baghouse, the permittee may not substitute a filter with a lower control efficiency specifications than specified in the engineering design specifications for the unit.

ii. The permittee must operate/maintain the pressure drop across any baghouse within the operational range of the manufacturer's design specification (or current engineering evaluation).
iii. The permittee must install, operate and maintain a differential pressure monitoring gauge (e.g. magnehelic) on all baghouses to measure differential pressure across the control device. If not already installed, the monitoring gauge must be installed and operating within 60 days of issuance of this permit.
iv. The permittee must post the differential pressure specification range on the baghouse at a location near the differential pressure guage.
v. The permittee must investigate and commence corrective action measures within 24 hours of documenting system operation outside of the differential pressure range.

Note: An operating pressure outside the differential pressure recommended level is not a violation of this permit condition; however, it is a violation of this permit condition if the permittee fails to investigate and act to return the pressure drop across the baghouse to a level within the differential pressure specification range within 24 hours of learning of the event.

b. The permittee must comply with the following scrubber operation and maintenance requirements:
i. The permittee must operate/maintain the pressure drop across any scrubber within the operational range of the manufacturer's design specification (or current engineering evaluation).
ii. The permittee must install, operate and maintain a differential pressure monitoring gauge (e.g. magnehelic) on all scrubbers to measure differential pressure across the control device. If not already installed, the monitoring gauge must be installed and operating within 60 days of issuance of this permit.
iii. The permittee must post the differential pressure specification range on the scrubber at a location near the differential pressure guage.
iv. The permittee must investigate and commence corrective action measures within 24 hours of documenting system operation outside of the differential pressure range.

Note: An operating pressure outside the differential pressure recommended level is not a violation of this permit condition; however, it is a violation of this permit condition if the permittee fails to investigate and act to return the pressure drop across the scrubber to a level within the differential pressure specification range within 24 hours of learning of the event.

4.0 PLANT SITE EMISSION LIMITS

4.1. Plant Site Emission Limits (PSEL)

The permittee must not cause or allow plant site emissions to exceed the following: [OAR 340-222-0040 and/or OAR 340-222-0041, OAR 340-222-0060]

Pollutant	Limit	Unassigned Emissions	Units
PM	70	7	tons per year
PM_{10}	52	0	
$PM_{2.5}$	42	0	
NO_x	39	0	
CO	99	0	
VOC	47	0	
GHGs (CO_2e)	74,000	0	

4.2. Annual Period

The annual plant site emissions limits apply to any 12-consecutive calendar month period. [OAR 340-222-0035]

5.0 COMPLIANCE DEMONSTRATION

5.1. Monitoring Requirements

The permittee must monitor the operation and maintenance of the facility and associated air contaminant control devices as follows: [OAR 340-226-0120]

a. Perform weekly inspection of the baghouses, ensuring proper condition and operation of bags and bag cleaning mechanisms.
b. Perform weekly inspections of the scrubbers, ensuring proper condition and operation of the scrubber mechanisms..

5.2. PSEL Compliance Monitoring using Emission Factors

The permittee must calculate the emissions for each 12-consecutive calendar month period based on the following calculation for each pollutant except GHGs: [OAR 340-222-0080]

$$E = \Sigma(EF \times P) \times 1 \text{ ton}/2000 \text{ pounds}$$

where:

E = pollutant emissions (tons/year);

Σ = symbol representing “summation of”;

EF = pollutant emission factor (see Condition 11.0);

P = process production (see Condition 12.0)

5.3. Emission Factors

The permittee must use the default emission factors provided in Condition 11.0 for calculating pollutant emissions, unless alternative emission factors are approved in writing by DEQ. The permittee may request or DEQ may require using alternative emission factors provided they are based on actual test data or other documentation (e.g., AP-42 compilation of emission factors) that has been reviewed and approved by DEQ. [OAR 340-222-0080]

5.4. Greenhouse Gas Emissions

The permittee must calculate greenhouse gas emissions in metric tons and short tons for each 12-consecutive calendar month period to determine compliance with the GHG PSEL using the DEQ Fuel Combustion Greenhouse Gas Calculator at https://www.oregon.gov/deq/FilterDocs/ghgCalculatorFuelCombust.xlsx. [OAR 340-215-0040]

5.5. PSEL Compliance Monitoring

The permittee must demonstrate compliance with the PSEL by totaling the emissions from all point sources calculated under Conditions 5.2 and 5.4. [OAR 340-222-0080]

6.0 RECORDKEEPING REQUIREMENTS

6.1. Operation and Maintenance

The permittee must maintain the following records related to the operation and maintenance of the facility and associated air contaminant control devices: [OAR 340-214-0114]

a. Maintain a written record of weekly baghouse and scrubber inspections, recording the pressure drop across the baghouse or scrubber, observations, and any needed repairs.
b. Operating parameters and production values required by Condition 12.0.

6.2. Excess Emissions

a. The permittee must maintain the records of excess emissions listed below and as defined in OAR 340-214-0300 through 340-214-0340, recorded on occurrence. Typically, excess emissions are caused by process upsets, startups, shutdowns, or scheduled maintenance. In many cases, excess emissions are evident when visible emissions are greater than 20% opacity as a six-minute block average.

i. The date and time of the beginning of the excess emissions event and the duration or best estimate of the time until return to normal operation;
ii. The date and time the permittee notified DEQ of the event;
iii. The equipment involved;
iv. Whether the event occurred during planned startup, planned shutdown, scheduled maintenance, or as a result of a breakdown, malfunction, or emergency;
v. Steps taken to mitigate emissions and corrective action taken, including whether the approved procedures for a planned startup, shutdown, or maintenance activity were followed;
vi. The magnitude and duration of each occurrence of excess emissions during the course of an event and the increase over normal rates or concentrations as determined by continuous monitoring or best estimate (supported by operating data and calculations); and
vii. The final resolution of the cause of the excess emissions;

b. If there is an ongoing excess emission caused by an upset or breakdown, the permittee must immediately take action to minimize emissions by reducing or ceasing operation of the equipment or facility, unless doing so could result in physical damage to the equipment or facility, or cause injury to employees. In no case may the permittee operate more than 48 hours after the beginning of the excess emissions, unless continued operation is approved by DEQ in accordance with OAR 340-214-0330(4).
c. In the event of any excess emissions which are of a nature that could endanger public health and occur during non-business hours, weekends, or holidays, the permittee must immediately notify DEQ by calling the Oregon Emergency Response System (OERS). The current number is 1-800-452-0311.
d. The permittee must maintain a log of all excess emissions in accordance with OAR 340-214-0340(3).

6.3. Complaint Log

The permittee must maintain a log of all complaints received by the permittee in person, in writing, by telephone or through other means that specifically refer to air pollution concerns associated to the permitted facility. Documentation must include date of contact, date and time of observed nuisance condition, description of nuisance condition, location of receptor, status of plant operation during the observed period, and date and time of response to complainant. The log must include a record of the permittee's actions to investigate the validity of each complaint and a record of actions taken for complaint resolution. [OAR 340-214-0114]

6.4. Retention of Records

Unless otherwise specified, the permittee must retain all records for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application and make them available to DEQ upon request. The permittee must maintain the two (2) most recent years of records onsite. [OAR 340-214-0114]

7.0 REPORTING REQUIREMENTS

7.1. Excess Emissions

The permittee must notify DEQ of excess emissions events if the excess emission is of a nature that could endanger public health.

a. The permittee must also submit follow-up reports as per Condition 6.2 when required by DEQ.
   i. Such notice must be provided as soon as possible, but never more than one hour after becoming aware of the problem. Notice must be made to the regional office identified in Condition 9.0 by email, telephone, facsimile, or in person.
   ii. If the excess emissions occur during non-business hours, the permittee must notify DEQ by calling the Oregon Emergency Response System (OERS). The current number is 1-800-452-0311.

7.2. Annual Report

For each year this permit is in effect, the permittee must submit to DEQ by **February 15** two (2) paper copies and one (1) electronic copy of the following information for the previous calendar year:

a. Operating parameters shown in Condition 12.0 on a monthly basis.
b. Calculations of annual pollutant emissions determined each month in accordance with Condition 5.2.
c. A brief summary listing the date, time, and the affected device/process for each excess emission that occurred during the reporting period.
d. Summary of complaints relating to air quality received by permittee during the year in accordance with Condition 6.3.
e. List permanent changes made in facility process, production levels, and pollution control equipment which affected air contaminant emissions.
f. List major maintenance performed on pollution control equipment.
g. The following records for each emergency stationary RICE identified: [40 CFR 63.6655(f)]
   i. Hours of operation of each emergency stationary RICE that is recorded through the non-resettable hour meter;
   ii. Hours of emergency operation; including what classified the operation as emergency; and
   iii. Hours of non-emergency operation used for maintenance checks and readiness testing.

7.3. Greenhouse Gas Registration and Reporting

a. If the calendar year greenhouse gas emissions (CO_2e) are ever greater than or equal to 2,756 tons (2,500 metric tons), the permittee must annually register and report its greenhouse gas emissions with DEQ in accordance with OAR 340 division 215.

b. If the calendar year greenhouse gas emissions (CO_2e) are less than 2,756 tons (2,500 metric tons) for three consecutive years, the permittee may stop reporting greenhouse gas emissions but must retain all records used to calculate greenhouse gas emissions for the five years following the last year that they were required to report. The permittee must resume reporting its greenhouse gas emissions if the calendar year greenhouse gas emissions (CO_2e) are greater than or equal to 2,756 tons (2,500 metric tons) in any subsequent calendar year.

7.4. Notice of Change of Ownership or Company Name

The permittee must notify DEQ in writing using a DEQ "Transfer Application Form" within 60 days after the following:

a. Legal change of the name of the company as registered with the Corporations Division of the State of Oregon; or
b. Sale or exchange of the activity or facility.

7.5. Construction or Modification Notices

The permittee must notify DEQ in writing using a DEQ "Notice of Intent to Construct Form," or other permit application form and obtain approval in accordance with OAR 340-210-0205 through 340-210-0250 before:

a. Constructing, installing, or establishing a new stationary source that will cause an increase in any regulated pollutant emissions;
b. Making any physical change or change in operation of an existing stationary source that will cause an increase, on an hourly basis at full production, in any regulated pollutant emissions; or
c. Constructing or modifying any air pollution control equipment.

7.6. Air Toxics Emission Inventory

The permittee must submit an air toxics emission inventory every three years. DEQ will notify the permittee in writing and provide a reporting form. [OAR 340-245-0040]

8.0 ADMINISTRATIVE REQUIREMENTS

8.1. Permit Renewal Application

The permittee must submit the completed application package for renewal of this permit **180 days prior to the expiration date**. Two (2) paper copies and one (1) electronic copy of the application must be submitted to the DEQ Permit Coordinator listed in Condition 9.2. [OAR 340-216-0040]

8.2. Permit Modifications

Application for a modification of this permit must be submitted within 60 days prior to the source modification. When preparing an application, the applicant should also consider submitting the application 180 days prior to allow DEQ adequate time to process the application and issue a permit before it is needed. A special activity fee must be submitted with an application for the permit modification. The fees and two (2) copies of the application must be submitted to the DEQ Business Office.

8.3. Annual Compliance Fee

The permittee must pay the annual fees specified in OAR 340-216-8020, Table 2, Part 2 and 3 for a Standard ACDP on **December 1** of each year this permit is in effect. An invoice indicating the amount, as determined by DEQ regulations will be mailed prior to the above date. **Late fees in accordance with Part 5 of the table will be assessed as appropriate.**

8.4. Change of Ownership or Company Name Fee

The permittee must pay the non-technical permit modification fee specified in OAR 340-216-8020, Table 2, Part 4 with an application for changing the ownership or the name of the company.

8.5. Special Activity Fees

The permittee must pay the special activity fees specified in OAR 340-216-8020, Table 2, Part 4 with an application to modify the permit.

9.0 DEQ CONTACTS / ADDRESSES

9.1. Business Office

The permittee must submit payments for invoices, applications to modify the permit, and any other payments to DEQ's Business Office:

Oregon Dept. of Environmental Quality

Financial Services – Revenue Section

700 NE Multnomah St., Suite 600

Portland, Oregon 97232-4100

9.2. Permit Coordinator

The permittee must submit all notices, reports (annual reports, source test plans and reports, etc.), and applications that do not include payment to the Permit Coordinator.

Oregon Dept. of Environmental Quality
Western Region
Air Quality Permit Coordinator
4026 Fairview Industrial Drive SE
Salem, OR 97302-1142
wraqpermits@deq.state.or.us

9.3. Report Submittals

Unless otherwise notified, the permittee must submit all reports (annual reports, source test plans and reports, etc.) to DEQ's Region. If you know the name of the Air Quality staff member responsible for your permit, please include it:

Oregon Dept. of Environmental Quality
Western Region
4026 Fairview Industrial Drive SE
Salem, OR 97302-1142

9.4. Web Site

Information about air quality permits and DEQ's regulations may be obtained from the DEQ web page at www.oregon.gov/deq/.

10.0 GENERAL CONDITIONS AND DISCLAIMERS

10.1. Permitted Activities

a. Until this permit expires or is modified or revoked, the permittee is allowed to discharge air contaminants from the following:
   i. Processes and activities directly related to or associated with the devices/processes listed in Condition 1.0 of this permit;
   ii. Any categorically insignificant activities, as defined in OAR 340-200-0020, at the source; and
   iii. Construction or modification changes that are Type 1 or Type 2 changes under OAR 340-210-0225 that are approved by DEQ in accordance with OAR 340-210-0215 through 0250, if the permittee complies with all of the conditions of DEQ's approval to construct and all of the conditions of this permit.

b. Discharge of air contaminants from any other equipment or activity not identified herein is not authorized by this permit.

10.2. Other Regulations

In addition to the specific requirements listed in this permit, the permittee must comply with all other applicable legal requirements enforceable by DEQ.

10.3. Conflicting Conditions

In any instance in which there is an apparent conflict relative to conditions in this permit, the most stringent conditions apply. [OAR 340-200-0010]

10.4. Masking of Emissions

The permittee must not cause or permit the installation of any device or use any means designed to mask the emissions of an air contaminant that causes or is likely to cause detriment to health, safety, or welfare of any person or otherwise violate any other regulation or requirement. [OAR 340-208-0400]

10.5. DEQ Access

The permittee must allow DEQ's representatives access to the plant site and pertinent records at all reasonable times for the purposes of performing inspections, surveys, collecting samples, obtaining data, reviewing and copying air contaminant emissions discharge records and conducting all necessary functions related to this permit in accordance with ORS 468.095.

10.6. Permit Availability

The permittee must have a copy of the permit available at the facility at all times. [OAR 340-216-0020(3)]

10.7. Open Burning

The permittee may not conduct any open burning except as allowed by OAR 340, division 264.

10.8. Asbestos

The permittee must comply with the asbestos abatement requirements in OAR 340, division 248 for all activities involving asbestos-containing materials, including, but not limited to, demolition, renovation, repair, construction, and maintenance.

10.9. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

10.10. Permit Expiration

a. A source may not be operated after the expiration date of the permit, unless any of the following occur prior to the expiration date of the permit: [OAR 340-216-0082]

i. A timely and complete application for renewal of this permit or for a different ACDP has been submitted; or

b. A timely and complete application for renewal or for an Oregon Title V Operating Permit has been submitted, or

c. Another type of permit (ACDP or Oregon Title V Operating Permit) has been issued authorizing operation of the source.

d. For a source operating under an ACDP or Oregon Title V Operating Permit, a requirement established in an earlier ACDP remains in effect notwithstanding expiration of the ACDP, unless the provision expires by its terms or unless the provision is modified or terminated according to the procedures used to establish the requirement initially.

10.11. Permit Termination, Revocation, or Modification

DEQ may terminate, revoke, or modify this permit pursuant to OAR chapter 340 division 216. [OAR 340-216-0082].

11.0 EMISSION FACTORS

Emissions device or activity	Pollutant	Emission Factor (EF)	EF units	EF Reference
Paper Machine #1 Economizer PM11	PM	0.013	Lb/ADT	1999 ST
	PM_{10}	0.012	Lb/ADT	1999 ST
	$PM_{2.5}$	0.012	Lb/ADT	1999 ST
Paper Machine #2 Economizer PM6	PM	0.013	Lb/ADT	1999 ST
	PM_{10}	0.012	Lb/ADT	1999 ST
	$PM_{2.5}$	0.012	Lb/ADT	1999 ST
Paper Mill Production Area Vents	PM	0.57	Lb/ADT	1995, 2011 STs
	PM_{10}	0.40	Lb/ADT	1995, 2011 STs
	$PM_{2.5}$	0.26	Lb/ADT	1995, 2011 STs
	VOC	0.25	Lb/ADT	NCASI P&P data
Paper Mill Vacuum Flume PM18	PM	0.01	Lb/ADT	NCASI TB 942
	PM_{10}	0.01	Lb/ADT	NCASI TB 942
	$PM_{2.5}$	0.01	Lb/ADT	NCASI TB 942
Converting Operations Vents	PM	0.076	Lb/ADT	1995 ST
	PM_{10}	0.038	Lb/ADT	1995 ST
	$PM_{2.5}$	0.038	Lb/ADT	1995 ST
	VOC	0.19	Lb/ADT	Mass Balance
Paper Machine #1 Dry End PM17A	PM	0.2522	Lb/ADT	2011 ST
	PM_{10}	0.2404	Lb/ADT	2011 ST
	$PM_{2.5}$	0.2404	Lb/ADT	2011 ST
Paper Machine #1 DE Pulper PM17B	PM	0.0175	Lb/ADT	2013 ST
	PM_{10}	0.017	Lb/ADT	2013 ST
	$PM_{2.5}$	0.017	Lb/ADT	2013 ST
Paper Machine #2 Dry End PM1	PM	0.1046	Lb/ADT	2011ST
	PM_{10}	0.0998	Lb/ADT	2011 ST
	$PM_{2.5}$	0.0998	Lb/ADT	2011 ST

Emissions device or activity	Pollutant	Emission Factor (EF)	EF units	EF Reference
Tissue 8 Rewinder C101	PM	0.107	Lb/ADT	2010, 2011 STs
	PM_{10}	0.104	Lb/ADT	2010, 2011 STs
	$PM_{2.5}$	0.104	Lb/ADT	2010, 2011 STs
Secondary Fiber	VOC	0.051	Lb/ADT	NCASI TB 1020
Paper Machine #1 Economizer and Paper Machine #2 Economizer NG Usage	NO_x	52.0	Lb/MM cf	1999 ST
	CO	72.8	Lb/MM cf	1999 ST
	VOC	5.5	Lb/MM cf	DEQ AQ-EF05
Converting NG Heaters	PM	2.5	Lb/MM cf	DEQ AQ-EF05
	PM_{10}	2.5	Lb/MM cf	DEQ AQ-EF05
	$PM_{2.5}$	2.5	Lb/MM cf	DEQ AQ-EF05
	NO_x	94	Lb/MM cf	DEQ AQ-EF05
	CO	40	Lb/MM cf	DEQ AQ-EF05
	VOC	5.5	Lb/MM cf	DEQ AQ-EF05
Propane Usage	PM	0.6	Lb/M gal	DEQ AQ-EF05
	PM_{10}	0.6	Lb/M gal	DEQ AQ-EF05
	$PM_{2.5}$	0.6	Lb/M gal	DEQ AQ-EF05
	NO_x	19	Lb/M gal	DEQ AQ-EF05
	CO	3.2	Lb/M gal	DEQ AQ-EF05
	VOC	0.5	Lb/M gal	DEQ AQ-EF05

12.0 PROCESS/PRODUCTION RECORDS

Emissions device or activity	Process or production parameter	Frequency
Paper machines (dry end), separately	Paper produced each (ADT)	Monthly, Annually
Paper machine economizers, separately	Paper produced each (ADT)	Monthly, Annually
	Natural gas combusted (MM cf)	Monthly, Annually
Tissue 8 converting	Paper converted (ADT)	Monthly, Annually
Converting operations	Paper converted (ADT)	Monthly, Annually
Converting operations NG heaters	Natural gas combusted (MM cf)	Monthly, Annually
Secondary fiber plant	Pulp processed (tons)	Monthly, Annually
Paper mill production area	Total paper produced (ADT)	Monthly, Annually
Paper machine #1 pulper	Material pulped (ADT)	Monthly, Annually
Paper mill vacuum flume	Total paper produced (ADT)	Monthly, Annually
Propane usage	Propane combusted (M gal)	Monthly, Annually

13.0 ABBREVIATIONS, ACRONYMS, AND DEFINITIONS

ACDP	Air Contaminant Discharge Permit
ASTM	American Society for Testing and Materials
AQMA	Air Quality Maintenance Area
calendar year	The 12-month period beginning January 1st and ending December 31st
CAO	Cleaner Air Oregon
CFR	Code of Federal Regulations
CO	carbon monoxide
CO_2e	carbon dioxide equivalent
DEQ	Oregon Department of Environmental Quality
dscf	dry standard cubic foot
EPA	US Environmental Protection Agency
FCAA	Federal Clean Air Act
Gal	gallon(s)
GHG	greenhouse gas
gr/dscf	grains per dry standard cubic foot
HAP	Hazardous Air Pollutant as defined by OAR 340-244-0040
I&M	inspection and maintenance
lb	pound(s)
MMBtu	million British thermal units
NA	not applicable
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NO_X	nitrogen oxides
NSPS	New Source Performance Standard
NSR	New Source Review
O_2	oxygen
OAR	Oregon Administrative Rules
ORS	Oregon Revised Statutes
O&M	operation and maintenance
Pb	lead
PCD	pollution control device
PM	particulate matter
PM_{10}	particulate matter less than 10 microns in size
$PM_{2.5}$	particulate matter less than 2.5 microns in size
ppm	part per million
PSD	Prevention of Significant Deterioration
PSEL	Plant Site Emission Limit
PTE	Potential to Emit
RACT	Reasonably Available Control Technology
scf	standard cubic foot
SER	Significant Emission Rate
SIC	Standard Industrial Code
SIP	State Implementation Plan
SO_2	sulfur dioxide
Special Control Area	as defined in OAR 340-204-0070
TACT	Typically Achievable Control Technology
VE	visible emissions
VOC	volatile organic compound
year	A period consisting of any 12-consecutive calendar months

State of Oregon
Department of
Environmental
Quality

STANDARD AIR CONTAMINANT DISCHARGE PERMIT REVIEW REPORT

Georgia-Pacific Consumer Operations LLC
P.O. Box 215
Halsey, OR 97348

Source Information:

SIC	2621
NAICS	322121 / 322122

Source Categories (Table 1 Part, code)	Part B, #69 Part C, #3
Public Notice Category	III

Compliance and Emissions Monitoring Requirements:

FCE	
Compliance schedule	
Unassigned emissions	X
Emission credits	
Special Conditions	

Source test	
COMS	
CEMS	
PEMS	
Ambient monitoring	

Reporting Requirements

Annual report (due date)	Feb 15
Quarterly report (due dates)	

Monthly report (due dates)	
Excess emissions report	X
Other (specify)	

Air Programs

Synthetic Minor (SM)	
SM -80	
NSPS (list subparts)	
NESHAP (list subparts)	ZZZZ
CAO	
NSR	

PSD	
GHG	X
RACT	
TACT	
Other (specify)	

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PERMITTING

PERMITTEE IDENTIFICATION

1. Georgia-Pacific Consumer Operations LLC is located at 30470 American Drive, Halsey, Oregon.

PERMITTING ACTION

2. The proposed permit is a renewal of an existing Standard Air Contaminant Discharge Permit (ACDP) that was issued on 10/27/14, and was originally scheduled to expire on 8/1/19. The permittee is on a Standard ACDP because this facility wishes to maintain its Netting Basis Emission Rate. The existing ACDP remains in effect until final action has been taken on the renewal application because the permittee submitted a timely and complete application for renewal on 5/24/19.
3. Georgia-Pacific Consumer Operations LLC has been determined to be an existing source for the purposes of Cleaner Air Oregon in accordance with OAR 340-245-0020 because construction had commenced on this facility prior to November 16, 2018. As an existing source the permittee is required to perform a risk assessment in accordance with OAR 340-245-0050, and demonstrate compliance with the Risk Action Levels for an "Existing Source" in OAR 340-245-8010 Table 1 when called in by DEQ. Georgia-Pacific Consumer Operations LLC has not been called in and, therefore, has not performed a risk assessment.

OTHER PERMITS

4. Other permits issued or required by the DEQ for this source include a NPDES Process Water Permit (OR003340-5) and a Water Quality Stormwater Permit (1200Z).

ATTAINMENT STATUS

5. The source is located in an attainment area for all pollutants.
6. The source is not located within 10 kilometers of any Class I Air Quality Protection Area.

SOURCE DESCRIPTION

OVERVIEW

7. The permittee operates a paper tissue manufacturing facility (paper mill). The facility was built in 1968. The secondary fiber recycling plant was added in March, 1992.

   The manufacturing operation consists of a paper mill, a converting operation, and a secondary fiber recycling plant with an activated sludge waste water treatment system.

The facility produces approximately 300 tons per day of paper which is converted into tissue and paper towels. The finished product is packaged and shipped for sale to commercial, retail, and wholesale markets. The product mix and constituents vary based on customer and market demands. The facility is segregated into process buildings, which consist of the Paper Mill, Converting Area, Maintenance Area, Secondary Fiber, and Wastewater Treatment.

Paper Mill

The paper mill has a stock prep area and two paper machines. Both paper machines have yankee dryers, a natural gas fired hood, and economizers. Paper dust generated on the dry end of the machines is collected by wet scrubbers; Paper Machine No. 1 has two wet scrubbers and Paper Machine No. 2 has one wet scrubber. Purchased pulp, secondary fiber recycled pulp and in-process broke are blended with various additives to produce a specific pulp mixture for each paper grade. Once formed the sheet is dried on a yankee dryer. The yankee dryers are 15-foot diameter cast iron rolls that are internally heated with steam. In addition, each yankee has two natural gas burners that heats air and directs it to a tight-fitting hood that surrounds top of the yankee. Each machine has two sections of hood that exhaust to an economizer. The economizer recovers heat from the exhaust in an air-to-water direct heat exchanger.

Reject paper from the process is recycled and reused in the process. Paper rolls of acceptable quality are sent to the converting area. Waste water generated in the paper mill is sent to the secondary fiber plant where it is used as process water for the secondary fiber plant. There are three pulpers located in the stock prep area of the paper mill. Two pulpers are dedicated to purchased pulp and the third is used to re-pulp converting broke and cull rolls. Broke paper resulting from the converting process is pneumatically conveyed to the tissue cyclone where it is fed into the converting pulper. The exhaust from the tissue cyclone is sent to the #7 Baghouse, which also serves as a dust collector for #1 and #2 NBT tissue rewinders.

Converting Area

Converting consists of eight tissue rewinders, two towel rewinders, three baghouses, one wet scrubber, and one drum filter along with associated bundling and palletizing equipment. In the converting process, large rolls of paper made in the paper mill or shipped in from other Georgia-Pacific (GP) facilities are cut and packaged into bath tissue or paper towels. The tissue rewinders include the #1, #2, #3, and #4 NBT rewinders, the #1 and #2 ABT rewinders, the tissue 8 rewinder and the tissue 9 rewinder. Paper dust captured from #1 and #2 NBT rewinders is collected by the #7 Baghouse. Paper dust captured from #3 and #4 NBT rewinders is collected by the #5 Baghouse and paper dust captured from #1 and #2 ABT and tissue 9 rewinders is collected by the drum filter. The tissue 8 rewinder is located in a stand alone building. Dust captured from that rewinder is routed to a wet scrubber.

The towel rewinders include the #5 and #6 towel rewinders, and paper dust captured from these rewinders is collected by the #6 Baghouse. All towel broke is collected, baled, and sold to other GP facilities where it is re-pulped and converted back into towel parent rolls.

Secondary Fiber

The secondary fiber facility processes post-consumer recycled paper and production waste paper to produce recycled pulp. Waste paper is combined with water and is pulped to a slurry then cleaned mechanically. A non-chlorine chemistry consisting of hydrogen peroxide and sodium hydrosulfite is used to brighten and whiten the pulp. Approximately 2/3 of the pulp produced is piped direct to the paper mill for use on the paper machines. Pulp that is not used on site is dewatered and sold as market pulp or sent to other Georgia-Pacific facilities. Recovered Paper Residue Lime, which is solids from the primary treatment of the secondary fiber process wastewater, is mixed with wastewater treatment secondary clarifier sludge and is beneficially reused as an agricultural amendment on local grass seed fields.

Maintenance
Maintenance activities conducted on site include welding, painting, cleaning, and construction activities on an intermittent basis.

The facility also has an emergency fire pump engine designated as a categorically insignificant activity. The engine is a Caterpillar model 3406B, diesel fueled and compression ignited, rated at 460 hp installed in 1992.

OWNERSHIP HISTORY

8. American Can Company built a combined pulp and paper mill facility at this location in 1968. The paper mill is now operated as a completely separate process. The pulp and paper processes are physically segregated by a paved road, and since 1989 have been owned and operated by different companies. The history of ownership and management of the facility is as follows:

    American Can Company operated the combined pulp and paper mill facility until the mid-1970's.
    In the mid-1970's Pope & Talbot purchased a one-half share of the pulp mill. The mill was then operated by the Halsey Pulp Company, a partnership between Pope & Talbot and American Can Company.
    In 1982, James River-Dixie/Northern, Inc. leased the paper mill with an option to purchase it.
    The Halsey Pulp Company partnership dissolved in May, 1983 when A.C. Pulp conveyed its interest in the pulp mill to Pope & Talbot.
    In a 1985 facility manager agreement, James River agreed to manage and operate

the pulp mill for Pope & Talbot for a specified period.
In 1986 James River purchased the paper mill.
On May 1, 1989, Pope & Talbot took over operation of the pulp mill.
In 1997, James River Corporation merged with Fort Howard Corporation. The paper mill began operating under the name of Fort James Operating Company.
In November, 2000, Fort James Operating Company became a wholly-owned subsidiary of Georgia-Pacific Corporation.
In December 2005, Fort James Operating Company/Georgia-Pacific became a wholly owned subsidiary of Koch Industries.

9. The following changes have been made to the facility since the last permit renewal:

A drum filter was approved to replace BH2 on the #1&2 ABT rewinders on 8/26/16 and installed on 12/19/16.

A new Tissue 9 rewinder was approved on 8/26/16 and installed on 3/6/17.

Replacement of two welding fume extractors (CI) was approved under NC #30338 on 9/30/18 and installed on 10/3/19.

Four new natural gas make up air units for the converting building were approved under NC #30771 on 7/22/19 and will be installed in 2020.

A dust collection hood was approved under NC #30831 on 7/31/19 but the project has been cancelled.

Use of propane as an alternative fuel to natural gas was approved in Modification No. 2 to the ACDP on 5/17/19.

The name of the permittee was changed from Georgia-Pacific Consumer Products LP to Georgia-Pacific Consumer Operations LLC by Modification No.1 to the ACDP on 11/29/17.

PROCESS AND CONTROL DEVICES

10. Existing air contaminant sources at the facility consist of the following:

Paper mill sources are shown in the following table.

Process/Device	Description	Control	Emission Point ID and (Pollutant)
Paper Machine #1 – Dry End	Paper sheet is calendered (pressed) and wound onto a roll.	Venturi Wet Scrubber	PM17A

			(PM, $PM_{10,}$, $PM_{2.5}$)
Paper Machine #2 – Dry End	Paper sheet is calendered (pressed) and wound onto a roll.	Venturi Wet Scrubber	PM1 (PM, $PM_{10,}$, $PM_{2.5}$)
Paper Machine #1 Economizer	Extracts heat from the dryer section exhaust of Paper Machine #1.	None	PM6 (PM, PM_{10},$PM_{2.5}$, CO, NO_x, VOC, SO_2, GHGs)
Paper Machine #2 Economizer	Extracts heat from the dryer section exhaust of Paper Machine #2.	None	PM11 (PM, PM_{10}, $PM_{2.5}$, CO, NO_x, VOC, SO_2, GHGs)
Paper Mill Production Area	Roof vents provide circulation and heat removal from the paper mill production operations.	None	PM2, PM3, PM4, PM5, PM7, PM8, PM9, PM10, PM12, PM13, and PM16 (PM, PM_{10}, $PM_{2.5}$)
Paper Machine #1—DE Pulper	Paper sheet is removed from the Yankee Dryer with crepe blade	Venturi Wet Scrubber	PM17B (PM, $PM_{10,}$, $PM_{2.5}$)
Paper Mill Vacuum Flume	Dsicharge from the paper mill vacuumpumps is directed through closed floor sumps to a stack	None	PM18 (PM, $PM_{10,}$, $PM_{2.5}$)

Converting sources are shown in the following table.

Process/Device	Description	Control	Emission Point ID and (Pollutant(s))
#1 & #2 NBT Rewinders	Paper is unwound from production rolls and rewound onto rolls that are cut and packaged for the vendor.	Baghouse #7	C51 (PM, PM_{10}, $PM_{2.5}$)
#1, #2, #3 ABT and Tissue 9 Rewinders	Paper is unwound from production rolls and rewound onto rolls that are cut and packaged for the vendor.	Drum Filter	C47 (PM, PM_{10}, $PM_{2.5}$)
#3 and #4 NBT Rewinders	Paper is unwound from production rolls and rewound onto rolls that are cut and packaged for the vendor.	Baghouse #5	C49 (PM, PM_{10}, $PM_{2.5}$)
#5 and #6 Towel Rewinders	Paper is unwound from production rolls and rewound onto rolls that are cut and packaged for the vendor.	Baghouse #6	C50 (PM, PM_{10}, $PM_{2.5}$)
Converting Pulper Cyclone	Broke paper from rewinding activities is pneumatically conveyed to a cyclone which discharges the paper to the converting pulper	Baghouse #7	C51 (PM, PM_{10}, $PM_{2.5}$)

Towel Broke Cyclone	Broke paper from rewinding activities is pneumatically conveyed to a cyclone which discharges the paper to a baler	Baghouse #6	C50 (PM, PM_{10}, $PM_{2.5}$)
Converting Building Vents	Roof vents provide circulation and air release for activities occurring in the converting room.	None	C2, C9, C14, C16, C31, C32, C36, C41, C42, C43, C44, C45, C46 (PM, PM_{10}, $PM_{2.5}$)
Tissue 8 Rewinder	Paper is unwound from production rolls and rewound onto rolls that are cut and packaged for the vendor.	Venturi Wet Scrubber	C101 (PM, PM_{10}, $PM_{2.5}$)
Converting NG Heaters	Provide heat to the converting building	None	(PM, PM_{10}, $PM_{2.5}$, CO, NO_x, VOC, SO_2, GHGs)

Secondary fiber plant Pulp is produced from recycled paper using mechanical and non-chlorine chemistry operational methods. The pulping activities generate VOC and HAP emissions.

Aggregate insignificant activities include the emissions of PM from Baghouses 5, 6, and 7 and VOC emissions from the wastewater treatment plant. The Krofta clarifiers and sludge dewatering activities in the wastewater treatment system generate the VOC emissions. The wastewater treatment and the sludge dewatering systems were installed in 1992. Emission calculations for these activities are shown in Appendix B to this review report.

Categorically insignificant activities at the facility are listed in detail in the permit application and include a 460 hp emergency fire pump and maintenance activities.
Maintenance activities conducted on site include welding, painting, cleaning, and construction activities on an intermittent basis. Particulate matter emissions from cutting and grinding activities are controlled by Baghouse #4. Emissions from categorically insignificant activities are not included in the PSEL calculations.

Particulate matter control devices at this facility are as follows:

Name	#2 Paper Machine Wet Scrubber	#1 Paper Machine Wet Scrubber	#1 Paper Machine Wet Scrubber
Emission Point ID	PM1	PM17A	PM17B
Type Control	Venturi Scrubber	Venturi Scrubber	Venturi Scrubber
Rated Efficiency	98%	98%	98%
Date Installed	July 1995	2009	2009
Manufacturer	Brunnschweiler	Andritz	Andritz
Model No.	SR 6045	SR Venturi Scrubber	SR Venturi Scrubber
Inlet Air Flow Rate	46,000 acfm	48,000 acfm	20,000 acfm

Pressure Drop	TBD	9-12 inches water	6-10.5 inches water
Water Flow Rate	360-550 gpm recirculated	300-400 gpm recirculated	150-250 gpm recirculated
Captured Material Disposition	Wastewater Treatment	Wastewater Treatment	Wastewater Treatment
Process/Device Controlled	#2 Paper Machine dry end	#1 Paper Machine dry end	#1 Paper Machine DE Pulper

Name	Tissue 8 Rewinder Wet Scrubber
Emission Point ID	C101
Type Control	Venturi Scrubber
Rated Efficiency	98%
Date Installed	2008
Manufacturer	Sargato
Model No.	SC 750
Inlet Air Flow Rate	45,000 acfm
Pressure Drop	TBD
Water Flow Rate	140-190 gpm recirculated
Captured Material Disposition	Wastewater Treatment
Process/Device Controlled	Tissue 8 rewinder

Name	Baghouse #4	Baghouse #5	Baghouse #6
Emission Point ID	Maintenance Shop	C49	C50
Type Control	Torit Cartridge Filter	Fabric Filter	Fabric Filter
Rated Efficiency	99.9% at 3 microns	99.99%	99.99%
Date Installed	2004	2002	2003
Manufacturer	The Donaldson Co.	The Donaldson Co.	MAC Dust Collector
Model	Torit Model DF03-6	Torit Model 243MBT10	Model 144MCF361
Inlet Air Flow Rate	2,500 acfm	41,600 acfm	50,000 acfm
Pressure Drop	0.5 to 5.0 inches water	0.5 to 5.0 inches water	0.85 to 2 inches water
Air-to-Cloth Ratio	2.7:1	10.7:1	9.6:1
Cleaning Mechanism	Air pulse	Pulse jet	Air pulse
Captured Material Disposition	Licensed landfill	Licensed landfill	Licensed landfill

Process/Device Controlled	Maintenance Shop	#3 and #4 NBT Rewinders	#5 and #6 Towel Saw Trim, #5 Towel Rewinders and Towel Broke Cyclone

Name	Baghouse #7	Drum Filter
Emission Point ID	C51	Inside converting building
Type Control	Fabric Filter	Drum Filter
Rated Efficiency	99.99% at 3 microns	99%
Date Installed	2004	2016
Manufacturer	The Donaldson Co.	EnviroAir
Model No.	Torit Model 324MBT10	TFB 25/75
Inlet Air Flow Rate	64,450 acfm	70,000 acfm
Pressure Drop	0.5 to 5.0 inches water	0.7-1.7 inches water
Air-to-Cloth Ratio	12.4:1	Na
Cleaning Mechanism	Pulse jet	Na
Captured Material Disposition	Licensed landfill	Licensed landfill
Process/Device Controlled	#1 and #2 NBT rewinders and converting pulper cyclone	#1 and #2 ABT rewinders and Tissue 9 rewinder

COMPLIANCE HISTORY

11. The facility was inspected on 8/23/19 and was determined to be in compliance with applicable permit conditions.
12. During the prior permit period there were no complaints recorded for this facility.
13. No enforcement actions have been taken against this source since the last permit renewal.

EMISSIONS

14. Proposed PSEL information:

Pollutant	Baseline Emission Rate (tons/yr)	Netting Basis		Plant Site Emission Limits (PSEL)		
		Previous (tons/yr)	Proposed (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)
PM	109	94	77	69	70	+1
PM_{10}	81	66	44	51	52	+1
$PM_{2.5}$	n/a	51	36	41	42	+1
SO_2	0	0	0	n/a	n/a	n/a
CO	17	17	17	99	99	0
NO_x	12	12	12	39	39	0
VOC	19	11	19	39	47	+8
Pb	0	0	0	n/a	n/a	n/a
GHG (CO_2e)	22,200	22,200	22,200	74,000	74,000	0

a. The baseline emission rate was established in previous permitting actions and has been changed for PM and VOC based on new information.

b. The PSEL is established for the facility as a Standard ACDP since the facility wishes to maintain their netting basis emission rates. Generic PSELs levels were set for CO, NO_x, and GHGs as the potential to emit is below the generic level but greater than the de minimis rate. Source specific PSELs are set at the facility's potential to emit for PM, PM_{10}, $PM_{2.5,}$ and VOC.

c. For Standard ACDPs, the netting basis is equal to the baseline emission rate minus emission reductions required by rule plus emission increases approved in accordance with OAR 340, division 224 (NSR rules) and can be no greater than an SER above the PSEL. [Refer to the definition of netting basis in OAR 340-222-0046.]

d. The previous PSEL is the PSEL in the last permit.

e. No baseline rate will be set for $PM_{2.5}$. See Appendix A in this Review Report for the netting basis determination.

f. No PSELs for SO_2 or Pb have been set as potential emissions are less than the de minimis rate.

g. The PSEL is a federally enforceable limit on the potential to emit.

15. In addition to the PSEL, the permit includes the following:

Pollutant	Unassigned Emissions (tons/yr)
PM	7
PM_{10}	0
$PM_{2.5}$	0
SO_2	0
NO_x	0
CO	0
VOC	0
GHG (CO_2e)	0

SIGNIFICANT EMISSION RATE ANALYSIS

16. For each pollutant, the proposed Plant Site Emission Limit is less than the sum of the Netting Basis and the Significant Emission Rate, thus no further air quality analysis is required at this time.

17. An analysis of the proposed PSEL increases over the Netting Basis is shown in the following table.

Pollutant	SER	Requested increase over proposed netting basis	Increase due to utilizing capacity that existed in baseline period	Increase due to physical changes or changes in method of operation	Increase due to changes to rules (i.e., the Generic PSEL)
PM	25	-7			
PM_{10}	15	+7.7	-8.5	+16.2	
$PM_{2.5}$	10	+6.0	-10.2	+16.2	
SO_2	40	---			
NO_x	40	+26.8	+1.2	+8.5	+17.1
CO	100	+81.9	+1.7	+3.6	+76.6
VOC	40	+27.8	+23.5	+4.3	
GHG (CO_2e)	75,000	+51,780	+8717	+10,897	+32,166

TITLE V MAJOR SOURCE APPLICABILITY

18. A major source is a facility that has the potential to emit 100 tons/year or more of any criteria pollutant or 10 tons/year or more of any single HAP or 25 tons/year or more of combined HAPs. This facility is not a major source of emissions. The basis for this determination can be found in Appendices B and D of this Review Report.
19. A source that has potential to emit at the major source levels but accepts a PSEL below major source levels is called a synthetic minor (SM). This source does not have the potential to emit at major source levels. Therefore, this source is not a synthetic minor. The basis for this determination can be found in Appendix B of this Review Report.
20. A source that has the potential to emit above the Title V major source thresholds but is willing to take a limit that is 80% or greater of the major source thresholds (e.g., 80 tons per year or greater for criteria pollutants) is called a synthetic minor 80 (SM-80). The source does not have the potential to emit at major source levels, does not need to accept a limit of at least 80% of the major source thresholds and is therefore not an SM-80. The basis for this determination can be found in Appendix B of this Review Report.
21. A source that has the potential to emit less than major source thresholds is called a true minor. This source is a true minor. The basis for this determination can be found in Appendix B of this Review Report.
22. A source that has the potential to emit less than major source thresholds but is required by rule to obtain a Title V permit is called a Title V minor source. This source is not a Title V minor source. The basis for this determination can be found in Appendix B of this Review Report.

CRITERIA POLLUTANTS

23. This facility is a true minor source of criteria pollutant emissions.

HAZARDOUS AIR POLLUTANTS

24. This source is not a major source of hazardous air pollutants. The basis for this determination can be found in Appendix D of this Review Report.

Hazardous Air Pollutants	Potential to Emit (tons/year)
Acetaldehyde	2.03
Biphenyl	2.78
Chloroform	3.05
Methanol	6.53
Toluene	1.64
Metal HAPs	0.002

Hazardous Air Pollutants	Potential to Emit (tons/year)
Total HAP emissions	19.60

CLEANER AIR OREGON RISK ASSESSMENT

25. The Cleaner Air Oregon Toxic Air Contaminant emissions from this source can be found at: https://www.deq.state.or.us/aq/AQPermitsonline/22-6034-ST-01_ATEI_2016.PDF.

26. Georgia-Pacific Consumer Operations LLC has not been called in and, therefore, has not performed a risk assessment.

TOXICS RELEASE INVENTORY

27. The Toxics Release Inventory (TRI) is federal program that tracks the management of certain toxic chemicals that may pose a threat to human health and the environment, over which DEQ has no regulatory authority. It is a resource for learning about toxic chemical releases and pollution prevention activities reported by certain industrial facilities. Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) created the TRI Program. In general, chemicals covered by the TRI Program are those that cause:

    a. Cancer or other chronic human health effects;

    b. Significant adverse acute human health effects; or

    c. Significant adverse environmental effects.

28. There are currently over 650 chemicals covered by the TRI Program. Facilities that manufacture, process or otherwise use these chemicals in amounts above established levels must submit annual TRI reports on each chemical.

29. Georgia-Pacific Consumer Operations LLC was required to report the release of only two TRI-listed chemicals for the year 2018:

	Air Stack Emissions (lbs/year)	Water Releases (lbs/year)
Lead compounds	0.18	0.49
Nitrate Compounds	None	45,615

ADDITIONAL REQUIREMENTS

NEW SOURCE PERFORMANCE STANDARDS APPLICABILITY

30. There are no devices/processes at this facility for which a New Source Performance Standard has been promulgated.

NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS APPLICABILITY

31. 40 CFR Part 63, Subpart S (Pulp and Paper) is not applicable to this source because it is a minor source of HAPs.

32. 40 CFR Part 63, Subpart ZZZZ (RICE) is applicable to this source because the permittee operates a 460 hp emergency fire pump engine manufactured in 1991 and installed in 1992. Applicable requirements of this NESHAP are being included in this permit renewal for the first time. The fire pump is a categorically insignificant activity and its emissions are not included in the PSEL calculations.

GREENHOUSE GAS REPORTING APPLICABILITY

33. OAR Chapter 340 Division 215 is applicable to this source because emissions of greenhouse gases exceed 2,500 metric tons (2,756 short tons) of CO_2 equivalents per year.

REASONABLY AVAILABLE CONTROL TECHNOLOGY APPLICABILITY

34. The RACT rules are not applicable to this source because it is not in the Portland AQMA, Medford AQMA, or Salem SKATS.

TYPICALLY ACHIEVABLE CONTROL TECHNOLOGY APPLICABILITY

35. The source is likely meeting OAR 340-226-0130 Highest and Best Practicable Treatment and Control: Typically Achievable Control Technology (TACT) by installing and operating baghouse and scrubber control devices that are required to perform maintenance and work practice requirements including measuring the differential pressure across each baghouse or scrubber.

SOURCE TESTING

36. There are no source testing requirements proposed for this facility during the next permit term.

37. The results of prior source tests at the facility are shown below.

Emission Device	Test Date	Production Rate	Pollutant	Results
Converting Vents	6/95	5400 dscfm	PM	0.0029 gr/dscf, 0.83 lb/hr, 0.076 lb/ADT
Paper Mill Vents	6/95	33,200 dscfm	PM	0.00377 gr/dscf, 1.03 lb/hr
Economizer #2	4/95	31,700 dscfm	PM	0.0055 gr/dscf, 0.013 lb/ADT
			CO	41 ppmv, 0.73 lb/hr, 72.8 lb/MM cf NG
			NO_x	16 ppmv, 0.45 lb/hr, 52.0 lb/MM cf NG
Converting Vent West	3/8/11	42,800 dscfm	PM	0.0024 gr/dscf, 0.0690 lb/ADT
			PM_{10}	0.0023 gr/dscf, 0.0659 lb/ADT
			$PM_{2.5}$	0.0017 gr/dscf, 0.0455 lb/ADT
Converting Vent East	3/10/11	41,400 dscfm	PM	0.0018 gr/dscf, 0.0500 lb/ADT
			PM_{10}	0.0017 gr/dscf, 0.0450 lb/ADT
			$PM_{2.5}$	0.0013 gr/dscf, 0.0343 lb/ADT
Tissue 8 Scrubber C101	12/9/09	51,243 dscfm	PM	0.002 gr/dscf, 0.107 lb/ADT
#1 Paper Machine Scrubber PM17A	11/1/11	36,700 dscfm	PM	0.0045 gr/dscf, 0.2522 lb/ADT
#2 Paper Machine Scrubber PM1	11/2/11	45,400 dscfm	PM	0.0017 gr/dscf, 0.1043 lb/ADT
#1 Paper Machine Pulper Scrubber PM17B	8/30/13	13,370 dscfm	PM	0.0011 gr/dscf, 0.0174 lb/ADT

PUBLIC NOTICE

38. Pursuant to OAR 340-216-0066(4)(a)(A), issuance of Standard Air Contaminant Discharge Permits require public notice in accordance with OAR 340-209-0030(3)(c), which requires DEQ to provide notice of the proposed permit action and a minimum of

35 days for interested persons to submit written comments. In addition, a hearing will be scheduled to allow interested persons to submit oral or written comments if DEQ receives written request for a hearing from ten persons, or from an organization representing at least ten persons, within 35 days of the mailing of the public notice. If a hearing is scheduled, DEQ will provide a minimum of 30 days notice for the hearing. **The public notice was emailed/mailed on Sept. 24, 2020 and the comment period will end on Oct. 29, 2020; unless a hearing is scheduled.**

GLA:KWF

APPENDICES

APPENDIX A	Baseline and Netting Basis Emissions
APPENDIX B	Proposed Emissions
APPENDIX C	Changes Since Baseline
APPENDIX D	Hazardous Air Pollutants

Appendix A

Georgia-Pacific Consumer Operations

Baseline & Netting Basis Emissions

PM

Emissions Unit	Annual Production Rate	Emission Factor		Emissions (tons/year)
		Rate	Reference	
Paper Machine #1 economizer PM11	40,021 ADT	0.013 lb/ADT	1999 ST FPM+CPM	0.3
Paper Machine #2 economizer PM6	40,021 ADT	0.013 lb/ADT	1999 ST FPM+CPM	0.3
Paper Mill 13 roof area vents	80,042 ADT	1.16 lb/ADT	1995/2011 STs FPM+CPM	46.4
Paper Mill vacuum flume PM18	80,042 ADT	0.01 lb/ADT	NCASI TB942, Table 5.1 FPM+CPM	0.4
Converting Operations area ventsC1,C2, C4-C6	80,042 ADT	0.219 lb/ADT	1995 ST FPM only	8.8
NBT Rewinder cyclone C3	53,000 ADT	1.68 lb/ADT	1999 Fort James Est. FPM only	44.5
Shredder cyclone CW7	8760 hours	1.8 lb/hr	1993 SAIC Study FPM only	7.9
			Baseline Total	108.6
		7/1/07 NB reduction required***		32
			7/1/07 NB	77
	2020 permit NB reduction required****			0
			2020 NB	77

The PM netting basis will be set at 77 tons/year.

***2007 PSEL = 52 T/Y
PSEL + SER = 52 + 25 = 77 T/Y = maximum NB allowed on 7/1/07
NB reduction required = 109 - 77 = 32 T/Y

****Proposed PSEL = 70 T/Y
NB can be no more than SER above PSEL = 70 + 25 = 95 T/Y
Prior (7/1/07) NB = 77 T/Y
Since prior NB less than PSEL+SER, no NB reduction required in this permit action.

PM_{10}

Emissions Unit	Annual Production Rate	Emission Factor		Emissions (tons/year)
		Rate	Reference	
Paper Machine #1 economizer PM11	40,021 ADT	0.012 lb/ADT	Eng. Est. 95% of PM	0.2
Paper Machine #2 economizer PM6	40,021 ADT	0.012 lb/ADT	Eng. Est. 95% of PM	0.2
Paper Mill 13 roof area vents	80,042 ADT	0.79 lb/ADT	Eng. Est. 64% of PM	31.6
Paper Mill vacuum flume PM18	80,042 ADT	0.01 lb/ADT	NCASI TB942, Table 5.1 FPM+CPM	0.4
Converting Operations area ventsC1,C2, C4-C6	80,042 ADT	0.110 lb/ADT	Eng. Est. 50% of PM	4.4
NBT Rewinder cyclone C3	53,000 ADT	1.43 lb/ADT	DEQ AQ-EF03 85% of PM	37.9
Shredder cyclone CW7	8760 hours	1.53 lb/hr	DEQ AQ-EF03 85% of PM	6.7
			Baseline Total	81.4
		7/1/07 NB reduction required***		37
			7/1/07 NB	44
	2020 permit NB reduction required****			0
			2020 NB	44

The PM_{10} netting basis will be set at 44 tons/year.

***2007 PSEL = 29 T/Y
PSEL + SER = 29 + 15 = 44 T/Y = maximum NB allowed on 7/1/07
NB reduction required = 81 - 44 = 37 T/Y

****Proposed PSEL = 52 T/Y
NB can be no more than SER above PSEL = 52 + 15 = 67 T/Y
Prior (7/1/07) NB = 44 T/Y
Since prior NB less than PSEL+SER, no NB reduction required in this permit action.

$PM_{2.5}$

PM_{10} NB on 5/1/11 = 44
PM_{10} PSEL = 52
$PM_{2.5}$ PSEL = 42
R = $PM_{2.5}$ PSEL/PM_{10} PSEL = 42/52 = 0.808

$PM_{2.5}$ NB = PM_{10} NB x R = 44 x 0.808 = 36 T/Y

NB cannot be greater than SER over PSEL = 42 + 10 = 52 T/Y. So $PM_{2.5}$ NB is set at 36 T/Y in this permit action.

CO

Emissions Unit	Annual Production Rate	Emission Factor		Emissions (tons/year)
		Rate	Reference	
Paper Machine #1 economizer PM11 and Paper Machine #2 economizer PM6 NG Usage	471 MM cf	72.8 lb/MM cf	1999 ST	17.1
			Baseline Total	17.1
		7/1/07 NB reduction required*		0
			7/1/07 NB	17
		2020 permit NB reduction required**		0
			2020 NB	17

The CO netting basis will be set at 17 tons/year.

*2007 PSEL = 99 T/Y
PSEL + SER = 99 + 100 = 199 T/Y = maximum NB allowed on 7/1/07
Since baseline is less than PSEL+SER, no NB reduction was required on 7/1/07.

**Proposed PSEL = 99 T/Y
NB can be no more than SER above PSEL = 99+ 100 = 199 T/Y
Prior (7/1/07) NB = 17 T/Y
Since prior NB is less than PSEL+SER, no NB reduction is required in this permit action.

NO_x

Emissions Unit	Annual Production Rate	Emission Factor		Emissions (tons/year)
		Rate	Reference	
Paper Machine #1 economizer PM11 and Paper Machine #2 economizer PM6 NG Usage	471 MM cf	52.0 lb/MM cf	1999 ST	12.2
			Baseline Total	12.2
		7/1/07 NB reduction required*		0
			7/1/07 NB	12
		2020 permit NB reduction required**		0
			2020 NB	12

The NO_x netting basis will be set at 12 tons/year.

*2007 PSEL = 39 T/Y
PSEL + SER = 39 + 40 = 79 T/Y = maximum NB allowed on 7/1/07
Since baseline less than PSEL, no NB reduction was required on 7/1/07

**Proposed PSEL = 39 T/Y
NB can be no more than SER above PSEL = 39+ 40 = 79 T/Y
Prior (7/1/07) NB = 12 T/Y
Since prior NB less than PSEL+SER, no NB reduction is required in this permit action.

SO_2

Emissions Unit	Annual Production Rate	Emission Factor		Emissions (tons/year)
		Rate	Reference	
Paper Machine #1 economizer PM11 and Paper Machine #2 economizer PM6 NG Usage	471 MM cf	1.7 lb/MM cf	DEQ AQ-EF05	0.4
			Baseline Total	0.4
		7/1/07 NB reduction required*		0
			7/1/07 NB	0
		2020 permit NB reduction required**		0
			2020 NB	0

The SO_2 netting basis will be rounded to zero tons/year.

*2007 PSEL = 0 T/Y
PSEL + SER = 0 + 40 = 40 T/Y = maximum NB allowed on 7/1/07
Since baseline equals zero when rounded, no NB reduction required on 7/1/07

**Proposed PSEL = 0 T/Y
NB can be no more than SER above PSEL = 0 + 40 = 40 T/Y
Prior (7/1/07) NB = 0 T/Y
Since prior NB is zero, no NB reduction required in this permit action.

VOC

Emissions Unit	Annual Production Rate	Emission Factor		Emissions (tons/year)
		Rate	Reference	
Paper Machine #1 economizer PM11 and Paper Machine #2 economizer PM6 NG Usage	471 MM cf	5.5 lb/MM cf	DEQ AQ-EF05	1.3
Paper Mill 13 roof area vents	80,042 ADT	0.25 lb/ADT	NCASI P&P database	10.0
Converting Operations area fugitives	80,042 ADT	0.19 lb/ADT	Mass balance	7.6
			Baseline Total	18.9
			7/1/07 NB reduction*	0
			7/1/07 NB	19
			2020 permit NB reduction required**	0
			2020 NB	19

The VOC netting basis will be set at 19 tons/year.

*2007 PSEL = 60 T/Y
PSEL + SER = 60 + 40 = 100 T/Y = maximum NB allowed on 7/1/07
Since baseline less than PSEL+SER, no NB reduction was required on 7/1/07.

**Proposed PSEL = 47 T/Y
NB can be no more than SER above PSEL = 47 + 40 = 87 T/Y
Prior (7/1/07) NB = 19 T/Y
Since prior NB less than PSEL+SER, no NB reduction is required in this permit action.

Pb

Emissions Unit	Annual Production Rate	Emission Factor		Emissions (tons/year)
		Rate	Reference	
Paper Machine #1 & #2 economizers NG usage	471 MM cf	0.0005 lb/MM cf	AP-42 Table 1.4-2	0.0001
			TOTAL	0.0001

The Pb baseline and netting basis will be considered zero tons/year.

GHGs (CO_2e)
(2009 Baseline)

Emissions Unit	Annual Production Rate	Emission Factor		Emissions (tons/year)
		Rate	Reference	
Facility Wide NG Usage	369.9 MMcf	120,142 lb/MMcf	40 CFR Part 98 Subpart C	22,220
			TOTAL	22,220

The GHG baseline and netting basis will be rounded to 22,200 tons/year.

Appendix B

Georgia-Pacific Consumer Operations

Proposed Emissions

PM

Emissions Unit	Annual Production Rate	Emission Factor		Emissions (tons/year)
		Rate	Reference	
Paper machine #1 economizer PM11	72,500 ADT	0.013 lb/ADT	1999 ST FPM+CPM	0.5
Paper machine #2 economizer PM6	72,500 ADT	0.013 lb/ADT	1999 ST FPM+CPM	0.5
Paper mill production area 13 vents	145,000 ADT	0.57 lb/ADT	1995/2011 STs FPM+CPM	41.3
Paper mill vacuum flume PM18	145,000 ADT	0.01 lb/ADT	NCASI TB942 FPM+CPM	0.7
Converting Operation vents	230,000 ADT	0.076 lb/ADT	1995 ST FPM only	8.7
Paper machine #1 dry end PM17A	72,500 ADT	0.2522 lb/ADT	2011 ST FPM+CPM	9.1
Paper machine #1 dry end pulper PM17B	72,500 ADT	0.0175 lb/ADT	2013 ST FPM+CPM	0.6
Paper machine #2 dry end PM1	72,500 ADT	0.1046 lb/ADT	2011 ST FPM+CPM	3.8
Tissue 8 rewinder C101	59,000 ADT	0.107 lb/ADT	2010, 2011 STs FPM+CPM	3.2
Converting NG heaters	181.4 MM cf	2.5 lb/MM cf	DEQ AQ-EF-05	0.2
AI				1.0
			TOTAL	69.6

The source specific PM PSEL will be set at 70 tons/year.

PM_{10}

Emissions Unit	Annual Production Rate	Emission Factor		Emissions (tons/year)
		Rate	Reference	
Paper machine #1 economizer PM11	72,500 ADT	0.012 lb/ADT	Eng. Est. 95% of FPM + CPM	0.4
Paper machine #2 economizer PM6	72,500 ADT	0.012 lb/ADT	Eng. Est. 95% of FPM + CPM	0.4
Paper mill production area 13 vents	145,000 ADT	0.40 lb/ADT	1995/2011 ST 64% of FPM + CPM	29.0
Paper mill vacuum flume PM18	145,000 ADT	0.01 lb/ADT	NCASI TB942 FPM+CPM	0.7
Converting Operation vents	230,000 ADT	0.038 lb/ADT	Eng. Est. 50% of FPM	4.4
Paper machine #1 dry end PM17A	72,500 ADT	0.2404 lb/ADT	DEQ AQ-EF03 95% of FPM + CPM	8.7
Paper machine #1 dry end pulper PM17B	72,500 ADT	0.017 lb/ADT	DEQ AQ-EF03 95% of FPM + CPM	0.6
Paper machine #2 dry end PM1	72,500 ADT	0.0998 lb/ADT	DEQ AQ-EF03 95% of FPM + CPM	3.6
Tissue 8 rewinder C101	59,000 ADT	0.104 lb/ADT	DEQ AQ-EF03 95% of FPM + CPM	3.1
Converting NG heaters	181.4 MM cf	2.5 lb/MM cf	DEQ AQ-EF-05	0.2
AI				1.0
			TOTAL	52.1

The source specific PM_{10} PSEL will be set at 52 tons/year.

$PM_{2.5}$

Emissions Unit	PM_{10} Emissions (tons/yr)	Emission Factor		Emissions (tons/year)
		% $PM_{2.5}$of PM_{10}	Reference	
Paper machine #1 economizer PM11	0.4	100	DEQ Est.	0.4
Paper machine #2 economizer PM6	0.4	100	DEQ Est.	0.4
Paper mill production area 13 vents	29.0	35% FPM + CPM	1995/2011 STs	18.9
Paper mill vacuum flume PM18	0.7	100	DEQ Est.	0.7
Converting Operation vents	4.4	100	DEQ Est.	4.4
Paper machine #1 dry end PM17A	8.7	100	DEQ Est.	8.7
Paper machine #1 dry end pulper PM17B	0.6	100	DEQ Est.	0.6
Paper machine #2 dry end PM1	3.6	100	DEQ Est.	3.6
Tissue 8 rewinder C101	3.1	100	DEQ Est.	3.1
Converting NG heaters	0.2	100	DEQ AQ-EF-08	0.2
AI	1.0	100	DEQ Est.	1.0
			TOTAL	42.0

The source specific $PM_{2.5}$ PSEL will be set at 42 tons/year.

SO_2

Emissions Unit	Annual Production Rate	Emission Factor		Emissions (tons/year)
		Rate	Reference	
Paper Machine #1 economizer PM11 and Paper Machine #2 economizer PM6 NG Usage	515 MM cf	1.7 lb/MM cf	DEQ AQ-EF05	0.4
Converting NG heaters	181.4 MM cf	1.7 lb/MM cf	DEQ AQ-EF-05	0.2
			TOTAL	0.6

Because the projected emissions are less than the de minimis rate of 1 ton/yr, no PSEL will be set for SO_2.

NO_x

Emissions Unit	Annual Production Rate	Emission Factor		Emissions (tons/year)
		Rate	Reference	
Paper Machine #1 economizer PM11 and Paper Machine #2 economizer PM6 NG Usage	515 MM cf	52.0 lb/MM cf	1999 ST	13.4
Converting NG heaters	181.4 MM cf	94 lb/MM cf	DEQ AQ-EF-05	8.5
			TOTAL	21.9

The NO_x PSEL will be set at the Generic PSEL level of 39 tons/year.

CO

Emissions Unit	Annual Production Rate	Emission Factor		Emissions (tons/year)
		Rate	Reference	
Paper Machine #1 economizer PM11 and Paper Machine #2 economizer PM6 NG Usage	515 MM cf	72.8 lb/MM cf	1999 ST	18.8
Converting NG heaters	181.4 MM cf	40 lb/MM cf	DEQ AQ-EF-05	3.6
			TOTAL	22.4

The CO PSEL will be set at the Generic PSEL level of 99 tons/year.

VOC

Emissions Unit	Annual Production Rate	Emission Factor		Emissions (tons/year)
		Rate	Reference	
Paper Machine #1 economizer PM11 and Paper Machine #2 economizer PM6 NG Usage	515 MM cf	5.5 lb/MM cf	DEQ AQ-EF05	1.4
Paper mill production area 13 vents	145,000 ADT	0.25 lb/ADT	NCASI P&P database	18.1
Converting Operation vents	230,000 ADT	0.19 lb/ADT	Mass balance	21.9
Secondary Fiber fugitives	148,158 ADT	0.051 lb/ADT	NCASI TB1020 Table 7.2	3.8
Converting NG heaters	181.4 MM cf	5.5 lb/MM cf	DEQ AQ-EF-05	0.5
AI				1.0
			TOTAL	46.7

The source specific VOC PSEL will be set at 47 tons/year.

Pb

Emissions Unit	Annual Production Rate	Emission Factor		Emissions (tons/year)
		Rate	Reference	
Paper Machine #1 economizer PM11 and Paper Machine #2 economizer PM6 NG Usage	515 MM cf	0.0005 lb/MM cf	AP-42 Table 1.4-2	0.0001
Converting NG heaters	181.4 MM cf	0.0005 lb/MM cf	AP-42 Table 1.4-2	0.00005
			TOTAL	0.00015

Because the projected emissions are less than the de minimis rate of 0.1 ton/yr, no PSEL will be set for Pb.

GHGs (CO_2e)

Emissions Unit	Annual Production Rate	Emission Factor		Emissions (tons/year)
		Rate	Reference	
Paper Machine #1 economizer PM11 and Paper Machine #2 economizer PM6 NG Usage	515 MM cf	120,142 lb/MM cf	40 CFR Part 98 Subpart C	30,937
Converting NG heaters	181.4 MM cf	120,142 lb/MM cf	40 CFR Part 98 Subpart C	10,897
			TOTAL	41,834

The GHG PSEL will be set at the Generic PSEL level of 74,000 tons/year.

Aggregate Insignificant

PM

Emissions Unit	Annual Production Rate	Emission Factor		Emissions (tons/year)
		Rate	Reference	
Baghouses 5, 6, and 7	230,000 ADT	0.0039 lb/ADT	2014 BH study FPM only	0.45
			TOTAL	0.45

PM_{10}

Emissions Unit	Annual Production Rate	Emission Factor		Emissions (tons/year)
		Rate	Reference	
Baghouses 5, 6, and 7	230,000 ADT	0.0039 lb/ADT	2014 BH study FPM only	0.45
			TOTAL	0.45

$PM_{2.5}$

Emissions Unit	Annual Production Rate	Emission Factor		Emissions (tons/year)
		Rate	Reference	
Baghouses 5, 6, and 7	230,000 ADT	0.0039 lb/ADT	2014 BH study FPM only	0.45
			TOTAL	0.45

VOC

Emissions Unit	Annual Production Rate	Emission Factor		Emissions (tons/year)
		Rate	Reference	
Wastewater treatment plant	148,158 ADT	0.0013 lb/ADT	2019 NCASI WWTP study	0.10
			TOTAL	0.10

Appendix C

Georgia-Pacific Consumer Operations

Changes Since Baseline

NC No.	Approval Date	Completion Date	Physical Change or Change in Method of Operation
		1979	#11 and #14 folders add to converting plant
		1982	Paper machine #2 rebuilt to a trim wire configuration
		1983	#12 folder added to converting plant
		1986	#15 folder added to converting plant
2544	11/21/90	1992	New secondary fiber recovery facility and wastewater treatment plant
2728	10/31/91		Cooling tower---never installed
14867	5/2/95		Venturi scrubber for #2 paper machine and improvements to dust collection system
15723	7/2/96		Baghouse for #3 & #4 NBT rewinders
17186	10/27/98		Baghouse for #1, 2, and #3 ABT rewinders
		1998	#4 towel rewinder added to converting plant
		2000	#2 paper machine improvements for light weight grades
20272	7/29/02	5/27/03	New towel rewinder for #5 towel line, BH5 for #4&#5 towel lines, cyclone for end trim from #1,2,3,4,5 towel lines and Kompact & Envoy folders controlled by BH6, removal of 6 napkin folders and one slitter rewinder
20638	5/27/03	9/9/03	Larger exhaust system for existing plasma cutter system
20824	11/10/03	7/15/04, 8/4/05	New towel rewinder #6 and removal of #2 and #3 towel rewinders and install BH7 on old trim cyclone and #6 towel rewinder
20950	3/3/04	8/18/04	Replace existing BH4 for maintenance shop (CI)
21468	6/24/05	8/24/05	Install summer/winter bypass vents on BHs 5,6,7
22387	10/16/07	4/2108	Installation of new Tissue 8 converting building and venture scrubber

22650	7/8/08	3/10/10	Dust collection system and wet scrubber on #1 paper machine and paper mill pulper scrubber
23879	1/20/10	1/20/10	Modification of dust collection system on #2 paper machine
26706	2/15/12		Reroute #5 towel rewinder dust from BH C49 through a cyclone and BH C70, reroute #3 and #4 NBT dust from BH C48 to BH C49, remove BH C48 (#3 & 4 NBT)
26995	9/21/12	6/3/13	Modification of water feed system to Tissue 8 converting scrubber to use white water instead of fresh water
	8/26/16		Drum filter to replace BH2 on #1&2 ABT rewinders
	8/26/16	3/6/17	New tissue 9 rewinder
30338	9/30/18	10/3/19	Replace two welding fume extractors (CI)
30771	7/22/19	To be installed in 2020	Four new natural gas make up air units for converting building (2 at 5.4 MM Btu/hr each and 2 at 8.96 MM Btu/hr each)
30831	7/31/19	Project cancelled	Dust collection hood

Appendix D

Georgia-Pacific Consumer Operations

Hazardous Air Pollutants

Hazardous Air Pollutants

Pollutant	Emission Unit	Production Rate	Emission Factor		Emissions (tons/year)	Pollutant Total (tons/year)
			Rate	Reference		
Acetaldehyde	Paper mill	145,000 ADT	0.017lb/ADT	NCASI P&P database	1.23	2.03
	Secondary Fiber	148,198 ADT	0.011 lb/ADT	NCASI P&P database	0.80	
Arsenic	PM NG	515 MM cf	2.0E-04 lb/MM cf	AP-42 Table 1.4-4	5.15E-05	6.96E-05
	Converting NG	181.4 MM cf	2.0E-04 lb/MM cf	AP-42 Table 1.4-4	1.81E-05	
Benzene	PM NG	515 MM cf	2.1E-03 lb/MM cf	AP-42 Table 1.4-3	5.41 E-04	7.31E-04
	Converting NG	181.4 MM cf	2.1E-03 lb/MM cf	AP-42 Table 1.4-3	1.90E-04	
Beryllium	PM NG	515 MM cf	1.2E-05 lb/MM cf	AP-42 Table 1.4-4	3.09E-06	4.18E-06
	Converting NG	181.4 MM cf	1.2E-05 lb/MM cf	AP-42 Table 1.4-4	1.09E-06	
Biphenyl	Paper mill	145,000 ADT	0.025lb/ADT	NCASI P&P database	1.81	2.77
	Secondary Fiber	148,198 ADT	0.013 lb/ADT	NCASI P&P database	0.96	
Cadmium	PM NG	515 MM cf	1.1E-03 lb/MM cf	AP-42 Table 1.4-4	2.83E-04	3.83E-04
	Converting NG	181.4 MM cf	1.1E-03 lb/MM cf	AP-42 Table 1.4-4	1.00E-04	

Carbon disulfide	Paper mill	145,000 ADT	6.52E-03 lb/ADT	NCASI P&P database	0.47	0.47
	Secondary Fiber	148,198 ADT	9.20E-06 lb/ADT	NCASI P&P database	6.82E-04	
Chloroform	Paper mill	145,000 ADT	3.23E-03 lb/ADT	NCASI P&P database	0.23	3.05
	Secondary Fiber	148,198 ADT	0.038 lb/ADT	NCASI P&P database	2.79	
	WWTP	148,198 ADT	4.46E-04 lb/ADT	NCASI WWTS study	0.03	
Chromium	PM NG	515 MM cf	1.4E-03 lb/MM cf	AP-42 Table 1.4-4	3.61E-04	4.88E-04
	Converting NG	181.4 MM cf	1.4E-03 lb/MM cf	AP-42 Table 1.4-4	1.27E-04	
Cobalt	PM NG	515 MM cf	8.45E-05 lb/MM cf	AP-42 Table 1.4-4	2.16E-05	2.93E-05
	Converting NG	181.4 MM cf	8.45E-05 lb/MM cf	AP-42 Table 1.4-4	0.77E-05	
Cumene	Paper mill	145,000 ADT	2.21E-03 lb/ADT	NCASI P&P database	0.16	0.16
	Secondary Fiber	148,198 ADT	2.14E-06 lb/ADT	NCASI P&P database	1.59E-04	
Formaldehyde	Paper mill	145,000 ADT	4.63E-03 lb/ADT	NCASI P&P database	0.34	0.344
	Secondary Fiber	148,198 ADT	5.21E-05 lb/ADT	NCASI P&P database	3.86E-03	

Hexane	PM NG	515 MM cf	1.8 lb/MM cf	AP-42 Table 1.4-3	0.46	0.62
	Converting NG	181.4 MM cf	1.8 lb/MM cf	AP-42 Table 1.4-3	0.16	
Lead	PM NG	515 MM cf	5.0E-04 lb/MM cf	AP-42 Table 1.4-2	1.29E-04	1.73E-04
	Converting NG	181.4 MM cf	5.0E-04 lb/MM cf	AP-42 Table 1.4-2	0.45E-04	
Manganese	PM NG	515 MM cf	3.8E-04 lb/MM cf	AP-42 Table 1.4-4	9.79E-05	1.32E-04
	Converting NG	181.4 MM cf	3.8E-04 lb/MM cf	AP-42 Table 1.4-4	3.45E-05	
Mercury	PM NG	515 MM cf	2.6E-04 lb/MM cf	AP-42 Table 1.4-4	6.70E-05	9.06E-05
	Converting NG	181.4 MM cf	2.6E-04 lb/MM cf	AP-42 Table 1.4-4	2.36E-05	
Methanol	Paper mill	145,000 ADT	0.039 lb/ADT	NCASI P&P database	2.83	6.53
	Secondary Fiber	148,198 ADT	0.026 lb/ADT	NCASI P&P database	1.95	
	Converting	230,000 ADT	0.015 lb/ADT	Mass balance	1.73	
	WWTP	148,198 ADT	2.24E-04 lb/ADT	NCASI WWTS study	0.02	
Methylene chloride	Paper mill	145,000 ADT	2.81E-03 lb/ADT	NCASI P&P database	0.20	0.22
	Secondary Fiber	148,198 ADT	3.29E-04 lb/ADT	NCASI P&P database	0.02	

Naphthalene	Paper mill	145,000 ADT	0.0102 lb/ADT	NCASI P&P database	0.74	0.81
	Secondary Fiber	148,198 ADT	4.36E-04 lb/ADT	NCASI P&P database	0.03	
	WWTP	148,198 ADT	5.35E-04 lb/ADT	NCASI WWTS study	0.04	
Nickel	PM NG	515 MM cf	2.1E-03 lb/MM cf	AP-42 Table 1.4-4	5.41E-04	7.31E-04
	Converting NG	181.4 MM cf	2.1E-03 lb/MM cf	AP-42 Table 1.4-4	1.90E-04	
Phenol	Paper mill	145,000 ADT	9.92E-03 lb/ADT	NCASI P&P database	0.72	0.971
	Secondary Fiber	148,198 ADT	3.31E-03 lb/ADT	NCASI P&P database	0.25	
	WWTP	148,198 ADT	1.66E-05 lb/ADT	NCASI WWTS study	0.001	
POM	PM NG	515 MM cf	5.2E-05 lb/MM cf	AP-42 Table 1.4-3	1.33E-05	1.80E-05
	Converting NG	181.4 MM cf	5.2E-05 lb/MM cf	AP-42 Table 1.4-3	0.47E-05	
Propionaldehyde	Paper mill	145,000 ADT	1.14E-03 lb/ADT	NCASI P&P database	0.08	0.11
	Secondary Fiber	148,198 ADT	4.64E-04 lb/ADT	NCASI P&P database	0.03	
Selenium	PM NG	515 MM cf	2.4E-05 lb/MM cf	AP-42 Table 1.4-4	6.18E-06	8.35E-06

	Converting NG	181.4 MM cf	2.4E-05 lb/MM cf	AP-42 Table 1.4-4	2.17E-06	
Styrene	Secondary Fiber	148,198 ADT	6.4E-05 lb/ADT	NCASI P&P database	4.74E-03	4.74E-03
Toluene	Paper mill	145,000 ADT	3.96E-03 lb/ADT	NCASI P&P database	0.29	1.642
	Secondary Fiber	148,198 ADT	0.018 lb/ADT	NCASI P&P database	1.35	
	WWTP	148,198 ADT	2.66E-05 lb/ADT	NCASI WWTS study	0.002	
Trichloroethylene	WWTP	148,198 ADT	6.66E-05 lb/ADT	NCASI WWTS study	4.94E-03	4.94E-03
					TOTAL HAPs	19.60
					Largest Single HAP (Methanol)	6.53