

Fact Sheet for NPDES Permit WA0000256 Georgia-Pacific Consumer Operations LLC

September, 29, 2020

Purpose of this supplemental fact sheet

This supplemental fact sheet explains and documents the decisions the Department of Ecology (Ecology) made in drafting the proposed National Pollutant Discharge Elimination System (NPDES) permit modification for Georgia-Pacific Consumer Operations LLC (G-P Camas).

Ecology makes the draft permit modification and supplemental fact sheet available for public review and comment at least thirty (30) days before issuing the final permit modification. Copies of the supplemental fact sheet and draft permit modification for G-P Camas's NPDES permit WA0000256, are available for public review and comment from October 1 to November 6, 2020. For more details on preparing and filing comments about these documents, please see **Appendix B - Public Involvement Information** section.

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

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

Summary

The Department of Ecology (Ecology) issued NPDES Permit No. WA0000256 to G-P Camas on November 2, 2015. The permit became effective on December 1, 2015 and was subsequently modified on March 25, 2016 to correct a typographical error. In April 2018, G-P Camas shut down its Kraft pulping and bleaching operations. The facility also reported a new outfall previously not covered under the permit. Ecology is modifying this permit to reflect the changes as described below.

- 1. Facility name change:** The facility's name was changed from Georgia-Pacific Consumer Products (Camas) LLC to Georgia-Pacific Consumer Operations LLC. There was no change in ownership.
- 2. Shut down of the Kraft pulping and bleach plant operations:** On February 27, 2018, G-P Camas submitted a notification for Reporting Planned Changes for the permanent shut down of the Kraft pulping operations. This includes the shutdown of the Kraft pulping operations, bleach plant, wood yard, No. 20 paper machine, and communication paper converting lines. The remaining operations are the No. 11 paper machine producing tissue/toweling, associated repulpers and tissue/toweling converting lines, as well as power boilers.

- 3. Outfall 004:** This outfall is located on the Camas Slough, an arm of the Columbia River. It is for the intermittent discharge of water from testing of the firewater system and its safety relief valve.

Ecology considers this a major permit change. Examples of a minor permit change include the correction of typographical errors, incorporating more frequent monitoring, changing compliance dates, or incorporating a change in ownership. The proposed permit changes described below are more extensive than those defined in 40 CFR Part 122.63, and therefore does not qualify as a minor change.

This proposed modification includes removal of sections from the existing permit and the addition of other sections. In order to retain the correct references, Ecology marked the sections removed as “Reserved.”

Proposed modifications to this permit include:

- More stringent BOD₅ and TSS limits representative of current non-integrated operations
- Removal of Best Management Practice Plan requirements for spills of black liquor and other pulping materials to the wastewater treatment system
- No longer allow for discharge from bleach plant, including the removal of limits and requirements associated with the bleach plant
- Addition of Outfall 004 for firewater testing

This modification also includes administrative changes to the permit, updating the website links. These changes are minor and for information purposes.

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Proposed Permit Changes

1. Facility Name Change

The modified permit changes the Permittee name from Georgia-Pacific Consumer Products LLC to Georgia-Pacific Consumer Operations LLC.

2. Shut down of Kraft Pulping and Bleaching Operations

The facility was a Kraft pulp and paper mill making communication paper, tissues, and toweling until April 2018. Since then, G-P Camas shut down the Kraft pulping operations and one of two paper machines. One paper machine, Paper Machine No. 11 (PM 11), associated converting operations, and power boilers continue to be operated to produce paper towel products from purchased pulp and secondary fibers.

The mill has a primary (clarifier) and secondary (aerated stabilization basins) treatment system for treating process wastewater and stormwater. The treatment system effluent discharges through the outfall to the Columbia River. The treatment system and outfall remain in place after the Kraft mill shut down.

The shutdown of the Kraft pulping and bleaching operations impacts a number of conditions in the permit. The conditions impacted include limits and best management practices associated with these operations. These proposed permit modifications are discussed below.

A. BOD₅ and TSS Limits

The proposed limits for BOD₅ and TSS have been updated to reflect the current operations at the site after the pulp mill shut down. The proposed limits are based on production-based effluent limit guidelines, as detailed in Section A.i below. Due to the reduction in the volume of process wastewater generated by the facility, stormwater is now a greater component of the overall wastewater treated by the wastewater treatment system. During heavy storm events, the modified permit proposes to allow G-P Camas an option of accounting for these additional BOD₅ and TSS contributions from the stormwater to the production based limits. This stormwater contribution allowance is further discussed in Section A.ii.

i. Production-based Limits

Production-based limits are found in the federal effluent guidelines outlined in 40 CFR Part 430 for the Pulp, Paper, and Paperboard category (specifically Subpart L – Non-Integrated Mills where Tissue Papers are produced from Purchased Pulp and Subpart J – Secondary Fiber Non-Deink Facilities where Tissue from Wastepaper is produced without Deinking). For paper production, the guidelines apply to the process wastewater stream. General provisions in 40 CFR 401.11(q) define process wastewater as any water that comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

These limits do not account for stormwater from outside the process areas, which are discussed separately in Section A.ii below.

The limits listed below are based on production from Paper Machine 11 (PM 11). In this modification, Ecology determined that PM 11 is not a new source based on information and the analysis in **Table 2**. Therefore, the limits are based on Best Practicable Control Technology (BPT) for existing sources. These production-based limits are calculated in **Tables 3 and 4** in Appendix A.

Ecology modified the production-based limits for BOD₅ and TSS as follows:

Table 1. BOD₅ and TSS Limits Comparison

Parameter	Current Limit	Proposed Limit
BOD ₅ , monthly average in lbs/day	9,307	1,923
BOD ₅ , maximum daily in lbs/day	17,948	3,525
TSS, monthly average in lbs/day	19,638	1,630
TSS, maximum daily in lbs/day	36,575	3,295

The proposed limits listed above are more stringent and reflect the current product type and production rates for the GP Camas facility. These changes affect Condition S1.A of the permit.

ii. Stormwater Contribution to the BOD₅ and TSS Limits

G-P Camas also treats and discharges non-process wastewater, the majority of which is stormwater covering over 250 acres of property. The stormwater has BOD₅ and TSS loadings that are not accounted for in the production-based limits calculated above. To address stormwater capture and treatment, Ecology proposes to include a stormwater contribution allowance as follows:

$$S = 8.34 \times M \times (F - F_{DW})$$

Where,

S = Stormwater BOD₅/TSS contribution, in lbs/day

M = Multiplier, in mg/L

F = Discharge flow rate, in MGD

F_{DW} = Dry weather flow rate, in MGD

The multiplier M reflects expected concentration of pollutant in stormwater after application of AKART. **Table 5 in Appendix A** contains the basis and calculations of M.

The dry weather flow rate, F_{DW}, represents long-term discharge rate without stormwater contributions; therefore, the third term (F – F_{DW}) in the above equation represents stormwater flow rate. Appendix A, **Figure 1** contains the basis for the calculation of F_{DW}. The F_{DW} is 6.9 MGD. The dry weather flow rate may be subject to future changes due to change in production or operations, such as water conservation measures.

This value may be updated through a permit modification or during permit renewals as the Permittee collects more data over the next permit cycle(s).

The actual discharge flow rate, F , is measured at Outfall 001. G-P Camas must use average monthly discharge rate to calculate the monthly average contribution and maximum daily flow rate to calculate the maximum daily contribution.

To account for stormwater treatment in the discharge, the Permittee has the option of adding S to the corresponding monthly average or maximum daily limits in **Table 1** to calculate the final BOD₅ and TSS limits for each month. S may vary each month with rainfall.

This change affects Condition S1.A of the permit.

B. Bleach Plant Flow and Limits

To account for the shutdown of the bleach plant at the GP Camas site, Ecology proposes to remove the requirements associated with the bleach plant flow from the permit. All monitoring and limits associated with this flow in Condition S1.A are also removed. Ecology proposed to retain the 2,3,7,8-TCDD limit at the outfall as it is currently in the TMDL; this limit will be further evaluated in future permit renewal. Because the bleach plant is no longer a source of adsorbable organic halides (AOX), AOX monitoring and limits will also be removed from the permit. No process wastewater discharge from the bleach plant will be allowed.

This change affects Conditions S1.A, S1.B, S2.A(1) and S2.A(2).

C. Best Management Practices (BMP) Plan

The federal regulations (40 CFR 430.03) require the development and implementation of BMPs to prevent leaks and spills of spent pulping liquors, soap and turpentine. This regulation applies to certain subcategories, including bleach Kraft pulp mills. Following the shutdown of the bleach plant and Kraft mill in 2018, GP Camas submitted a letter requesting Ecology's concurrence that implementation of the BMP Plan per Condition S9 no longer applied to the facility. As G-P Camas is no longer a pulp mill, Ecology responded with a letter dated April 19, 2019 and agreed that BMP requirements were no longer applicable. Ecology proposes to remove this requirement from the permit with this modification. This change affects Condition S9.

D. Outfall 004, Firewater Testing

This outfall is for the intermittent discharge of river water used for testing and maintaining the facility's emergency firewater pump. The pump is electric and has a maximum rated capacity of 3600 gpm. The pump has a diesel generator (located upland) which is able to provide backup power if grid power is unavailable.

As part of testing, the pump draws water from the Camas Slough, an arm of the Columbia River, cycles it through the system, and discharges the water back into the Camas Slough. Routine testing is done once per month for approximately ten minutes. Testing results in a total average discharge of 0.432 million gallons per year. There is no temperature loading associated with this discharge.

The outfall configuration consists of a 6-inch pipe with a nozzle, and an emergency safety relief valve that drains to a 10-inch pipe. Both pipes are located at G-P Camas' riverbank fire pump house.

Based on the information provided, Ecology determined that AKART for this discharge are as follow:

- System piping and valves are configured and maintained to prevent the fire water from coming into contact or comingling with other flows (e.g. sanitary sewers, process sewers).
- No addition of chemicals, including firefighting foam, are added to the fire water.
- The fire water is not used for cooling, including non-contact cooling.

Based on the current design and operations, Outfall 004 discharge meets AKART. Ecology proposes to add this outfall to the permit and requires G-P Camas to certify on an annual basis that the facility meets all of the above conditions.

This change affects Condition S1.C and S.2.A(7).

Appendix A – Evaluations and Calculations

Table 2. Paper Machine 11 Status Review

New source definition	Review	Meet the criteria (see note below)
A. Construction commenced after the promulgation of performance standards which are applicable to such source, 40 CFR 122.2	The source, PM 11, was installed in 1930. This is prior to the EPA promulgation of performance standards in 6/15/1998, per 63 FR 18504.	No
B. Construction commence after the proposal of standards of performance standards which are applicable to such source, but only if the standards are promulgated within 120 days of their proposal, 40 CFR 122.2	The source, PM 11, was installed in 1930. This is prior to the EPA proposal of the performance standards in 12/17/1993.	No
C. Source constructed at a site at which no other source is located, 122.29(b)(1)(i)	The mill was initially constructed in 1883 and started making newsprint. By the time PM 11 was installed in 1930, there were already other sources at the site.	No
D. Source totally replaces the process or production equipment that causes the discharge of pollutants at an existing source, 122.29(b)(1)(ii)	Since its installation in 1930, PM 11 has not been replaced.	No
E. Source's processes are substantially independent of an existing source at the same site, 122.29(b)(1)(iii)	PM 11 does not meet new source definitions in A and B, and is therefore not a new source. Ecology did not further evaluate this criteria.	-

Note: The production unit is a new source if it meets at least one of the criteria A and B and at least one of the criteria in C through E. If the unit is not a new source, it is subject to regulation for existing source.

Table 3. Production-based Limits for BOD₅

Subcategory	Applicable Regulation ^(a)	Production (ton/day) ^(b)	Monthly ave (lb/ton of production)	Max daily (lb/ton of production)	Monthly ave (lb/day)	Max daily (lb/day)
Non-integrated tissue	40 CFR 430.122, L	139	12.5	22.8	1,738	3,169
Secondary fiber, non-deink	40 CFR 430.102, J	13	14.2	27.4	185	356
Total Production	40 CFR 430	152	-	-	1,923	3,525

(a) Based on Best Practicable Control Technology (BPT) of existing sources)

(b) Based on long-term averages of production, taking into account boom/bust years and numbers representative of future production. Production year 2017 is considered to be most representative for paper production. This production line was independent of the pulp mill shut down.

Table 4. Production-based Limits for TSS

Subcategory	Applicable Regulation ^(a)	Production (ton/day) ^(b)	Monthly ave (lb/ton of production)	Max daily (lb/ton of production)	Monthly ave (lb/day)	Max daily (lb/day)
Non-integrated tissue	40 CFR 430.125, L	139	10	20.5	1,390	2,850
Secondary fiber, non-deink	40 CFR 430.105, J	13	18.4	34.1	240	445
Total Production	40 CFR 430	152	-	-	1,630	3,295

(a) Based on Best Practicable Control Technology (BCT) of existing sources)

(b) Based on long-term averages of production, taking into account boom/bust years and numbers representative of future production. Production year 2017 is considered to be most representative for paper production. This production line was independent of pulp mill shut down.

Table 5. Calculation of Multiplier M

Parameter	Concentration achievable by source control and non-treatment BMPs ^(a) (mg/L)	Overall Treatment Removal Efficiency ^(b)	M, Multiplier (mg/L) ^(c)
BOD ₅	30	83%	5.1
TSS	100	83%	17.0

^(a) These concentrations are established in EPA’s Multisector General Permit. Additionally, the TSS concentration is also incorporated into Ecology’s Industrial Stormwater General Permit for Paper Allied Products with NAICS 322XXX.

^(b)Based on EPA’s Treatability Database and G-P’s treatment system design, as calculated in Tables 6 and 7.

^(c) Multiplier M is calculated by (a) × [1-(b)/100].

Table 6. Removal Efficiency by Treatment Method

Parameter	Clarification % Removal Efficiency ^(a)	Biological Treatment % Removal Efficiency ^(b)
BOD/ Biogradable dissolved organic carbon (BDOC)	72	47.5
Total Organic Carbon (TOC)	54	98
Organic Matter, average	63	73

(a) Based on EPA Treatability Database for conventional treatment of natural organic matter clarification.

(b) Based on EPA Treatability Database for conventional treatment of natural organic matter via aerated stabilization basins (ASBs).

Table 7. Total Removal Efficiency Calculation

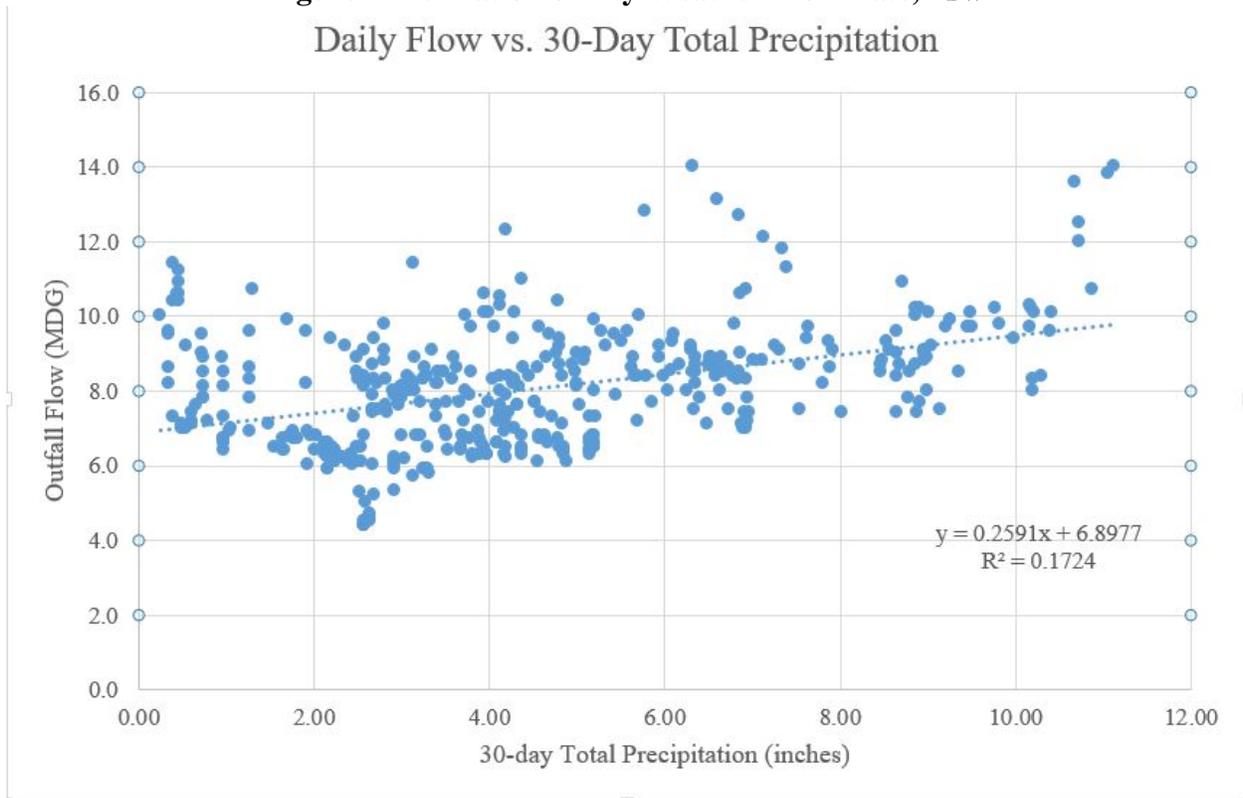
Treatment Info	Clarification	ASBs	Total ^(c)
Percentage flow ^(a)	57	100	N/A
Removal Efficiency ^(b)	63	73	83%

(a) The percent of the total stormwater flow that receives treatment. Stormwater that falls directly on the 108 acres of land surrounding the ASBs is downstream of the clarifier and does not go through clarification. The 57% is estimated based on stormwater drainage area.

(b) Removal efficiency is calculated from Table 6.

(c) Total pollutant removal based calculated from the equation below: $1 - [(1 - (\text{ABS removal efficiency}/100)) \times (1 - ((\text{Clarification removal efficiency} \times \text{Clarification percentage flow})/100^2))]$

Figure 1. Derivation of Dry Weather Flow Rate, F_{DW}
Daily Flow vs. 30-Day Total Precipitation



Note: Precipitation data is from the G-P Camas rain gage and the Portland-Troutdale Airport, using a 30-day precipitation rate to reflect the 30 to 45 days residence time in the treatment system. F_{DW} is calculated for no rain (zero inches of rainfall), or the y-intercept of the regression. F_{DW} is 6.9 MGD.

Appendix B - Public Involvement Information

The Department of Ecology is proposing to modify the NPDES permit for the G-P Camas. The Department will publish a Public Notice of Modification (PNOM) on October 1, 2020 in the Camas-Washougal Post-Record to inform the public that a draft permit modification and fact sheet are available for review.

Interested persons are invited to submit written comments regarding the draft permit modification. The draft modification and supplemental fact sheet are available online at <https://fortress.wa.gov/ecy/industrial/UIPermit/DraftPermits.aspx>. Due to COVID-19 related building closures, documents will not be available to view at local repositories or Ecology's offices and in-person public events cannot take place. An online public hearing will take place on November 2, 2020 if a significant number of people request it takes place. A paper copy of documents is available by request. Call (360) 407-6916 or e-mail angelina.ward@ecy.wa.gov if you'd like to receive a paper copy in the mail.

Send written comments:

- Using the online comment form available at <http://wq.ecology.commentinput.com/?id=c4WmU>
- Or by mail to:
Ha Tran
Department of Ecology
Industrial Section
P.O. Box 47600
Olympia, WA 98504-7600

Ecology Comments should reference specific text followed by the requested change or concern when possible. **Ecology will only consider comments that pertain to the permit conditions we propose to modify.**

The Department will consider all comments received by the end of the comment period in formulating a final determination to modify the permit. The Department's response to all significant comments is available upon request and will be sent directly to people expressing an interest in this permit.

If you have questions, or need additional information, you may also contact Ha Tran at ha.tran@ecy.wa.gov.

Appendix C - Permit Modification Response to Comments

No comments were received during the public comment period.