



*Representing Clallam, Grays Harbor, Jefferson,  
Mason, Pacific, and Thurston Counties*

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Olympia, WA 98502  
(360) 539-7610 • 1-800-422-5623

November 3, 2023

Georgia Pacific Corrugated LLC  
1203 Fones Rd  
Olympia WA 98501

RE: Final Determination – 23NOC1605

Greetings:

Olympic Region Clean Air Agency (ORCAA) has approved your Notice of Construction for the facility located at **1203 Fones Rd, Olympia, Thurston County**, Washington.

Read, become familiar with, and retain these documents for future reference. The applicable regulations and special conditions of approval identified in your permit are enforceable by ORCAA.

You may appeal the Approval Order within 30 days, by sending a written appeal to the Pollution Control Hearings Board and ORCAA.

Sincerely,

Debbie Moody  
Office Manager

Enclosures

# ORDER OF APPROVAL

NOTICE OF CONSTRUCTION 23NOC1605

ISSUED to Georgia-Pacific Corrugated LLC – Olympia Container on

OCT 31 2023

This Order of Approval (“Order”) is issued in accordance with Olympic Region Clean Air Agency (“ORCAA”) Rule 6.1 and the Washington State Implementation Plan under 40 CFR part 52.2470(c), Table 6.

Conditional approval to replace the existing 16.5 MMBtu/hr natural gas-fired boiler with a new 20.94 MMBtu/hr natural gas-fired boiler located at 1203 Fones Road SE, in Olympia (“Approved Location”), for operation solely as described in the associated Notice of Construction (“NOC”) application 23NOC1605, is hereby GRANTED to Georgia-Pacific Corrugated LLC – Olympia Container (“Applicant”), subject to the Conditions of Approval listed below.

This Order and the Conditions of Approval herein remain in effect for the life of the Approved Equipment as used at the Approved Location and shall be binding on Applicant, current owners and operators of the equipment, and Applicant’s heirs, successors and assigns unless amended or superseded by a subsequent Order issued by ORCAA or unless the equipment is permanently shut down. The Applicant must notify any subsequent owner, operator, heirs, successor or assigns of this Order and the Conditions of Approval herein.

Conditions of Approval established in this Order shall be enforceable in addition to any applicable state, local and federal regulations, or standards in existence now or in the future. Compliance with the conditions of this Order do not relieve the Applicant or any owner or operator from compliance with ORCAA Regulations, chapter 70A.15 of the Revised Code of Washington, or any other emissions control requirements, nor from any penalties for failure to comply with the same. Applicant may appeal this Order to the Pollution Control Hearings Board (“PCHB”) by filing a written appeal with the PCHB and serving a copy upon ORCAA within thirty (30) days of receipt of this Order.

This Order is GRANTED, subject to the following Conditions of Approval:

1. **Approved Equipment.** The 20.94 MMBtu/hr natural gas-fired boiler as described in Notice of Construction application No. 23NOC1605 and the associated Final Determination is approved for construction and operation subject to conditions in this Order of Approval.

[Regulatory Basis: ORCAA 6.1(a); ORCAA 6.1.2(I); 40 CFR part 52.2470(c), Table 6]

2. **Preapproval Required.** Prior approval by ORCAA may be required for the following as specified in ORCAA Rule 6.1:

- a. Construction, installation, or establishment of any stationary source;
- b. Modification to any existing stationary source;
- c. Replacement or substantial alteration of emission control technology installed on an existing stationary source; or,

- d. Deviations from the approved plans, drawings, data, and specifications of the stationary sources listed in Table 1.

**Table 1 Stationary sources located at GP**

| Emission Unit                                   | Specifications:   |
|---|---|
| <b>EU1</b> – Corrugating Line                   | Width: 98”<br>Max 441 MSF/hr<br>Max. 3,863,160 MSF/yr <sup>1</sup><br>Installation: 1989 (estimate)<br>Scrap paper collection system to baghouse  |
| <b>EU2</b> – Ward 50” FFG (Flexo-135)           | Line includes:<br>-Flexographic press<br>-Slitter/scorer<br>-Folder/Gluer<br>Max 139.553 MSF/hr <sup>1</sup><br>Scrap paper collection system to baghouse   |
| <b>EU3</b> – Martin 48” 924 NT FFG              | Line includes:<br>-Flexographic press<br>-Slitter/scorer<br>-Folder/Gluer<br>Max 20,000 box/hr <sup>1</sup><br>Max 264 MSF/hr <sup>1</sup><br>Scrap paper collection system to baghouse   |
| <b>EU4</b> – Bobst 38” FFG 8.20 EXPERTLINE      | Line includes:<br>-Flexographic printer<br>-Die cutter<br>-Slitter/scorer<br>-Folder/Gluer<br>Max 24,000 box/hr<br>Max 467.61 MSF/hr <sup>1</sup><br>Max 4,096,000 MSF/yr <sup>1</sup><br>Scrap paper collection system to baghouse       |
| <b>EU5</b> – Sun/Ward 66” (Die Cutter-123)      | Installed 1999, NOC not required<br>Line includes:<br>-Rotary die cutter<br>-Flexographic printer – 3 colors<br>-Folder<br>Max 79.508 MSF/hr <sup>1</sup><br>Max 696,000 MSF/yr <sup>1</sup><br>Scrap paper collection system to baghouse |
| <b>EU6</b> - Boiler Supply Company, Inc. Boiler | Firetube Steam Boiler<br>Produces steam for process heat<br>Fuel: Natural Gas Only  |

|  |   |
|--|---|
|  | Manf: Cleaver-Brooks<br>Model: CBEX-2W-700-500-250ST<br>Max Heat Input: 20.94 MMBtu/hr  |
| <b>EU7</b> – Scrap paper collection system/cyclone | pre-1996, exact installation date unknown<br>Collects trimmed paper scraps and dust from corrugator and converting lines (FFG, RDC) for recycling.<br>Max. Flowrate: 69,000 ACFM<br>Operating flowrate: 58,000 ACFM |
| <b>EU8</b> – Starch Silo                           | Installed 12/14/98 (NOC #98NOC093)<br>Stores and delivers starch for starch-based adhesive for corrugator   |
| <b>Insignificant Emission Units (IEUs)</b>         |   |
| <b>IEU1</b> – Space Heaters                        | Units exempt from NSR based on size<br>Natural gas-fired space heaters with combined heat input rating of 0.9 MMBtu/hr  |
| <b>IEU2</b> – Parts Washer                         |   |
| <b>IEU3</b> - Wastewater Pretreatment              | Beckart closed loop system treats water from cleaning of finishing machines.  |

<sup>1</sup>Note: The corrugator is the bottleneck at the facility. In the future, replacement or modification of the corrugating line to increase its capacity will trigger New Source Review and will debottleneck any downstream emission units (such as the finishing lines). Emission increases from any debottlenecked units will also need to be addressed in that permitting action.

-Other than EU6, Emissions Units at GP are covered under their own permits and are included here for informational purposes/reference only.

[Regulatory Basis: ORCAA 6.1(a); ORCAA 6.1.2(l); WAC 173-400-110(2); WAC 173-400-111(10)]

3. **Boiler Requirements:** The following limits and requirements apply to the boiler (EU6):
  - a) **Stack Height:** The exhaust stack must have a vertical discharge to the atmosphere at least 40 feet above grade. Flow obstructions at the point of discharge from the stack (i.e., caps) are prohibited. However, a weatherproof stack exhaust configuration that does not obstruct the air flow as it exits the stack is acceptable.
  - b) **Approved Fuels:** The boiler is approved to burn natural gas only unless prior approval is granted by ORCAA.
  - c) **Opacity Limit:** Visible emissions from the boiler must not exceed five percent opacity, six-minute rolling average, as determined in accordance with EPA 40 CFR Part 60 Appendix A, Method 9. This limit does not apply during periods of cold start-up. For the purpose of compliance with this condition, cold start-up is defined as the period of time beginning when the boiler is started and ending when the boiler reaches normal operating temperature. This opacity limit is in addition to the state-wide general opacity standard of 20% required under WAC 173-400-040(1) and ORCAA Rule 8.2.
  - d) **NOx Limit:** Emissions of oxides of nitrogen (NOx) from the boiler must not exceed 12 ppmvd @ 3% O<sub>2</sub> on a one-hour average basis, except during startup and shutdown.
  - e) **CO Limit:** Emissions of carbon monoxide (CO) from each boiler must not exceed 25 ppmvd @ 3% O<sub>2</sub> on a one-hour average basis, except during startup and shutdown.

- f) **Boiler Tuning:** The boiler must be tuned at least once every five (5) years as follows:
- i) Tuning will include measuring concentrations of NO<sub>x</sub>, CO and O<sub>2</sub> from each boiler under normal loading using an electrochemical cell combustion analyzer, analyzer used for reference method testing, or other analyzer pre-approved by ORCAA;
  - ii) The analyzer(s) response to span gas of a known concentration must be determined before and after testing.
  - iii) No more than 12 hours may elapse between span gas response checks.
  - iv) The results of the analyzer response check will not be valid if the pre and post response check results vary by more than 10% of the span gas value.
  - v) The CO and NO<sub>x</sub> span gas concentrations must be no less than 50% and no more than 200% of the emission concentration corresponding to the Manufacturer's recommended operating range for the boiler.
  - vi) A lower concentration span gas may be used if it is more representative of measured concentrations.
  - vii) Ambient air may be used to zero the CO and NO<sub>x</sub> cells/analyzer(s) and span the oxygen cell/analyzer.
  - viii) Corrective actions must be initiated promptly if results from tuning show O<sub>2</sub>, NO<sub>x</sub> or CO concentrations to be out-of-range, and then rechecked to confirm the boiler is operating properly.

[Regulatory Basis: ORCAA Rule 6.1.4(a)(2); WAC 173-400-113(2); WAC 173-460-040(3)]

4. **Boiler Operations and Maintenance Plan** – GP must:

- a) Follow the recommended operation and maintenance procedures supplied by the manufacturer of the boiler; and,
- b) Keep a copy of the recommended operation and maintenance procedures supplied by the manufacturer of the boiler.

[Regulatory Basis: ORCAA Rule 6.1.4(a)(2); ORCAA Rule 4.3(g)]

5. **Boiler Testing:** When required by ORCAA, GP must conduct testing of the boiler to verify compliance with emission limits as follows:

- a) All testing will be in accordance with federal reference methods 1, 2, 3, 4, 5, 7e, 9 and 10 found of 40 CFR Part 60, appendix A. Equivalent methods may be used if approved by ORCAA in advance.
- b) GP must submit to ORCAA for approval, a Test Plan specifying test methods, equipment and procedures proposed to be used during stack testing. The Test Plan must be submitted at least 30 days prior to any stack testing used for compliance demonstration purposes.
- c) GP must submit to ORCAA results from any stack testing within 45 days from conducting the test unless prior approval is granted by ORCAA.

[Regulatory Basis: ORCAA 1.5(i)]

6. **Monitoring:** The owner or operator must monitor performance of emissions units as follows:

- a) On a monthly basis, using fuel bills or meter readings, monitor and record the quantity of natural gas delivered to the property.

[Regulatory Basis: ORCAA 6.1.4(a)(2); 40 CFR part 52.2470(c), Table 6; 40 CFR part 60.48c(g)(3)]

7. **Required Records:** The owner or operator must keep the following records and maintain them for at least five years after the record is created:
- a) Record of boiler startups, shutdowns and malfunctions including the date, time and duration of each;
  - b) Record of corrective actions to maintain the boiler including the date, time, and description of each corrective action.
  - c) Results of any boiler stack testing.
  - d) The monthly amount of natural gas combusted by the boiler.
  - e) Copy of the recommended operation and maintenance procedures supplied by the boiler manufacturer.

[Regulatory Basis: ORCAA 8.11; 40 CFR Part 60, §60.7(a); 40 CFR part 52.2470(c), Table 6]

8. **Notifications:** The owner or operator must notify ORCAA and Region 10 of the Environmental Protection Agency the following information:
- a) A notification of the date construction of the boiler is commenced postmarked no later than 30 days after such date;
  - b) A notification of the actual date of initial startup of the boilers postmarked within 15 days after such date.

[Regulatory Basis: 40 CFR Part 60, §60.7(a); ORCAA 1.5(i); ORCAA 8.11]

9. **Existing Boiler Availability.**

- a) The owner or operator is approved to operate the existing Babcock & Wilcox 16.5 MMBtu/hr boiler until such time as the Cleaver-Brooks 20.94 MMBtu/hr boiler (EU6) begins providing useful steam and/or energy to the facility (begins operating).
- b) Once EU6 begins operating, the Babcock & Wilcox 16.5 MMBtu/hr boiler must be removed from the facility or otherwise made inoperable while at the facility.

[Regulatory Basis: ORCAA 6.1.4(a)(5); WAC 173-460-080(3)]

*Aaron Manley*

10/31/2023

PREPARED BY: Aaron Manley, Engineer II

Date

*Mark V. Goodin*

10/31/2023

REVIEWED BY: Mark V. Goodin, PE

Date





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Serving Clallam,  
Grays Harbor, Jefferson,  
Mason, Pacific, and  
Thurston counties.

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# NEW SOURCE FINAL DETERMINATION to APPROVE:

## Replacement of a Natural Gas- Fired Boiler

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### Georgia-Pacific Corrugated LLC – Olympia Container

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23NOC1605

October 12, 2023

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NOTICE OF CONSTRUCTION  
FINAL DETERMINATION TO APPROVE

Olympic Region Clean Air Agency

|                |  |         |               |
|----------------|--|---------|---------------|
| Issued to:     | Georgia-Pacific Corrugated LLC – Olympia Container | County: | Thurston (67) |
| Location:      | 1203 Fones Road SE<br>Olympia, WA 98501            | Source: | 17<br>RC: RC1 |
| Application #: | 23NOC1605  | File:   | 295           |
| Prepared on:   | October 12, 2023                                   |         |               |

## 1. Summary

Georgia-Pacific Corrugated LLC – Olympia Container (GP) seeks approval from Olympic Region Clean Air Agency (ORCAA) to replace the existing 16.5 MMBtu/hr natural gas-fired boiler with a new 20.94 MMBtu/hr natural gas-fired boiler at 1203 Fones Road SE, Olympia, Washington. Replacement of a boiler is considered replacement of a stationary source and requires ORCAA’s approval under ORCAA Rule 6. ORCAA staff reviewed GP’s proposal and concluded it may be conditionally approved. Recommended conditions of approval are detailed in Section 16 of this Final Determination report.

## 2. Regulatory Background

Pursuant to the Washington Clean Air Act under chapter 70A.15 of the Revised Code of Washington, ORCAA’s Rule 6.1 and the Washington State Implementation Plan under 40 CFR part 52.2470(c), Table 6<sup>1</sup> require New Source Review (NSR) for new stationary sources of air pollution (referred to as new sources) in ORCAA’s jurisdiction. NSR is also required prior to installing, replacing, or substantially altering any air pollution control technology. NSR generally refers to the process of evaluating air quality impacts and the likelihood of compliance with applicable air regulations and standards. NSR and approval of an air permit by ORCAA is required prior to commencing construction or modification of any new source or prior to installing, replacing, or substantially altering air pollution control technology. The goal of NSR is to assure compliance with applicable air regulations and standards, including equipment performance standards and ambient air quality standards.

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<sup>1</sup> A State Implementation Plan (SIP) is a collection of regulations and documents used by a state, territory, or local air district to implement, maintain, and enforce the National Ambient Air Quality Standards, or NAAQS, and to fulfill other requirements of the federal Clean Air Act. The Clean Air Act requires the EPA to review and approve all SIPs. ORCAA’s SIP was last approved by EPA in 1995.

NSR is initiated by a project proponent submitting an air permit application referred to as Notice of Construction (NOC) application<sup>2</sup>, which provides ORCAA information on the proposed project of sufficient detail to characterize air impacts. NOC applications are posted on ORCAA's website and may undergo a public notice and comment period if requested by the public or if emissions increases trigger an automatic public notice. Approval of a NOC in an attainment or unclassifiable area<sup>3</sup> is contingent on verifying a proposed project meets the following criteria from ORCAA's Rule 6.1 and the Washington State Implementation Plan under 40 CFR part 52.2470(c), Table 6:

1. **Performance Standards** - The new stationary source will likely comply with applicable air-performance standards such as federal new source performance standards (NSPS), national emission standards for hazardous air pollutants (NESHAPs), or any performance standards adopted under chapter 70A.15 RCW;
2. **BACT** - The new stationary source will employ "Best Available Control Technology" (BACT) to control all air pollutants emitted;
3. **RACT** – Replaced or substantially altered air pollution control technology meets the standard of "Reasonably Available Control Technology" (RACT) as defined in ORCAA Rule 1.4;
4. **Ambient Air Quality** – Emissions from the new stationary source will not cause or contribute to a violation of any ambient air quality standard;
5. **Federal Air Permitting Requirements** - The new stationary source secures all applicable federal air permits that may apply; and,
6. **Air Toxics** - If there are increases in toxic air pollutant (TAP) emissions, the requirements of Washington's Controls for New Sources of Toxic Air Pollutants under Chapter 173-460 WAC are met.

In this case, GP is proposing to replace the existing 16.5 MMBtu/hr natural gas-fired boiler with a new 20.94 MMBtu/hr natural gas-fired boiler at their corrugated container manufacturing facility located in Olympia, Washington. Replacement of a boiler is considered replacement of a stationary source and requires ORCAA's approval under ORCAA Rule 6. Additionally, potential to emit will increase as a result of this project due to the new boiler's larger design capacity.

### 3. Facility Background

Georgia Pacific has operated a corrugated container manufacturing facility at this location since 1961, which predates the Washington State Clean Air Act.

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<sup>2</sup> There are two categories of NOC applications: Notice of Construction (NOC) and Notice of Construction Revision (NOR). NOCs are required for new or modified sources, new control technology, replacing an existing stationary source or control technology, and substantially altering control technology. NORs are required when an owner or operator requests a revision to an existing air permit issued by ORCAA.

<sup>3</sup> Unclassified area or "attainment area" means an area that has not otherwise been designated by EPA as nonattainment with ambient air quality standards for a particular regulated pollutant. Attainment area means any geographic area in which levels of a given criteria air pollutant (e.g., ozone, carbon monoxide, PM10, PM2.5, and nitrogen dioxide) meet the health-based National Ambient Air Quality Standards (NAAQS) for that pollutant. An area may be an attainment area for one pollutant and a nonattainment area for others.

In 1996, Georgia Pacific submitted an application to install a baghouse on the existing paper waste collection system and applied for a voluntary limit on potential emissions to below major source thresholds (Synthetic Minor Limit). ORCAA issued the Order of Approval for the baghouse on August 29, 1996, and a separate Regulatory Order for their Synthetic Minor Limit was issued on August 19, 1996. The baghouse was approved to either vent back inside the building or to ambient air.

In 1998, ORCAA issued Georgia Pacific an Order of Approval (NOC# 98NOC093) to construct a baghouse to control dust from a corn starch silo.

In 2001, Georgia Pacific proposed to replace an existing 35" FFG machine with a new 50" FFG machine. ORCAA conditionally approved this NOC on August 2, 2001. The order was superseded by NOC# 12NOC907.

In 2012, Georgia Pacific proposed to replace FFG #134, 50" Koppers with a new Martin 924 NT FFG. ORCAA conditionally approved this NOC on September 4, 2012. This order was superseded by NOC# 19NOC1359.

In 2019, Georgia Pacific proposed changes to the finishing operations: install a new 38" Bobst flexo-folder-gluer (FFG) (FFG 8.20 EXPERTLINE) which includes a sheet stock feeder, flexographic printer, die cutter, slitter/scorer, folder/gluer, and counter/ejector. Additionally, as part of this project, GP decommissioned and removed one existing FFG (#130) and one existing RDC (RDC# 122).

**Table 1. Permitting History with ORCAA**

| Permit # (date)  | Description  | Status                  |
|--|--|-------------------------|
| <b>96NOC023<br/>(8/29/1996)</b>                                | Install a baghouse on the existing paper waste collection system and applied for a voluntary limit on potential emissions to below major source thresholds | Active                  |
| <b>1996 Regulatory Order under WAC 173-400-091 (8/19/1996)</b> | Regulatory Order for Synthetic Minor Limit   | Active                  |
| <b>98NOC039<br/>(1998)</b>                                     | Construct a baghouse to control dust from a corn starch silo   | Active                  |
| <b>01NOC160<br/>(2001)</b>                                     | Replace an existing 35" FFG machine with a new 50" FFG machine   | Superseded by 12NOC907  |
| <b>12NOC907<br/>(2012)</b>                                     | Replace FFG #134, 50" Koppers with a new Martin 924 NT FFG   | Superseded by 19NOC1359 |
| <b>19NOC1359<br/>(2020)</b>                                    | Multiple changes to the finishing operations.  | Active                  |

## 4. Facility Description

The following is an excerpt from the NOC application discussing the facility's processes:

Olympia Container utilizes rolls of liner and medium paperboard to manufacture custom corrugated packaging. The medium is corrugated for strength and then glued onto the liner paper to form corrugated sheets. These corrugated sheets are subsequently processed through a combination of flexographic printing, cutting, slitting/scoring, trimming, folding, and gluing operations (collectively referred to as “finishing operations”) to form the final corrugated containers that are then sold to customers. The Facility has the capability to operate 24 hours per day, seven days per week, and 52 weeks per year. One 16 MMBtu/hr, natural gas-fired existing boiler, generates steam for process heat.

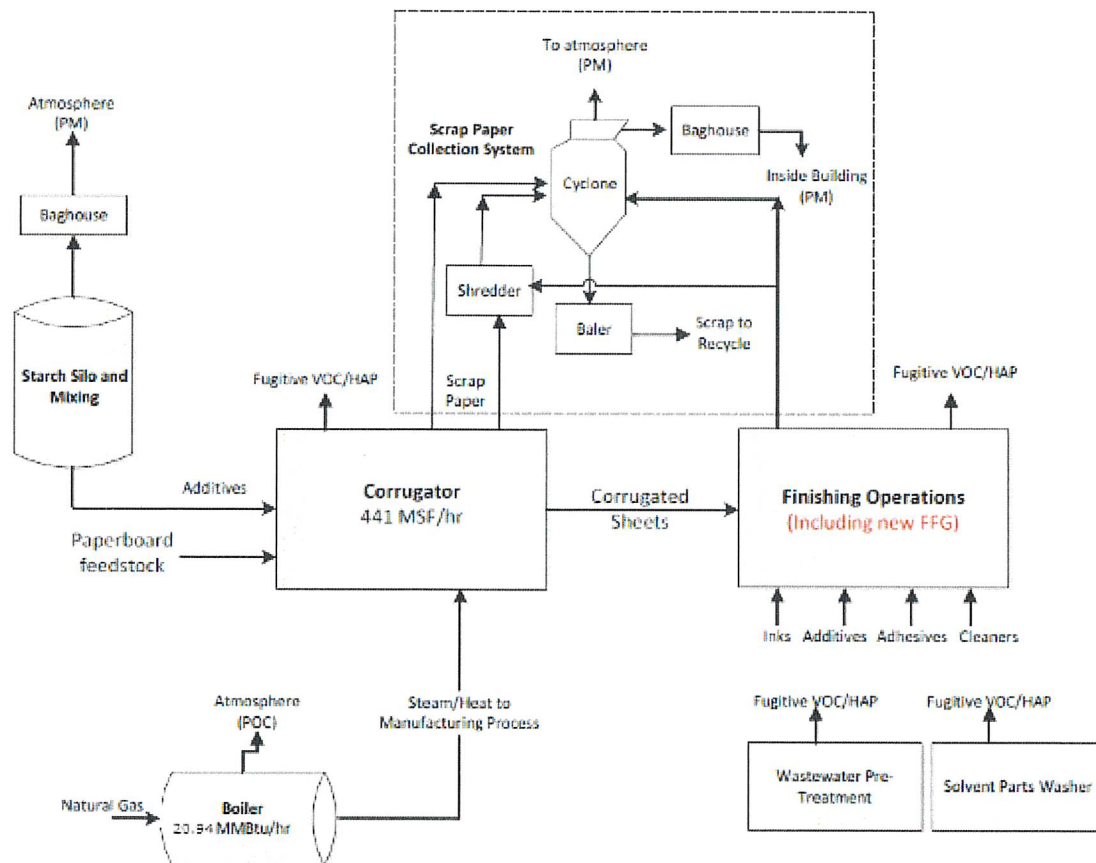
**Table 2: Existing Emission Units at Georgia Pacific**

| Emission Unit                       | Description  | Control Measures  |
|-------------------------------------|--|---|
| EU1 – Corrugating Line              | Width: 98”<br>Max 441 MSF/hr<br>Max. 3,863,160 MSF/yr <sup>1</sup><br>Installation: 1989 (estimate)  | -Pollution prevention practices such as use of low-VOC glues<br>-Scrap paper collection system to baghouse  |
| EU2 – Ward 50” FFG (Flexo-135)      | Line includes:<br>-Flexographic press<br>-Slitter/scorer<br>-Folder/Gluer<br>Max 139.553 MSF/hr <sup>1</sup>   |   |
| EU3 – Martin 48” 924 NT FFG         | Line includes:<br>-Flexographic press<br>-Slitter/scorer<br>-Folder/Gluer<br>Max 20,000 box/hr <sup>1</sup><br>Max 264 MSF/hr <sup>1</sup>   | -Scrap paper collection system to baghouse  |
| EU4 – Bobst 38” FFG 8.20 EXPERTLINE | Line includes:<br>-Flexographic printer<br>-Die cutter<br>-Slitter/scorer<br>-Folder/Gluer<br>Max 24,000 box/hr<br>Max 467.61 MSF/hr <sup>1</sup><br>Max 4,096,000 MSF/yr <sup>1</sup> | -Pollution prevention practices such as use of water-based coatings (including inks, additives, cleaners, and adhesives) containing low VOCs and minimal toxic air pollutants |
| EU5 – Sun/Ward 66” (Die Cutter-123) | Installed 1999, NOC not required<br>Line includes:<br>-Rotary die cutter<br>-Flexographic printer – 3 colors<br>-Folder<br>Max 79.508 MSF/hr <sup>1</sup><br>Max 696,000 MSF/yr        |   |
| EU6 – Babcock & Wilcox Boiler       | TO BE REPLACED<br>Produces steam for process heat<br>Model: FM786<br>Max Heat Input: 16.5 MMBtu/hr   | Natural gas only.<br>Stack: Vertical, 35’ height, 3’ diameter.  |

|  |   |   |
|--|---|---|
|  | Stack temp: 425 F   |   |
| <b>EU7 – Scrap paper collection system/cyclone</b> | pre-1996, exact installation date unknown<br>Collects trimmed paper scraps and dust from corrugator and converting lines (FFG, RDC) for recycling.<br>Max. Flowrate: 69,000 ACFM<br>Operating flowrate: 58,000 ACFM | Baghouse<br>MacDonald Model ST-18-306-144 (Serial No. M18-306-168-SN)<br>Installed 10/21/96 (NOC# 96NOC023; Regulatory Order issued 8/19/96)<br>Maximum airflow 69,000 acfm<br>Operating airflow 58,000 acfm<br>Air to cloth ratio 7:1<br>306 separate bags<br>Pressure drop 7 to 13 in. H <sub>2</sub> O<br>Baghouse exhausts either into the building (during winter) or to ambient air (during summer) |
| <b>EU8 – Starch Silo</b>                           | Installed 12/14/98 (NOC #98NOC093)<br>Stores and delivers starch for starch-based adhesive for corrugator   | Baghouse<br>AME Model FT14-SV<br>Installed 12/14/98 (NOC# 98NOC093)<br>Maximum airflow 600 acfm<br>Air to cloth ratio 3:1<br>Motorized shaker system  |
| <b>Insignificant Emission Units (IEUs)</b>         |   |   |
| <b>IEU1 – Space Heaters</b>                        | Units exempt from NSR based on size<br>Natural gas-fired space heaters with combined heat input rating of 0.9 MMBtu/hr  | N/A   |
| <b>IEU2 – Parts Washer</b>                         |   | N/A   |
| <b>IEU3 - Wastewater Pretreatment</b>              | Installed circa 2001<br>Beckart closed loop system treats water from cleaning of finishing machines. Treated water sent to LOTT.  | N/A   |

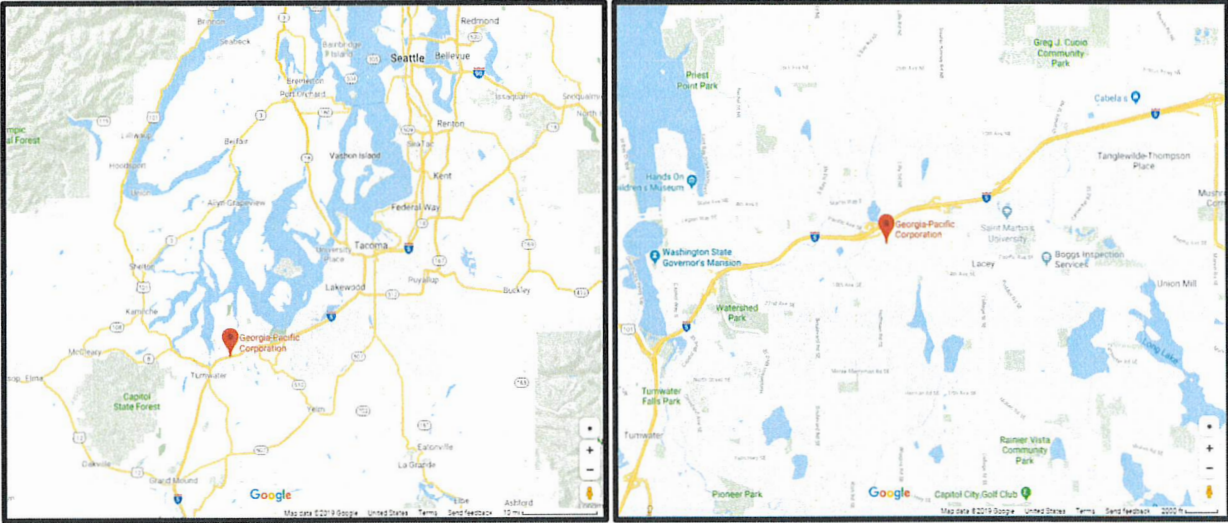
<sup>1</sup>Note: The corrugator is the bottleneck at the facility. In the future, replacement or modification of the corrugating line to increase its capacity will trigger New Source Review and will debottleneck any downstream emission units (such as the finishing lines). Emission increases from any debottlenecked units will also need to be addressed in that permitting action.

**Figure 1. Process Flow Diagram of the Georgia Pacific – Olympia Containerboard Plant in Olympia, WA**  
 [From #19NOC1359 application addendum, 11/21/19]



-Amended by ORCAA staff to update boiler design heat input rating

**Figures 2 and 3: Location of Georgia Pacific – Olympia Containerboard Plant in Olympia, WA**  
 [Maps from maps.google.com at two different scales]



**Figure 4: Site Map of the Georgia Pacific – Olympia Containerboard Plant in Olympia, WA**  
 [Map from NOC# 23NOC1605 Application, p. 6-6]



GP reports actual emissions for each calendar year as part of ORCAA’s emission inventory (EI) program. Below is a summary of facility-wide emissions reported for the 2022 Emission

Inventory. It is worth noting that ORCAA does not request GP to submit HAP and TAP emissions from the boiler for purposes of the EI.

**Table 3. Actual Emissions for Calendar Year 2022 (facility-wide)**

| Pollutant   | Classification<br>(Criteria <sup>a</sup> /HAP <sup>b</sup> /TAP <sup>c</sup> ) | Annual Emissions | Units |
|---|--|------------------|-------|
| PM (Total Particulate)  | Contains Criteria  | 31.4             | TPY   |
| PM <sub>10</sub> (Total Particulate) (<= 10 µm)               | Criteria   | 22.7             | TPY   |
| PM <sub>2.5</sub> (Fine Particulate (<=2.5 µm))               | Criteria   | 4.4              | TPY   |
| Ground Level Ozone (O <sub>3</sub> )                          | Not Evaluated  |                  |       |
| VOC <sup>d</sup> (Volatile Organic Compounds as VOC and WPP1) | Criteria (Precursor to ozone)  | 3.5              | TPY   |
| SO <sub>2</sub> (Sulfur Dioxide)                              | Criteria   | 0.01             | TPY   |
| NO <sub>x</sub> (Nitrogen Oxides)                             | Contains Criteria  | 2.14             | TPY   |
| CO (Carbon Monoxide)  | Criteria and TAP   | 1.80             | TPY   |
| Lead  | Not Evaluated  |                  |       |
| Hazardous Air Pollutants (total HAP)                          | HAP  | 1.8              | TPY   |
| Acetaldehyde (CAS# 75-07-0)                                   | TAP and HAP  | 178.1            | Lbs   |
| Acrolein (CAS# 107-02-8)                                      | TAP and HAP  | 6.0              | Lbs   |
| Acrylic Acid (CAS# 79-10-7)                                   | TAP and HAP  | 26.8             | Lbs   |
| Diethylene glycol monoethyl ether (CAS# 111-90-0)             | TAP and HAP  | 91.6             | Lbs   |
| Formaldehyde (CAS# 50-00-0)                                   | TAP and HAP  | 95.3             | Lbs   |
| Isopropyl alcohol (CAS# 67-63-0)                              | TAP  | 189              | Lbs   |
| Methanol (CAS# 67-56-1)                                       | TAP and HAP  | 3161.9           | Lbs   |
| Propionaldehyde (CAS# 123-38-6)                               | TAP and HAP  | 1.4              | Lbs   |
| Propylene glycol (CAS# 57-55-6)                               | TAP  | 253              | Lbs   |
| Styrene (CAS# 100-42-5)                                       | TAP and HAP  | 7.9              | Lbs   |

<sup>a</sup> EPA has established national ambient air quality standards (NAAQS) for six of the most common air pollutants— carbon monoxide, lead, ground-level ozone, particulate matter, nitrogen dioxide, and sulfur dioxide—known as “criteria” air pollutants (or simply “criteria pollutants”).

<sup>b</sup> HAP means Hazardous Air Pollutant. Hazardous Air Pollutants are those known to cause cancer and other serious health impacts and are regulated under the federal Clean Air Act.

<sup>c</sup> TAP means any toxic air pollutant regulated in Washington and listed in WAC 173-460-150.

<sup>d</sup> VOC is regulated as a Criteria Air Pollutant because it is a precursor to Ground Level Ozone (O<sub>3</sub>)

## 5. Project Description

GP proposes to replace the existing 16.5 MMBtu/hr natural gas-fired boiler with a new 20.94 MMBtu/hr natural gas-fired boiler.



**Table 4: New Boiler**

| Emission Unit       | Description  |
|---------------------|--|
| <b>EU6 - Boiler</b> | Firtube Steam Boiler<br>Produces steam for process heat<br>Fuel: Natural Gas Only<br>Manf: Cleaver-Brooks<br>Model: CBEX-2W-700-500-250ST<br>Max Heat Input: 20.94 MMBtu/hr<br><br>Stack temp: 425 F<br>Stack height: 40 ft<br>Stack diameter: 2.5 ft<br>Stack flowrate: 6677 acfm |

## 6. Emission Increases

PTE is expected to increase slightly due to the larger design capacity of the proposed boiler. For simplicity, the table below represents maximum potential to emit of the new boiler. Project Emissions are discussed in more detail in Section 13 (TAP).

GP submitted PTE information for the new boiler. More details are included in Appendix B of the Application for NOC # 23NOC1605. PTE was evaluated assuming 8,760 hrs/yr of operation. ORCAA staff reviewed and agrees with GP's emissions calculations.

**Table 5. PTE of the Replacement 20.94 MMBtu/hr Boiler**

| Pollutant  | Classification<br>(Criteria <sup>a</sup> /HAP <sup>b</sup> /TAP <sup>c</sup> ) | Emission<br>Rate<br>(lb/hr)     | Emission<br>Rate<br>(lb/day) | Emission<br>Rate<br>(tons/yr) |
|--|--|---------------------------------|------------------------------|-------------------------------|
| PM (Total Particulate)                               | Contains Criteria  | 0.16                            | 3.72                         | 0.68                          |
| PM <sub>10</sub> (Total Particulate) (<= 10 µm)      | Criteria   | 0.16                            | 3.72                         | 0.68                          |
| PM <sub>2.5</sub> (Fine Particulate (<=2.5 µm))      | Criteria   | 0.16                            | 3.72                         | 0.68                          |
| Ground Level Ozone (O <sub>3</sub> )                 | Criteria   | Not evaluated for this proposal |                              |                               |
| VOC <sup>d</sup> (Volatile Organic Compounds as VOC) | Criteria (Precursor to ozone)  | 0.11                            | 2.69                         | 0.49                          |
| SO <sub>2</sub> (Sulfur Dioxide)                     | Criteria   | 1.22E-02                        | 0.294                        | 5.36E-02                      |
| NO <sub>x</sub> (Nitrogen Oxides)                    | Contains Criteria  | 0.31                            | 7.33                         | 1.34                          |
| CO (Carbon Monoxide)                                 | Criteria and TAP   | 0.39                            | 9.29                         | 1.70                          |
| Lead   | Criteria, TAP, and HAP   | 1.02E-05                        | 0.000245                     | 4.47E-05                      |
| Hazardous Air Pollutants (total HAP)                 | HAP  | 3.85E-02                        | 9.25E-01                     | 0.169                         |
| Toxic Air Pollutants (total TAP)                     | TAP  | 3.85E-02                        | 9.25E-01                     | 0.169                         |
| Benzene  | HAP and TAP  | 4.29E-05                        | 1.03E-03                     | 1.88E-04                      |

|                                |             |          |          |          |
|--------------------------------|-------------|----------|----------|----------|
| Dichlorobenzene                | HAP and TAP | 2.45E-05 | 5.88E-04 | 1.07E-04 |
| Formaldehyde                   | HAP and TAP | 1.53E-03 | 3.67E-02 | 6.71E-03 |
| n-Hexane                       | HAP and TAP | 3.67E-02 | 8.82E-01 | 0.16     |
| Naphthalene                    | HAP and TAP | 1.25E-05 | 2.99E-04 | 5.45E-05 |
| Toluene                        | HAP and TAP | 6.94E-05 | 1.67E-03 | 3.04E-04 |
| Arsenic                        | HAP and TAP | 4.08E-06 | 9.80E-05 | 1.79E-05 |
| Beryllium                      | HAP and TAP | 2.45E-07 | 5.88E-06 | 1.07E-06 |
| Cadmium                        | HAP and TAP | 2.25E-05 | 5.39E-04 | 9.83E-05 |
| Chromium (III)                 | HAP and TAP | 2.74E-05 | 6.58E-04 | 1.20E-04 |
| Chromium (VI)                  | HAP and TAP | 1.14E-06 | 2.74E-05 | 5.01E-06 |
| Cobalt                         | HAP and TAP | 1.71E-06 | 4.12E-05 | 7.51E-06 |
| Lead                           | HAP and TAP | 1.02E-05 | 2.45E-04 | 4.47E-05 |
| Manganese                      | HAP and TAP | 7.76E-06 | 1.86E-04 | 3.40E-05 |
| Mercury                        | HAP and TAP | 5.31E-06 | 1.27E-04 | 2.32E-05 |
| Nickel                         | HAP and TAP | 4.29E-05 | 1.03E-03 | 1.88E-04 |
| Selenium                       | HAP and TAP | 4.90E-07 | 1.18E-05 | 2.15E-06 |
| Acenaphthene                   | HAP         | 3.67E-08 | 8.82E-07 | 1.61E-07 |
| Acenaphthylene                 | HAP         | 3.67E-08 | 8.82E-07 | 1.61E-07 |
| Anthracene                     | HAP         | 4.90E-08 | 1.18E-06 | 2.15E-07 |
| Benz(a)anthracene              | HAP and TAP | 3.67E-08 | 8.82E-07 | 1.61E-07 |
| Benzo(a)pyrene                 | HAP and TAP | 2.45E-08 | 5.88E-07 | 1.07E-07 |
| Benzo(b)fluoranthene           | HAP and TAP | 3.67E-08 | 8.82E-07 | 1.61E-07 |
| Benzo(g,h,i)perylene           | HAP         | 2.45E-08 | 5.88E-07 | 1.07E-07 |
| Benzo(k)fluoranthene           | HAP and TAP | 3.67E-08 | 8.82E-07 | 1.61E-07 |
| Chrysene                       | HAP and TAP | 3.67E-08 | 8.82E-07 | 1.61E-07 |
| Dibenz(a,h)anthracene          | HAP and TAP | 2.45E-08 | 5.88E-07 | 1.07E-07 |
| 7,12-Dimethylbenz(a)anthracene | HAP and TAP | 3.27E-07 | 7.84E-06 | 1.43E-06 |
| Fluoranthene                   | HAP         | 6.12E-08 | 1.47E-06 | 2.68E-07 |
| Fluorene                       | HAP         | 5.72E-08 | 1.37E-06 | 2.50E-07 |
| Indeno(1,2,3-c,d)pyrene        | HAP and TAP | 3.67E-08 | 8.82E-07 | 1.61E-07 |
| 2-Methylnaphthalene            | HAP         | 4.90E-07 | 1.18E-05 | 2.15E-06 |
| 3-Methylchloranthrene          | HAP and TAP | 3.67E-08 | 8.82E-07 | 1.61E-07 |
| Phenanthrene                   | HAP         | 3.47E-07 | 8.33E-06 | 1.52E-06 |
| Pyrene                         | HAP         | 1.02E-07 | 2.45E-06 | 4.47E-07 |

<sup>a</sup> EPA has established national ambient air quality standards (NAAQS) for six of the most common air pollutants— carbon monoxide, lead, ground-level ozone, particulate matter, nitrogen dioxide, and sulfur dioxide—known as “criteria” air pollutants (or simply “criteria pollutants”).

<sup>b</sup> HAP means Hazardous Air Pollutant. Hazardous Air Pollutants are those known to cause cancer and other serious health impacts and are regulated under the federal Clean Air Act.

<sup>c</sup> TAP means any toxic air pollutant regulated in Washington and listed in WAC 173-460-150.

<sup>d</sup> VOC is regulated as a Criteria Air Pollutant because it is a precursor to Ground Level Ozone (O<sub>3</sub>)

## 7. Administrative Requirements for NOC Applications

NOC applications are subject to filing fees according to ORCAA Rule 3.3(b) and may incur additional NOC processing fees at an hourly rate according to ORCAA Rule 3.3(c). Applicable NOC filing fees for GP's NOC application were paid prior to ORCAA commencing processing of the application. Additional NOC processing fees may apply and will be determined and assessed prior to issuing a Final Determination and the Approval Order (a.k.a.: Air Permit).

NOC applications are subject to a 15-day public notice and an opportunity to request a 30-day public comment period and opportunity for a public hearing. Public notice of GP's NOC application was posted on ORCAA's website on July 25, 2023. The time period for filing comments on the application and requests for a public comment period expired on August 9th, 2023. No comments on the NOC application or requests for a public comment period or hearing were received during the NOC application noticing period. Based on this result, neither a public comment period nor public hearing were initiated.

## 8. SEPA Review

The State Environmental Policy Act (SEPA) under Chapter 197-11 WAC is intended to provide information to agencies, applicants, and the public to encourage the development of environmentally sound proposals. The goal of SEPA is to assure that significant impacts are mitigated.

This NOC qualifies for the SEPA categorical exemption offered under WAC 197-11-800(3) because it does not involve any material expansions, physical modifications, changes in use, or additions to the existing facility beyond those previously existing.

## 9. Criteria for Approval

ORCAA's Rule 6.1 and the Washington State Implementation Plan under 40 CFR part 52.2470(c), Table 6, establish the following general criteria for approving new stationary sources and modifications to existing stationary sources of air pollution in ORCAA's region:

- **Performance Standards** - Any new stationary source or modification will likely comply with applicable air-performance standards such as the federal new source performance standards (NSPS), national emission standards for hazardous air pollutants (NESHAPs), and any performance standards adopted under chapter 70A.15 RCW;
- **BACT** - The new or modified stationary source is controlled to a level that meets the standard of "Best Available Control Technology" (BACT);
- **Ambient Air Quality** – Any increase in air emissions will not cause or contribute to violation of any ambient air quality standard;

- **Federal Air Permitting Requirements** – All applicable federal air permits, if required, are secured;
- **Washington Air Toxics Regulations** - If there are increases in toxic air pollutant (TAP) emissions, the requirements of Washington’s Controls for New Sources of Toxic Air Pollutants under Chapter 173-460 WAC are met; and,
- **Public Outreach** – Public notice and comment requirements in ORCAA’s regulations and the Washington State Implementation Plan under 40 CFR part 52.2470(c), Table 6 are met.

The following sections provide more detail on each criterion.

## 10. Applicable Performance Standards (Summary)

ORCAA’s Rule 6.1.4(a)(1) and the Washington State Implementation Plan under 40 CFR part 52.2470(c), Table 6, require a finding that any new or modified stationary source will likely comply with applicable state, federal and local performance standards for air emissions including emission standards adopted under chapter 70A.15 RCW, emissions standard of ORCAA, and federal emission standards including New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), and National Emission Standards for Hazardous Air Pollutants for Source Categories (MACT standards). The performance standards in Table 6 were determined applicable to the proposed 20.94 MMBtu/hr natural gas-fired boiler. The performance standards in Table 7 were determined relevant to the proposed 20.94 MMBtu/hr natural gas-fired boiler, but inapplicable. A comprehensive list of applicable performance standards that apply to all stationary sources of air pollution located at the facility, as well as general air regulations and standards that apply, are included in the Appendix.

**Table 6: Applicable Performance Standards specific to the proposed 20.94 MMBtu/hr natural gas-fired boiler**

| Title Citation   | Brief Description (Consult rule/regulation for specific requirements)   | discussion/determination  |
|--|---|---|
| Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units<br><i>40 CFR Part 60, Subpart Dc</i> | Applies to commercial, industrial and small boilers (steam generating units) that commenced construction or were modified after June 9, 1989 and have a rated heat input greater than 10 million Btu/hr (MMBtu/hr) and less than 100 MMBtu/hr. Establishes standards for SO <sub>2</sub> , PM, and opacity. | Applies, however the boiler is not subject to any emissions standards in Subpart Dc as the subpart does not have emissions standards for boilers firing natural gas. There are applicable recordkeeping and reporting requirements. |
| General Provisions<br><i>40 CFR Part 60, Subpart A</i>   | All Part 60 affected sources (unless specifically excluded by an applicable NSPS) are subject to the general provisions in Subpart A.   | Because 40 CFR Part 60, Subpart Dc applies to the boiler, certain requirements from Subpart A of 40 CFR Part 60 also apply.   |

Subpart Dc of 40 CFR Part 60 applies to boilers with heat rates between 10 MMBtu/hr and 100 MMBtu/hr heat input. Boilers firing natural gas alone are subject only to the recordkeeping requirements at §60.48c(g) and the general notification requirements under §60.7(a)(1) and (4) of 40 CFR Part 60, Subpart A. The following notifications and record keeping requirements apply:

- §60.7(a)(1) - Notification of the date construction (or reconstruction as defined under §60.15) of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.
- §60.7(a)(4) - Notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in §60.14(e).
- §60.48c(g)(3) – As an alternative to meeting the requirements of paragraph (g)(1), the owner or operator of an affected facility or facilities on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to this subpart) at that property are natural gas and the steam generating units are not subject to an emissions standard (excluding opacity) in Subpart Dc: “may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.”

**Table 7: Relevant Performance Standards Determined Inapplicable**

| Regulation Title<br>Citation  | Relevant Performance Standard<br>Determined Inapplicable  | Basis  |
|---|---|--|
| National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources<br><br><i>40 CFR Part 63, Subpart JJJJJ</i> | Applies to industrial, commercial, or institutional boilers that is located at, or is part of, and area source of hazardous air pollutants (HAP). | Since the boiler will combust only natural gas, it is not subject to Subpart JJJJJ (40 CFR § 63.11195(e)). |

## 11. Best Available Control Technology (BACT)

ORCAA Rule 6.1.4(a)(2) and the Washington State Implementation Plan under 40 CFR part 52.2470(c), Table 6, require the finding that a new source or modification to an existing source of air pollution in an attainment or unclassifiable area will employ best available control technology for all pollutants (BACT) not previously emitted or whose emissions would increase as a result of the new source or modification.

New sources of air pollution and modifications to existing sources of air pollution are required to use BACT to control all pollutants not previously emitted, or those for which emissions would increase as a result of the new source or modification. BACT is defined in WAC 173-400-030 as, *“an emission limitation based on the maximum degree of reduction for each air pollutant subject to regulation under chapter 70A.15 RCW emitted from or which results from any new or modified stationary source, which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of each pollutant.”*

As part of the permit application, GP performed a top-down BACT analysis for all new source air pollutants associated with the boiler replacement project. The analysis is available upon

request. ORCAA staff reviewed the BACT analysis and agree with the methodology and results, which are summarized below.

**Table 8: BACT Summary**

| <b>Air Contaminant</b>                             | <b>Emissions Limit</b>     | <b>Control Technology</b>                      | <b>Compliance Method</b> |
|--|----------------------------|--|--------------------------|
| NO <sub>x</sub>                                    | 12 ppm @ 3% O <sub>2</sub> | Flue Gas Recirculation                         | Vendor Guarantee         |
| CO   | 25 ppm @ 3% O <sub>2</sub> | Good Combustion Practices                      | Vendor Guarantee         |
| VOC/Organics                                       | None                       | Natural Gas Fuel and Good Combustion Practices | None                     |
| PM/PM <sub>10</sub> /<br>PM <sub>2.5</sub> /Metals | None                       | Natural Gas Fuel and Good Combustion Practices | None                     |
| SO <sub>2</sub>                                    | None                       | Natural Gas Fuel and Good Combustion Practices | None                     |

*[Excerpt, 23NOC1605 permit application]*

## 12. Ambient Impact Analysis (Criteria Pollutants)

ORCAA’s Rule 6.1.4(a)(3) and the Washington State Implementation Plan under 40 CFR part 52.2470(c), Table 6, require emissions from any new stationary source or modification not delay the attainment date of an area not in attainment, nor cause or contribute to a violation of any Ambient Air Quality Standard (AAQS). ORCAA’s current Dispersion Modeling Guidance (2009) recommends this approval criteria be demonstrated using dispersion modeling techniques when Potential to Emit (PTE) of any pollutant with an ambient standard is above ORCAA’s adopted significant emission level for the pollutant. Any pollutant with a PTE below its significant emission level can be considered insignificant with respect to maintaining the AAQs.

GP calculated PTE for criteria pollutants and compared them to ORCAA’s significant emission levels requiring modeling. All pollutants will be emitted below their respective threshold. Therefore, it can be concluded the AAQs will be maintained.

**Table 9: AAQA Demonstration**

| <b>Pollutant</b>       | <b>New Boiler PTE (tons per year)</b> | <b>Significance Thresholds Criteria Pollutants (tons per year)</b> |
|------------------------|---------------------------------------|--|
| PM (Total Particulate) | 0.68                                  | 2.5  |
| PM <sub>10</sub>       | 0.68                                  | 1.5  |
| PM <sub>25</sub>       | 0.68                                  | 1.5  |
| SO <sub>2</sub>        | 0.054                                 | 4.0  |
| NO <sub>x</sub>        | 1.34                                  | 4.0  |
| CO                     | 1.70                                  | 10.0   |
| Lead                   | 0.089 pounds/year                     | 120 pounds/year  |

*[Excerpt, 23NOC1605 permit application]*

## 13. Ambient Impact Analysis (Toxic Air Pollutants)

Washington’s regulation titled Controls for New Sources of Toxic Air Pollutants (Air Toxics Rule) under Chapter 173-460 of the Washington Administrative Code applies to new stationary sources of Toxic Air Pollutants (TAP), including modifications to existing emissions units that increase TAP. The purpose of the Air Toxics Rule is to, “... maintain such levels of air quality as will protect human health and safety.” The TAPs covered under the Air Toxics Rule include carcinogens and non-carcinogens. TAP emissions increases for determining applicability are the increases attributable to the new or modified emissions unit - Decreases from existing emissions units are not allowed to be subtracted from project-attributable TAP increases when determining applicability. Also, the Air Toxics Rule provides that review of modifications are limited to the emission unit or units proposed to be modified and the TAPs whose emissions would increase as a result of the modification.

The Air Toxics Rule has two independent requirements for new sources and modifications that increase TAP emissions above de-minimis levels:

- 1) **t-BACT:** The new or modified emission units must use Best Available Control Technology to control TAP emissions (WAC 173-460-040(3)(a)).
- 2) **Ambient Impact:** The NOC application must demonstrate that any increase in TAP from the new or modified emission units are sufficiently low to protect human health and safety from potential carcinogenic and/or other toxic effects (WAC 173-460-070).

**t-BACT**

The t-BACT requirement applies to any new or modified emission units that triggers the Air Toxics Rule (results in a TAP increase above de-minimis levels), regardless of facility-wide or “net” TAP emissions. The term t-BACT means Best Available Control Technology, as that term is defined in WAC 173-400-030, but applied to control of TAP (see BACT definition in Section 11).

As part of the permit application, GP performed a top-down BACT analysis for all new source air pollutants associated with the boiler replacement project. The analysis is available upon request. ORCAA staff reviewed the t-BACT analysis and agree with the methodology and results, which are summarized below.

**Table 10: t-BACT Analysis**

| <b>Air Contaminant</b>                         | <b>Emissions Limit</b>     | <b>Control Technology</b>                      | <b>Compliance Method</b> |
|--|----------------------------|--|--------------------------|
| NO <sub>x</sub>                                | 12 ppm @ 3% O <sub>2</sub> | Flue Gas Recirculation                         | Vendor Guarantee         |
| CO   | 25 ppm @ 3% O <sub>2</sub> | Good Combustion Practices                      | Vendor Guarantee         |
| VOC/Organics                                   | None                       | Natural Gas Fuel and Good Combustion Practices | None                     |
| PM/PM <sub>10</sub> /PM <sub>2.5</sub> /Metals | None                       | Natural Gas Fuel and Good Combustion Practices | None                     |
| SO <sub>2</sub>                                | None                       | Natural Gas Fuel and Good Combustion Practices | None                     |

*[Excerpt, 23NOC1605 permit application]*

TAP fall into the category of VOC or PM, and therefore can be concluded t-BACT for TAP will be met by the use of natural gas fuel and good combustion practices.

### **Ambient Impact Review**

The Air Toxics Rule provides a multi-tiered, screening approach under WAC 173-460-080 to assess health impacts and demonstrate compliance with the ambient impact requirement under WAC 173-460-070, which is that TAP increases must be sufficiently low to protect human health and safety from potential carcinogenic and/or other toxic effects.

The "First Tier Review" (Tier 1 Review) is a two-step process. First, the emissions increase of each TAP is compared to its unique Small Quantity Emission Rate (SQER). SQERs are listed for each TAP under WAC 173-460-150. An SQER is the level of emissions of a TAP below which dispersion modeling is not required to demonstrate compliance with the ambient impact requirement. TAP emissions increases used in this first step must be based on the maximum potential to emit considering control or reduction in emissions achievable using the air pollution control technology or methods proposed to meet the tBACT requirement. Any TAP with an increase below its SQER can be presumed to be in compliance with the ambient impact requirement. If this is the outcome, further analysis is not required for that TAP. However, TAPs with emissions increases above their SQER must undergo the second step of the Tier 1 Review.

The second step of the Tier 1 Review requires evaluating TAP impacts against Acceptable Source Impact Levels (ASIL) and is referred to as an ASIL Analysis. An ASIL is the adopted health-based concentration for a TAP below which can be presumed as meeting the ambient impact requirement of WAC 173-460-070. ASILs are provided for each TAP under WAC 173-460-150. An ASIL analysis typically involves using an ambient air dispersion model to estimate ambient concentrations resulting from TAP emissions increases and considering air dispersion and local meteorological characteristics of the source. If the modeled impact of the increase in emissions of a TAP does not exceed its corresponding ASIL, the ambient impact requirement of WAC 173-460-070 may be considered met and the First Tier Review is completed for that TAP.

Emissions rates used to support an ASIL Analysis must be based on the maximum potential to emit considering control or reduction in emissions achievable using the air pollution control technology or methods proposed to meet the tBACT requirement. In addition, the Air Toxics Rule allows TAP reductions from existing emission units not subject to review to be subtracted or "netted out" from TAP increases, provided the reductions are included in the approval order as enforceable voluntary emission limits and meet all the requirements of WAC 173-460-071.

These requirements include:

- (1) The voluntary emissions reductions must be enforceable through a regulatory order issued by the air permitting agency.
- (2) The approval order enforcing the voluntary emissions reductions must include monitoring, recordkeeping, and reporting requirements sufficient to ensure the reductions are maintained.
- (3) The agency's preliminary determination to approve the voluntary emissions reductions are subject to a 30-day public notice and comment period and opportunity for a public hearing.



For pollutants with ambient concentrations found to be greater than their ASIL, a “Second Tier Review” (Tier 2 Review) by the Washington Department of Ecology (Ecology) is required. An application for a Tier 2 Review by Ecology is referred to a Tier 2 petition. Tier 2 petitions must include a Health Impacts Assessment (HRA) and estimated ambient TAP impacts based on refined air dispersion modeling. Ecology will not act on a Tier 2 petition unless a written preliminary determination on the NOC application for the new or modified TAP source and a draft approval order have been completed by the local agency with jurisdiction. Ecology’s review and approval of a Tier 2 petition is contingent on a finding that TAP impacts meet the ambient impact requirement of WAC 173-460-070 that increases in TAP emissions are sufficiently low to protect human health and safety from potential carcinogenic and/or other toxic effects. If Ecology recommends denial of a Tier 2 petition, the permitting authority may not approve the project. The applicant then has the option of submitting a petition for a “Third Tier Review” (Tier 3 Review) by Ecology and a request for a risk management decision.

WAC 173-460-080(3) allows for the reduction of TAPs from existing emission units in a process known as “offsetting.” An applicant may include in an acceptable source impact analysis proposed reductions in actual emissions of a particular TAP from emission units at the source that are not new or modified for the purpose of offsetting emissions of that TAP caused by the new or modified source. The reductions in TAP emissions authorized by this subsection must be included in the approval order as enforceable emission limits and must meet all the requirements of WAC 173-460-071. GP will be removing the existing boiler being replaced in the current permitting action and has elected to use the allowed offsetting methodology. ORCAA will therefore conditionally require GP to remove or disable the existing boiler.

The existing boiler was a natural gas-fired boiler rated approximately 16 MMBtu/hr. GP offset the new boiler’s PTE by the average of the existing boiler’s actual annual emissions from 2021 and 2022, as determined by actual fuel use and production data during those two years. Offsetting was accomplished during the SQER review by subtracting actual average emissions from the existing boiler from the PTE of the new boiler. Offsetting was accomplished during the ASIL review by modeling both the existing boiler and new boiler and subtracting the existing boiler’s modeled ambient impacts from the new boiler’s modeled ambient impacts.

GP calculated PTE for TAP emissions associated with the boiler replacement project and compared them to their corresponding SQER. GP used the natural gas combustion emissions factors found in AP-42. Some of the emissions factors in AP-42 are listed as being emitted below the method detection limit, and GP did not include those emissions factors in their application. ORCAA staff calculated PTE for project TAP emitted whose emissions factors are based on the detection limit threshold using the same methodology and equations as those submitted by GP. The SQER analysis results are summarized below.

**Table 11: Toxics Analysis Against SQER**

| Toxic Air Pollutant | Washington Administrative Code 173-460 - tBACT Analysis |                  |                       |             |
|---------------------|---|------------------|-----------------------|-------------|
|                     | Project TAP Rates By Averaging Period (lb/avg. period)  | Averaging Period | SQER (lb/avg. period) | Above SQER? |
| Benzene             | 0.28  | year             | 21                    | --          |

|                                |          |       |          |     |
|--------------------------------|----------|-------|----------|-----|
| 1,4-Dichlorobenzene            | 0.16     | year  | 15       | --  |
| Formaldehyde                   | 10.14    | year  | 27       | --  |
| n-Hexane                       | 0.59     | 24-hr | 52       | --  |
| Naphthalene                    | 8.25E-02 | year  | 4.8      | --  |
| Toluene                        | 1.11E-03 | 24-hr | 370      | --  |
| Arsenic                        | 2.70E-02 | year  | 4.90E-02 | --  |
| Beryllium                      | 1.62E-03 | year  | 6.80E-02 | --  |
| Cadmium                        | 0.15     | year  | 3.90E-02 | YES |
| Chromium (III)                 | 4.39E-04 | 24-hr | 3.70E-01 | --  |
| Chromium (VI)                  | 7.57E-03 | year  | 6.50E-04 | YES |
| Cobalt                         | 2.74E-05 | 24-hr | 7.40E-03 | --  |
| Lead                           | 6.76E-02 | year  | 14       | --  |
| Manganese                      | 1.24E-04 | 24-hr | 2.20E-02 | --  |
| Mercury                        | 8.49E-05 | 24-hr | 2.20E-03 | --  |
| Nickel                         | 0.28     | year  | 0.62     | --  |
| Selenium                       | 7.84E-06 | 24-hr | 1.50     | --  |
| Benz(a)anthracene              | 2.43E-04 | year  | 0.89     | --  |
| Benzo(a)pyrene                 | 1.62E-04 | year  | 0.16     | --  |
| Benzo(b)fluoranthene           | 2.43E-04 | year  | 0.89     | --  |
| Benzo(k)fluoranthene           | 2.43E-04 | year  | 0.89     | --  |
| Chrysene                       | 2.43E-04 | year  | 8.90     | --  |
| Dibenz(a,h)anthracene          | 1.62E-04 | year  | 8.20E-02 | --  |
| 7,12-Dimethylbenz(a)anthracene | 2.16E-03 | year  | 1.40E-03 | YES |
| Indeno(1,2,3-c,d)pyrene        | 2.43E-04 | year  | 0.89     | --  |
| 3-Methylchloranthrene          | 2.43E-04 | year  | 1.60E-02 | --  |

[Excerpt, 23NOC1605 permit application, as amended by ORCAA staff]

All TAP except Cadmium, Chromium VI, and 7, 12-Dimethylbenz(a)anthracene were found to be below their respective SQER. GP then modeled the ambient impacts associated with the project, as summarized below.

**Table 12: Toxics Analysis Against ASIL**

| Pollutant   | Model Scenario    | Avg. Period | Modeled Maximum Annual Concentration | Maximum Year | UTM (Easting) | UTM (Northing) | ASIL                         |
|-------------|-------------------|-------------|--------------------------------------|--------------|---------------|----------------|------------------------------|
|             |                   |             | ( $\mu\text{g}/\text{m}^3$ )         |              | (m)           | (m)            | ( $\mu\text{g}/\text{m}^3$ ) |
| Cadmium     | Olympia_CADM_04_A | year        | 4.77E-05                             | 2020         | 511,595.75    | 5,209,611.42   | 2.40E-04                     |
| Chromium VI | Olympia_CHRO_04_A | year        | 2.43E-06                             | 2020         | 511,595.75    | 5,209,611.42   | 4.00E-06                     |

[Excerpt, 23NOC1605 permit application]

GP demonstrated the modeled impacts of Cadmium and Chromium VI were both found to be below their respective ASILs and can therefore be considered to have passed their respective ambient impacts analysis.

7,12-Dimethylbenz(a)anthracene is one of the TAP with an uncertain emissions factor associated with the project, as AP-42 states it is present in natural gas combustion but emitted

below the method detection limit. Considering the dubious nature of the emissions factor, experience with modeling similar projects, and the time and resources required to model the pollutant, ORCAA staff determined compliance could be demonstrated by comparing the relative impacts of 7,12-Dimethylbenz(a)anthracene to another TAP GP modeled as part of the project application.

For the comparison ORCAA staff conservatively assumed 7,12-Dimethylbenz(a)anthracene was emitted at its full method detection limit and then compared the offset PTE to that of Chromium VI, another TAP associated with the project GP modeled that also has an annual ASIL. The results are shown in Table 13 below.

**Table 13: Offset PTE and SQER Comparison for TAP of Concern**

| Pollutant                       | Offset PTE (lbs/year) | SQER (lbs/year) | Offset PTE as a Percentage of associated of SQER (%) |
|---------------------------------|-----------------------|-----------------|--|
| Chromium VI                     | 6.68E-03              | 6.50E-04        | 1,027  |
| 7,12-Dimethylbenz (a)anthracene | 1.91E-03              | 1.40E-03        | 136  |

Chromium VI is almost always the most difficult TAP with which to demonstrate compliance through an SQER or ASIL review and since it also has an annual ASIL, it is an ideal surrogate for demonstrating compliance with potential 7,12-Dimethylbenz(a)anthracene emissions. ORCAA staff determined that since Chromium VI is demonstrated to be emitted at over 1,000% its associated SQER while 7,12-Dimethylbenz(a)anthracene is only emitted at 136% of its associated SQER, if Chromium VI passes its ASIL review, 7,12-Dimethylbenz (a)anthracene will also pass its ASIL review. As shown above in Table 12 above, GP demonstrated Chromium VI passed its ASIL review and it can therefore be inferred 7,12-Dimethylbenz(a)anthracene passes as well.

ORCAA staff concluded all TAP associated with the project are demonstrated to pass their respective acceptable source impact level analysis as required under Chapter 173-460.

## 14. Requirements for Major Stationary Sources and Major Modifications to Major Stationary Sources

Projects that are major stationary sources and major modifications to major stationary sources as defined in 40 CFR 52.21(b) may be subject to permitting requirements under WAC 173-400-700 through 173-400-860.

GP is not a “Major Stationary Source” as defined in 40 CFR 52.21(b) and not subject to the permitting program required by WAC 173-400-700 through WAC 173-400-860. Therefore, these permitting requirements do not apply.

## 15. Title V Air Operating Permit (AOP) Implications

The State of Washington program pursuant to Title V of the federal Clean Air Act is governed under Chapter 173-401 WAC, the Washington Air Operating Permit Program. Chapter 173-401 WAC requires existing major stationary sources to operate in compliance with an approved Air Operating Permit (AOP). Major stationary sources are those stationary sources with a potential to emit which is greater than 100 tons per year of any criteria pollutant, greater than 10 tons per year of any hazardous air pollutants (HAP), or greater than 25 tons per year of any combination of HAP.

GP is not a “Major Source” under the Title V program and is not subject to the requirement to operate under an AOP.

**16. Conditions of Approval**

The following conditions of approval were determined necessary for assuring compliance with applicable air regulations and standards and protecting air quality. Recommended conditions of approval will become effective once the Approval Order is issued:

1. **Approved Equipment.** The 20.94 MMBtu/hr natural gas-fired boiler as described in Notice of Construction application No. 23NOC1605 and the associated Final Determination is approved for construction and operation subject to conditions in this Order of Approval. [Regulatory Basis: ORCAA 6.1(a); ORCAA 6.1.2(l); 40 CFR part 52.2470(c), Table 6]
2. **Preapproval Required.** Prior approval by ORCAA may be required for the following as specified in ORCAA Rule 6.1:
  - a. Construction, installation, or establishment of any stationary source;
  - b. Modification to any existing stationary source;
  - c. Replacement or substantial alteration of emission control technology installed on an existing stationary source; or,
  - d. Deviations from the approved plans, drawings, data, and specifications of the stationary sources listed in Table 1.

**Table 1 Stationary sources located at GP**

| Emission Unit                         | Specifications:   |
|---------------------------------------|---|
| <b>EU1 – Corrugating Line</b>         | Width: 98”<br>Max 441 MSF/hr<br>Max. 3,863,160 MSF/yr <sup>1</sup><br>Installation: 1989 (estimate)<br>Scrap paper collection system to baghouse          |
| <b>EU2 – Ward 50” FFG (Flexo-135)</b> | Line includes:<br>-Flexographic press<br>-Slitter/scorer<br>-Folder/Gluer<br>Max 139.553 MSF/hr <sup>1</sup><br>Scrap paper collection system to baghouse |

|  |   |
|--|---|
| <b>EU3 – Martin 48" 924 NT FFG</b>                 | Line includes:<br>-Flexographic press<br>-Slitter/scorer<br>-Folder/Gluer<br>Max 20,000 box/hr <sup>1</sup><br>Max 264 MSF/hr <sup>1</sup><br>Scrap paper collection system to baghouse   |
| <b>EU4 – Bobst 38" FFG 8.20 EXPERTLINE</b>         | Line includes:<br>-Flexographic printer<br>-Die cutter<br>-Slitter/scorer<br>-Folder/Gluer<br>Max 24,000 box/hr<br>Max 467.61 MSF/hr <sup>1</sup><br>Max 4,096,000 MSF/yr <sup>1</sup><br>Scrap paper collection system to baghouse       |
| <b>EU5 – Sun/Ward 66" (Die Cutter-123)</b>         | Installed 1999, NOC not required<br>Line includes:<br>-Rotary die cutter<br>-Flexographic printer – 3 colors<br>-Folder<br>Max 79.508 MSF/hr <sup>1</sup><br>Max 696,000 MSF/yr <sup>1</sup><br>Scrap paper collection system to baghouse |
| <b>EU6 - Boiler Supply Company, Inc. Boiler</b>    | Firetube Steam Boiler<br>Produces steam for process heat<br>Fuel: Natural Gas Only<br>Manf: Cleaver-Brooks<br>Model: CBEX-2W-700-500-250ST<br>Max Heat Input: 20.94 MMBtu/hr  |
| <b>EU7 – Scrap paper collection system/cyclone</b> | pre-1996, exact installation date unknown<br>Collects trimmed paper scraps and dust from corrugator and converting lines (FFG, RDC) for recycling.<br>Max. Flowrate: 69,000 ACFM<br>Operating flowrate: 58,000 ACFM                       |
| <b>EU8 – Starch Silo</b>                           | Installed 12/14/98 (NOC #98NOC093)<br>Stores and delivers starch for starch-based adhesive for corrugator   |
| <b>Insignificant Emission Units (IEUs)</b>         |   |
| <b>IEU1 – Space Heaters</b>                        | Units exempt from NSR based on size<br>Natural gas-fired space heaters with combined heat input rating of 0.9 MMBtu/hr  |
| <b>IEU2 – Parts Washer</b>                         |   |
| <b>IEU3 - Wastewater Pretreatment</b>              | Beckart closed loop system treats water from cleaning of finishing machines.  |

<sup>1</sup>Note: The corrugator is the bottleneck at the facility. In the future, replacement or modification of the corrugating line to increase its capacity will trigger New Source Review and will debottleneck any downstream emission units (such as the finishing lines). Emission increases from any debottlenecked units will also need to be addressed in that permitting action.

-Other than EU6, Emissions Units at GP are covered under their own permits and are included here for informational purposes/reference only.

[Regulatory Basis: ORCAA 6.1(a); ORCAA 6.1.2(I); WAC 173-400-110(2); WAC 173-400-111(10)]

3. **Boiler Requirements:** The following limits and requirements apply to the boiler (EU6):

- a) **Stack Height:** The exhaust stack must have a vertical discharge to the atmosphere at least 40 feet above grade. Flow obstructions at the point of discharge from the stack (i.e., caps) are prohibited. However, a weatherproof stack exhaust configuration that does not obstruct the air flow as it exits the stack is acceptable.
- b) **Approved Fuels:** The boiler is approved to burn natural gas only unless prior approval is granted by ORCAA.
- c) **Opacity Limit:** Visible emissions from the boiler must not exceed five percent opacity, six-minute rolling average, as determined in accordance with EPA 40 CFR Part 60 Appendix A, Method 9. This limit does not apply during periods of cold start-up. For the purpose of compliance with this condition, cold start-up is defined as the period of time beginning when the boiler is started and ending when the boiler reaches normal operating temperature. This opacity limit is in addition to the state-wide general opacity standard of 20% required under WAC 173-400-040(1) and ORCAA Rule 8.2.
- d) **NO<sub>x</sub> Limit:** Emissions of oxides of nitrogen (NO<sub>x</sub>) from the boiler must not exceed 12 ppmvd @ 3% O<sub>2</sub> on a one-hour average basis, except during startup and shutdown.
- e) **CO Limit:** Emissions of carbon monoxide (CO) from each boiler must not exceed 25 ppmvd @ 3% O<sub>2</sub> on a one-hour average basis, except during startup and shutdown.
- f) **Boiler Tuning:** The boiler must be tuned at least once every five (5) years as follows:
  - i) Tuning will include measuring concentrations of NO<sub>x</sub>, CO and O<sub>2</sub> from each boiler under normal loading using an electrochemical cell combustion analyzer, analyzer used for reference method testing, or other analyzer pre-approved by ORCAA;
  - ii) The analyzer(s) response to span gas of a known concentration must be determined before and after testing.
  - iii) No more than 12 hours may elapse between span gas response checks.
  - iv) The results of the analyzer response check will not be valid if the pre and post response check results vary by more than 10% of the span gas value.
  - v) The CO and NO<sub>x</sub> span gas concentrations must be no less than 50% and no more than 200% of the emission concentration corresponding to the Manufacturer's recommended operating range for the boiler.
  - vi) A lower concentration span gas may be used if it is more representative of measured concentrations.
  - vii) Ambient air may be used to zero the CO and NO<sub>x</sub> cells/analyzer(s) and span the oxygen cell/analyzer.
  - viii) Corrective actions must be initiated promptly if results from tuning show O<sub>2</sub>, NO<sub>x</sub> or CO concentrations to be out-of-range, and then rechecked to confirm the boiler is operating properly.

[Regulatory Basis: ORCAA Rule 6.1.4(a)(2); WAC 173-400-113(2); WAC 173-460-040(3)]

4. **Boiler Operations and Maintenance Plan** – GP must:

- a) Follow the recommended operation and maintenance procedures supplied by the manufacturer of the boiler; and,
- b) Keep a copy of the recommended operation and maintenance procedures supplied by the manufacturer of the boiler.

[Regulatory Basis: ORCAA Rule 6.1.4(a)(2); ORCAA Rule 4.3(g)]

5. **Boiler Testing:** When required by ORCAA, GP must conduct testing of the boiler to verify compliance with emission limits as follows:

- a) All testing will be in accordance with federal reference methods 1, 2, 3, 4, 5, 7e, 9 and 10 found of 40 CFR Part 60, appendix A. Equivalent methods may be used if approved by ORCAA in advance.
- b) GP must submit to ORCAA for approval, a Test Plan specifying test methods, equipment and procedures proposed to be used during stack testing. The Test Plan must be submitted at least 30 days prior to any stack testing used for compliance demonstration purposes.
- c) GP must submit to ORCAA results from any stack testing within 45 days from conducting the test unless prior approval is granted by ORCAA.

[Regulatory Basis: ORCAA 1.5(i)]

6. **Monitoring:** The owner or operator must monitor performance of emissions units as follows:

- a) On a monthly basis, using fuel bills or meter readings, monitor and record the quantity of natural gas delivered to the property.

[Regulatory Basis: ORCAA 6.1.4(a)(2); 40 CFR part 52.2470(c), Table 6; 40 CFR part 60.48c(g)(3)]

7. **Required Records:** The owner or operator must keep the following records and maintain them for at least five years after the record is created:

- a) Record of boiler startups, shutdowns and malfunctions including the date, time and duration of each;
- b) Record of corrective actions to maintain the boiler including the date, time, and description of each corrective action.
- c) Results of any boiler stack testing.
- d) The monthly amount of natural gas combusted by the boiler.
- e) Copy of the recommended operation and maintenance procedures supplied by the boiler manufacturer.

[Regulatory Basis: ORCAA 8.11; 40 CFR Part 60, §60.7(a); 40 CFR part 52.2470(c), Table 6]

8. **Notifications:** The owner or operator must notify ORCAA and Region 10 of the Environmental Protection Agency the following information:

- a) A notification of the date construction of the boiler is commenced postmarked no later than 30 days after such date;
- b) A notification of the actual date of initial startup of the boilers postmarked within 15 days after such date.

[Regulatory Basis: 40 CFR Part 60, §60.7(a); ORCAA 1.5(i); ORCAA 8.11]

**9. Existing Boiler Availability.**



- a) The owner or operator is approved to operate the existing Babcock & Wilcox 16.5 MMBtu/hr boiler until such time as the Cleaver-Brooks 20.94 MMBtu/hr boiler (EU6) begins providing useful steam and/or energy to the facility (begins operating).
- b) Once EU6 begins operating, the Babcock & Wilcox 16.5 MMBtu/hr boiler must be removed from the facility or otherwise made inoperable while at the facility.

[Regulatory Basis: ORCAA 6.1.4(a)(5); WAC 173-460-080(3)]

**17. Final Determination to Approve**

This Final Determination documents ORCAA staff’s determinations with respect to the applicable criteria of approval in ORCAA Rule 6.1 and the Washington State Implementation Plan under 40 CFR part 52.2470(c), Table 6. ORCAA staff recommends approval of GP’s proposed 20.94 MMBtu/hr natural gas-fired boiler, provided the conditions identified in Section 16 of this Final Determination are implemented through an enforceable Order of Approval (AKA: Air Permit). Emissions calculations, modeling summary and other data supporting this Final Determination are provided as attachments.

~ end of section ~

|   |                   |
|---|-------------------|
|  | <i>10/31/2023</i> |
| <hr/>   |                   |
| PREPARED BY: Aaron Manley, Engineer II  | Date              |
|  | <i>10/31/2023</i> |
| <hr/>   |                   |
| REVIEWED BY: Mark Goodin, PE  | Date              |





Attachments

Applicable Performance Standards that apply to Georgia Pacific

| Title<br>Citation  | Brief Description<br>(Consult rule/regulation for specific requirements)   | Applies to  |
|--|--|---|
| Registration<br>ORCAA Regulation 4                                 | Requires facilities that are minor sources of emissions to register annually with ORCAA and pay annual registration fees.  | GP will continue to be a synthetic minor source requiring registration. |
| Annual Registration Fees<br>ORCAA Rule 3.1                         | Requires payment of annual registration fees to ORCAA based in part on air pollutants emitted during the previous year.  | GP is required to register and pay annual registration fees.            |
| Initial Notification<br>ORCAA Rule 4.3(a)&(b);<br>4.3(f)           | Requires facilities subject to registration to register by submitting an initial notification with the information in ORCAA Rule 4.3(b) within 30 days from:<br>1) Commencement of operation of any new or recommissioned stationary source;<br>2) Change in ownership of existing registered stationary source.<br>The notification must be signed by the owner or operator or by the agent appointed by the owner. |   |
| Administrative Change Notification<br>ORCAA Rule 4.3(e);<br>4.3(f) | Requires facilities to notify ORCAA of any changes to administrative information within 30 days from the change taking place including, but not limited to, contact names, address, phone numbers, and permanent shut down or decommissioning of a stationary source. The notification must be signed by the owner or operator or by the agent appointed by the owner.   |   |
| Annual and/or Periodic Reports<br>ORCAA Rule 4.3(c)&(d);<br>4.3(f) | Requires stationary sources to submit reports with information directly related to the registration program when requested by the Agency within 30 days of receipt of the request. The submittal must be signed by the owner or operator or by the agent appointed by the owner.   |   |
| Interference or Obstruction<br>ORCAA Rule 7.1                      | Prohibits willfully interfering with or obstructing the Executive Director or any Agency employee in performing any lawful duty.   | Applies generally to all air pollution sources                          |

Attachments

| Title<br>Citation  | Brief Description<br>(Consult rule/regulation for specific requirements)  | Applies to  |
|--|---|---|
| False or Misleading Statements<br>ORCAA Rule 7.2                   | Prohibits any person from willfully making a false or misleading statement to the Board or its representative as to any matter within the jurisdiction of the Board.  | Applies generally to all air pollution sources  |
| Unlawful Reproduction or Alteration of Documents<br>ORCAA Rule 7.3 | Prohibits reproducing or altering, or causing to be reproduced or altered, any order, registration certificate or other paper issued by the Agency if the purpose of such reproduction or alteration is to evade or violate any provision of these Regulations or any other law.  | Applies generally to all air pollution sources  |
| Display of Orders and Certificates<br>ORCAA Rule 7.4               | Any order or registration certificate required to be obtained by these Regulations shall be available on the premises designated on the order or certificate. In the event that the Agency requires order or registration certificate to be displayed, it shall be posted. No person shall mutilate, obstruct, or remove any order or registration certificate unless authorized to do so by the Board or the Executive Director. | The Approval Order issued in conjunction with this NOC approval must be retained on site. |
| General Requirements<br>WAC 173-400-040(1)(c)<br>ORCAA Rule 8.3    | All emissions units are required to use reasonably available control technology (RACT).   | Applies generally to all air pollution sources.   |
| Visible Emissions<br>WAC 173-400-040(2)<br>ORCAA Rule 8.2(a)       | Prohibits emissions with opacity of greater than 20% for more than three (3) minutes in any one hour.   | Applies generally to all air pollution sources  |
| Sulfur Dioxide<br>WAC 173-400-040(7)                               | No person shall cause or allow the emission from any emissions unit in excess of one thousand ppm of sulfur dioxide on a dry basis, corrected to seven percent oxygen for combustion sources, and based on the average of any period of sixty consecutive minutes.  | Applies generally to facilities that emit Sulfur Dioxide.                                 |
| Control Equipment Maintenance and Repair<br>ORCAA Rule 8.8         | ORCAA Rule 8.8 requires that all air contaminant sources keep any process and/or air pollution control equipment in good operating condition and repair.  | Applies generally to all air pollution control devices.                                   |

Attachments

| Title<br>Citation  | Brief Description<br>(Consult rule/regulation for specific requirements)   | Applies to  |
|--|--|---|
| Fallout<br><br>WAC 173-400-040(3)<br>ORCAA Rule 8.3(e)                                   | Prohibits particulate emissions from any source to be deposited, beyond the property under direct control of the owner or operator of the source, in sufficient quantity to interfere unreasonably with the use and enjoyment of the property upon which the material was deposited. | Applies generally to all air pollution sources.                       |
| Fugitive Emissions<br><br>WAC 173-400-040(4)(a)<br>ORCAA Rule 8.3(c)                     | The owner or operator of any emissions unit engaging in materials handling, construction, demolition, or other operation which is a source of fugitive emission shall take reasonable precautions to prevent the release of air contaminants from the operation.                     | Applies generally to any activity that results in fugitive emissions. |
| Odor<br><br>WAC 173-400-040(5)<br>ORCAA Rule 8.5   | ORCAA Rule 8.5 contains general requirements for controlling odors and a general prohibition of odors that unreasonably interfere with the use or enjoyment of a person's property.  | Applies generally to all air pollution sources.                       |
| Emissions Detrimental to Persons or Property<br><br>WAC 173-400-040(6)<br>ORCAA Rule 7.6 | Prohibits causing or allowing the emission of any air contaminant from any source if it is detrimental to the health, safety, or welfare of any person, or causes damage to property or business.  | Applies generally to all air pollution sources                        |
| Concealment and Masking<br><br>WAC 173-400-040(8)<br>ORCAA Rule 7.5                      | Prohibits installation or use of any device or means to conceal or mask emissions of an air contaminant, which causes detriment to health, safety, or welfare of any person, or causes damage to property or business.   | Applies generally to all air pollution sources                        |
| Fugitive Dust<br><br>WAC 173-400-040(9)  | The owner or operator of a source or activity that generates fugitive dust must take reasonable precautions to prevent that fugitive dust from becoming airborne and must maintain and operate the source to minimize emissions.   | Applies to any activity that results in fugitive dust.                |
| Excess Emissions Provisions<br><br>WAC 173-400-107;<br>WAC 173-400-108<br>ORCAA 8.7      | Requires excess emissions be reported to the Agency as soon as possible and within 24 hours and establishes criteria qualifying excess emissions as unavoidable.   | Applies generally to all air pollution sources                        |

## Attachments

| Title<br>Citation  | Brief Description<br>(Consult rule/regulation for specific requirements)  | Applies to   |
|--|---|--|
| Record Keeping and Reporting.<br><br>ORCAA Rule 8.11   | Requires the following:<br>1. Maintenance of records on the nature and amounts of emissions and other related information as deemed necessary by ORCAA;<br>2. Reporting of emissions to ORCAA upon request.   | Required of all facilities registered with ORCAA.                                    |
| Particulate Standards for Combustion Units<br>ORCAA Rule 8.3(a)<br>WAC 173-400-050(1)  | Prohibits emissions from any combustion unit in excess of 0.1 grain/dscf. EPA test methods from 40 CFR Part 60 Appendix A shall be used should demonstration of compliance be required.   | Applies generally to all stationary combustion units that exhaust to the atmosphere. |
| Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units<br><br><i>40 CFR Part 60, Subpart Dc</i> | Applies to commercial, industrial and small boilers (steam generating units) that commenced construction or were modified after June 9, 1989 and have a rated heat input greater than 10 million Btu/hr (MMBtu/hr) and less than 100 MMBtu/hr. Establishes standards for SO <sub>2</sub> , PM, and opacity. | Boiler (EU6)   |
| General Provisions<br><br><i>40 CFR Part 60, Subpart A</i>   | All Part 60 affected sources (unless specifically excluded by an applicable NSPS) are subject to the general provisions in Subpart A.   | Boiler (EU6)   |

# OLYMPIC REGION CLEAN AIR AGENCY

2940 Limited Lane NW - Olympia, Washington 98502 - 360-539-7610 – Fax 360-491-6308

## FORM 1- NOTICE OF CONSTRUCTION

TO CONSTRUCT - INSTALL - ESTABLISH OR MODIFY AN AIR CONTAMINANT SOURCE

Form 1 Instructions:

1. Please complete all the fields below. **This NOC application is considered incomplete until signed.**
2. If the application contains any confidential business information, please complete a Request of Confidentiality of Records ([www.orcaa.org](http://www.orcaa.org)).
3. Duty to Correction Application: An applicant has the duty to supplement or correct an application. Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application must, upon becoming aware of such failure or incorrect submittal, promptly submit supplementary factors or corrected information.

|  |   |
|--|---|
| Business Name:<br><b>Georgia-Pacific Corrugated LLC - Olympia Container</b>  | <b>For ORCAA use only</b><br>File No: <u>295</u><br>County No: <u>67</u><br>Source No: <u>17</u><br>Application No: <u>23NOC1605</u>  |
| Mailing Address:<br>PO Box 547, Olympia, WA 98501  | Date Received:<br><div style="text-align: center; color: red; font-weight: bold; font-size: 1.2em;">                     Received<br/>                     JUL 19 2023<br/><br/>                     ORCAA                 </div> |
| Physical Address of Project or New Source:<br>1203 Fones Rd SE, Olympia, WA 98501  |   |
| Billing Address:<br>PO Box 547, Olympia, WA 98501  |   |
| Project or Equipment to be installed/established:<br><br>Replacement of an existing 16.5 MMBtu/hr boiler with a new, 20.94 MMBtu/hr boiler.  |   |
| Anticipated startup date: <u>09</u> / <u>1</u> / <u>2023</u> Is facility currently registered with ORCAA? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>  |   |
| This project must meet the requirements of the State Environmental Policy Act (SEPA) before ORCAA can issue final approval. Indicate the SEPA compliance option:<br><input type="checkbox"/> SEPA was satisfied by _____ (government agency) on ___/___/___ (date) - Include a copy of the SEPA determination<br><input checked="" type="checkbox"/> SEPA threshold determination by <u>ORCAA</u> (government agency) is pending - Include a copy of the environmental checklist<br><input type="checkbox"/> ORCAA is the only government agency requiring a permit - Include ORCAA Environmental Checklist<br><input type="checkbox"/> This project is exempt from SEPA per _____ (WAC citation). |   |
| <b>Name of Owner of Business:</b><br>Wade Riley  | <b>Agency Use Only</b>  |
| Title: Director of Operations  |   |
| Email: <u>Wade.Riley@gapac.com</u>   |   |
| Phone: <u>(360) 412-3552</u>   |   |
| <b>Authorized Representative for Application (if different than owner):</b><br>Kedar Desai, P.E., PMP  | <b>CONDITIONALLY APPROVED<br/>                 FOR CONSTRUCTION ONLY<br/>                 IN ACCORDANCE WITH<br/>                 RCW 70A.15, WAC 173-400<br/>                 ORCAA REGULATIONS</b>                              |
| Title: Senior Environmental Manager  |   |
| Email: <u>kedar.desai@gapac.com</u>  |   |
| Phone: <u>(562) 458-4912</u>   |   |
| I hereby certify that the information contained in this application is, to the best of my knowledge, complete and correct.   |   |
| <b>Signature of Owner or Authorized Representative: (sign in Blue Ink)</b><br>   | (SEE ATTACHED ADDENDUM FOR<br>CONDITIONS OF APPROVAL)<br><u>10/31/2023</u>  |
| Date: <u>7/18/23</u>   | DATE<br>  |
| <b>IMPORTANT:</b> Do not send via email or other electronic means. ORCAA must receive Original, hardcopy, signed application and payment prior to processing application.  |   |
|  | ORCAA   |