

Facility Name: **Georgia-Pacific Wood Products, LLC (Madison Plywood)**

City: Madison

County: Morgan

AIRS #: 04-13-21100013

Application #: 591474

Date SIP Application Received: August 10, 2021

Date Title V Application Received: August 10, 2021

Permit No: 2436-211-0013-V-04-4

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## Introduction

This narrative is being provided to assist the reader in understanding the content of the referenced SIP permit to construct and draft operating permit amendment. Complex issues and unusual items are explained in simpler terms and/or greater detail than is sometimes possible in the actual permit. This permit is being issued pursuant to: (1) Sections 391-3-1-.03(1) and 391-3-1-.03(10) of the Georgia Rules for Air Quality Control, (2) Part 70 of Chapter I of Title 40 of the Code of Federal Regulations, and (3) Title V of the Clean Air Act Amendments of 1990. The following narrative is designed to accompany the draft permit and is presented in the same general order as the permit. This narrative is intended only as an adjunct for the reviewer and has no legal standing. Any revisions made to the permit in response to comments received during the EPA review process will be described in an addendum to this narrative.

**I. Facility Description****A. Existing Permits**

Table 1 below lists the current Title V permit, and all administrative amendments, minor and significant modifications to that permit, and 502(b)(10) attachments.

**Table 1: Current Title V Permit and Amendments**

<b>Permit/Amendment Number</b>	<b>Date of Issuance</b>	<b>Description</b>
2436-211-0013-V-04-0	November 15, 2017	Title V Renewal Permit
2436-211-0013-V-04-2	August 6, 2019	Significant modification with construction for the revision of Phase II of the 2014 expansion project
2436-211-0013-V-04-3	August 20, 2020	Significant modification without construction for the further revision of Phase II of the 2014 expansion project

**B. Regulatory Status****1. PSD/NSR/RACT**

Georgia-Pacific Wood Products, LLC (Madison Plywood) (G-P Madison) is classified as a major source of air emissions according to NSR/PSD regulations. The facility is major for CO and VOC as each pollutant's potential to emit (PTE) is greater than the PSD major source threshold of 250 ton/yr.

2. Title V Major Source Status by Pollutant

**Table 2: Title V Major Source Status**

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the Pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
PM	Yes	✓		
PM <sub>10</sub>	Yes	✓		
PM <sub>2.5</sub>	Yes	✓		
SO <sub>2</sub>	Yes			✓
VOC	Yes	✓		
NO <sub>x</sub>	Yes	✓		
CO	Yes	✓		
TRS	N/A			
H <sub>2</sub> S	N/A			
Individual HAP	Yes	✓		
Total HAPs	Yes	✓		

The manufacture of plywood is not one of the 28 named categories whose major source threshold is 100 ton/yr.

**II. Proposed Modification**

A. Description of Modification

The G-P Madison facility is proposing to incorporate the applicable Plywood and Composite Wood Products (PCWP) MACT rule, 40 CFR Part 63 Subpart DDDD, changes finalized on August 13, 2020, into the existing Title V operating permit pursuant to Georgia Air Quality Control Rule 391-3-1-.03(10)(e)5.(i)(I). The proposed permit updates do not include any physical changes or change to the method of operation for any emission units at the facility and there are no changes to actual or potential throughput or emission rates for any emission units at the facility proposed as part of this application. G-P Madison is seeking to add or revise permit conditions to reflect the rule changes.

B. Emissions Change

There are no emissions changes associated with this permit language update.

**Table 3: Emissions Change Due to Modification**

Pollutant	Is the Pollutant Emitted?	Net Actual Emissions Increase (Decrease) (tpy)	Net Potential Emissions Increase (Decrease) (tpy)
PM	Yes	N/A	N/A

TITLE V MINOR MODIFICATION (WITHOUT CONSTRUCTION) APPLICATION REVIEW

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PM <sub>10</sub>	Yes	N/A	N/A
PM <sub>2.5</sub>	Yes	N/A	N/A
SO <sub>2</sub>	Yes	N/A	N/A
VOC	Yes	N/A	N/A
NO <sub>x</sub>	Yes	N/A	N/A
CO	Yes	N/A	N/A
TRS	N/A	N/A	N/A
H <sub>2</sub> S	N/A	N/A	N/A
Individual HAP	Yes	N/A	N/A
Total HAPs	Yes	N/A	N/A

C. PSD/NSR Applicability

This modification is classified as minor for PSD or Nonattainment NSR because there is no change in emissions.

**III. Facility Wide Requirements**

- A. Emission and Operating Caps - None applicable.
- B. Applicable Rules and Regulations – The facility remains subject to 40 CFR 63 Subpart DDDD as the facility manufactures plywood and/or composite wood products and is located at a major source of HAP.
- C. Compliance Status - The facility is not documented as operating out of compliance with any of the rules or regulations described above.
- D. Permit Conditions – There are no changes to any existing permit conditions in Section 2.0 of the Permit.

**IV. Regulated Equipment Requirements**

A. Brief Process Description

This modification is to incorporate changes due to the August 13, 2020, rule update. The proposed permit updates do not include any physical changes or change to the method of operation for any emission units at the facility and there are no changes to actual or potential throughput or emission rates for any emission units at the facility proposed as part of this application. In general, the updates removed language regarding startup, shutdown, and malfunction, and replaced it with work practice standards.

B. Equipment List for the Process

There were no changes to any equipment due to this modification. The equipment table as published in Permit Amendment No. 2436-211-0013-V-04-3 is still valid.

C. Equipment & Rule Applicability

**Emission and Operating Caps** - None applicable.

**Applicable Rules and Regulations** – All rules and regulations, as they have applied in the past, continue to apply.

D. Permit Conditions

Permit Condition 3.2.1 was modified to incorporate the updated language of 40 CFR 63 Subpart DDDD. Additionally, because the long-standing language of this condition was due to a Civil Action, it was reinstated as the citation. The condition now reads as:

3.2.1 The Hybrid Thermal/Catalytic Oxidizer (ID No. TCO) shall achieve both:

- a. A minimum destruction efficiency of 90% for the captured VOC emissions from the hot zone of the veneer dryers. The 90% destruction efficiency need not be maintained during periods when the dryer(s) are not operating or during previously scheduled startup and shutdown periods (including bakeouts and washouts) and Force Majeure events. These startup and shutdown periods shall not exceed the minimum amount of time necessary for these events, and during these vents, emissions shall be minimized to the greatest extent practicable, and [United States Vs. Georgia-Pacific Corporation, Civil Action No. 1 96-CV-1818-FMH]
- b. A reduction in emissions of total HAP, measured as THC (as carbon), by 90% except during safety-related shutdowns conducted according to work practice requirements in Table 3 of 40 CFR 63 Subpart DDDD [Tables 1B and 3 of 40 CFR 63 Subpart DDDD]

Permit Condition 3.3.4 was modified to incorporate the updated language of 40 CFR 63 Subpart DDDD and to correct the citations. The condition now reads as:

- 3.3.4 The Permittee shall, at all times except during safety-related shutdowns according to work practice requirements, for the device (TCO) controlling emissions from Veneer Dryers (Emission Unit ID No. 300), achieve a minimum destruction efficiency for the total HAP emissions, measured as THC (as carbon), of 90 percent. Methane can be subtracted from THC measurement.  
[Subpart DDDD, 40 CFR 63.2250(f) and Tables 1B and 3 to 40 CFR 63 Subpart DDDD]

Permit Condition 3.3.5 was modified to incorporate the updated language of 40 CFR 63 Subpart DDDD and to correct the citations. The condition now reads as:

- 3.3.5 The Permittee shall comply with Work Practice requirements of Item No. 3 in Table 3 of 40 CFR 63, Subpart DDDD at all times except during safety-related shutdowns according to work practice requirements, specified in 40 CFR 63.2241 by minimizing fugitive emissions from the veneer dryer doors (through proper maintenance procedures) and from the green end of the Veneer Dryers (Emission Unit ID No 300) through proper balancing of the heated zone exhausts.  
[Subpart DDDD, 40 CFR 63.2241(a) and Table 3(3) to 40 CFR 63 Subpart DDDD]

Permit Condition 3.3.8 was modified to incorporate the updated language of 40 CFR 63 Subpart DDDD and to correct the citations. The condition now reads as:

- 3.3.8 When the veneer dryer control device is operated in catalytic mode, the Permittee shall maintain the minimum 3-hour block average combustion chamber temperature above the minimum temperature set in accordance with the provisions in Condition No. 4.2.8 and check the activity level of a representative sample of the catalyst annually except during the calendar year when a performance test is conducted according to Table 4 to Subpart DDDD.  
[Subpart DDDD, Table 2(2) to 40 CFR 63 Subpart DDDD]

Permit Condition 3.3.9 was deleted as this language was null and void after August 31, 2021.

**V. Testing Requirements (with Associated Record Keeping and Reporting)**

Permit Condition 4.1.3.o was modified to include current language for the Wood Products Protocol 1 for testing VOC emissions. The condition now reads as:

- 4.1.3 Performance and compliance tests shall be conducted and data reduced in accordance with applicable procedures and methods specified in the Division's Procedures for Testing and Monitoring Sources of Air Pollutants. The methods for the determination of compliance with emission limits listed under Sections 3.2, 3.3, 3.4 and 3.5 are as follows:

[a. through n. – no change]

o. Table 4 to 40 CFR 63 Subpart DDDD(5) through (8)

- i. Method 25A shall be used for the determination of VOC concentrations. Or, Method 18 shall be used to measure emissions of methane and subtracted from the emissions of total HAP as THC.
- ii. Method 320, NCASI 99.02, NCASI 105.01, or ASTM D6348-03 (provided that percent R as determined in Annex A5 is equal or greater than 70% and less than or equal to 130%) shall be used to measure emissions of total HAP.
- iii. NCASI 99.0, NCASI 98.01, NCASI 105.01, Method 320, or Method 308 shall be used for the determination of methanol concentrations.
- iv. NCASI 105.01, NCASI 99.02, Method 316, Method 320, Method 0011 (EPA SW-846), or NCASI 98.01 or shall be used for the determination of formaldehyde concentrations.

[p. through r. – no change]

Permit Condition 4.2.6 was modified remove the phrase “which is currently operating in catalytic mode” and to add a “new initial performance” to describe the test needed if the TCO is reconfigured. The condition now reads as:

- 4.2.6 If the TCO is reconfigured to operate in thermal mode, a new initial performance test shall be performed. Testing shall be conducted according to procedures of 40 CFR 63.2262, using methods listed in Condition 4.1.3.  
[Subpart DDDD, 40 CFR 63.2260(a) and 40 CFR 63.2261(a)]

Permit Condition 4.2.9 was modified to incorporate the updated language of 40 CFR 63 Subpart DDDD and to correct the citations. The condition now reads as:

- 4.2.9 The Permittee shall check the activity level of a representative sample of the catalyst bed annually, not to exceed twelve months, to ensure that the catalyst is performing within its design range when the oxidizer is operating in the catalytic mode. The Permittee may forego the annual catalyst activity check during the calendar year when a performance test is conducted in accordance with Table 4 of Subpart DDDD.  
[Subpart DDDD, Table 2(2) to 40 CFR 63 Subpart DDDD]

Permit Condition 4.2.10 was modified to incorporate the updated language of 40 CFR 63 Subpart DDDD and to correct the citations. The condition now reads as:

- 4.2.10 Performance tests required by 40 CFR 63 Subpart DDDD shall be conducted according to the requirements in 40 CFR 63.7(e)(1), and the requirements in 40 CFR 63.2262(b) through (l), whichever is applicable, using appropriate methods specified in Table 4 of 40 CFR 63 Subpart DDDD and Condition No. 4.1.3. The performance tests shall be conducted as follows:  
[Subpart DDDD, 40 CFR 63.2262(a) & (b)(1)]

- a. The Permittee must conduct each performance test based on representative operating conditions. Representative operating conditions (40 CFR 63.2292) means operation of a process unit during performance testing under the conditions that the process unit will typically be operating in the future, including use of a representative range of materials (e.g., wood material of a typical species mix and moisture content or typical resin formulation) and representative operating temperature range. Representative operating conditions exclude periods of startup and shutdown. The Permittee may not conduct performance tests during periods of malfunction. The performance test report shall describe representative operating conditions for the process and control systems and explain why they are representative. The Permittee must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions are representative. Upon request, the Permittee shall make available to the Division such records as may be necessary to determine the conditions of performance tests.  
[40 CFR 63.2262(a) and (b)]

[b. – no change]



- c. Sampling sites shall be located at the inlet (if emission reduction testing or documentation of inlet methanol or formaldehyde concentration is required) and outlet of the control device (defined in 40 CFR 63.2292) and prior to any releases to the atmosphere.

[40 CFR 63.2262(d)(1)]

[d. – no change]

- e. Emissions of an individual HAP may be treated as zero if all three of the performance test runs result in a nondetect measurement, and the method detection limit is less than or equal to 1 parts per million by volume, dry basis (ppmvd). Otherwise, all nondetect data (40 CFR 63.2292) shall be treated as one-half of the method detection limit when determining total HAP, formaldehyde, methanol, or total hydrocarbon (THC) emission rates.

[40 CFR 63.2262(g)(1) and 40 CFR 63.2262(g)(2)]

[f. – no change]

## **VI. Monitoring Requirements (with Associated Record Keeping and Reporting)**

Permit Condition 5.2.14 was modified to incorporate the updated language of 40 CFR 63 Subpart DDDD and to clean up some grammar. The condition now reads as:

- 5.2.14 The Permittee shall, for each temperature monitoring device of the TCO, meet the following requirements:

[Subpart DDDD, 40 CFR 63.2269(b)(1-6)]

[a. through c. – no change]

- d. Validation of the temperature sensor's reading shall be performed at least semiannually using the requirements of 40 CFR 63.2269(b)(4)(i), (ii), (iii), (iv), or (v).

- e. Validation checks shall be conducted in accordance with Condition 5.2.14.d any time the sensor exceeds the manufacturer's specified maximum operating temperature range or the Permittee shall install a new temperature sensor.

[f. – no change]

Permit Condition 5.2.15 was modified to incorporate the updated language of 40 CFR 63 Subpart DDDD. The condition now reads as:

- 5.2.15 The Permittee shall monitor and collect data according to the following requirements:

[Subpart DDDD, 40 CFR 63.2270(b), (c), (d), and (f)]

[a. – no change]

- b. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities nor data recorded during safety-related shutdown, nor control device downtime covered in any approved routine control device maintenance exemption, shall not be used in data averages and calculations used to report emission or operating levels, nor may such data be used in fulfilling a minimum data availability requirement, if applicable. The Permittee must use all the data collected during all other periods in assessing the operation of the control system.

[c. and d. – no change]

## VII. Other Record Keeping and Reporting Requirements

Permit Condition 6.2.6 was modified to incorporate the updated language of 40 CFR 63 Subpart DDDD and to correct the citations. The condition now reads as:

- 6.2.6 The Permittee shall follow documented site-specific procedures to cease the flow of raw materials and fuel or process heat and to remove material from the process unit(s) as expeditiously as possible, given the system design, to reduce air pollutant emissions. The Permittee shall keep records that show the work practice requirements are being followed during safety-related shutdowns.  
[Subpart DDDD, 40 CFR 63.2250(f), 40 CFR 63.2282(a) and Table 3(6) to Subpart DDDD of Part 63]

Permit Condition 6.2.8 was modified to incorporate the updated language of 40 CFR 63 Subpart DDDD and to correct the citations. The condition now reads as:

- 6.2.8 The Permittee must submit a Notification of Compliance Status (NOCS) as specified in 40 CFR 63.2281(h), (k) and (l) if the Permittee is required to conduct a performance test, design evaluation, or other initial compliance demonstration as specified in Tables 4, 5, and 6 of 40 CFR 63, Subpart DDDD, or a repeat performance test as specified in Table 7 of 40 CFR 63, Subpart DDDD, as follows:  
[Subpart DDDD, 40 CFR 63.2280(d)]

[a. – no change]

- b. For each compliance demonstration required in Tables 5, 6, and 7 of 40 CFR 63, Subpart DDDD that includes a performance test conducted according to the requirements in Table 4 of 40 CFR 63, Subpart DDDD, the Permittee must submit the NOCS, including the performance test results, before the close of business on the 60<sup>th</sup> calendar day following the completion of the performance test.

Permit Condition 6.2.10 was modified to incorporate the updated language of 40 CFR 63 Subpart DDDD and to remove the requirements of Item 2 of this table as it is now null and void. The condition now reads as:

6.2.10 The Permittee shall submit each report, in accordance with the following table (Table 9 of 40 CFR 63, Subpart DDDD), that applies to the Permittee:  
[Subpart DDDD, 40 CFR 63.2281(a)]

The Permittee must submit a(n)...	The report must contain...	The Permittee must submit the report...
(1) Compliance report...	The information in 40 CFR 63.2281(c) through (g)	Semiannually according to the requirements in 40 CFR 63.2281(b).
(2) DELETED	DELETED	DELETED
(3) Performance test report	The information required in 40 CFR 63.7(g)	According to the requirements of 40 CFR 63.2281(i).
(4) CMS performance evaluation, as required for CEMS under 40 CFR 63.2269(d)(2)	The information required in 40 CFR 63.7(g)	According to the requirements of 40 CFR 63.2281(j).

Permit Condition 6.2.11 was modified to incorporate the updated language of 40 CFR 63 Subpart DDDD. The condition now reads as:

6.2.11 The Permittee shall submit each report by the date in the table (Table 9 of 40 CFR 63, Subpart DDDD) in Condition No. 6.2.10, and as specified below, unless the Director has approved a different schedule for submission of reports under 40 CFR 63.10(a):  
[Subpart DDDD, 40 CFR 63.2281(b)]

[a. through e. – no change]

f. The Permittee shall submit all subsequent reports following the procedure specified in 40 CFR 63.2281(h), (k) and (l).

Permit Condition 6.2.12 was modified to incorporate the updated language of 40 CFR 63 Subpart DDDD. The condition now reads as:

6.2.12 The Permittee’s compliance report required by Condition No. 6.2.11 shall contain the following information:  
[Subpart DDDD, 40 CFR 63.2281(c)]

[a. through c. – no change]

- d. The compliance report must include the number of instances and total amount of time during the reporting period in which each of the startup/shutdown work practice requirements in Table 3 of 40 CFR 63, Subpart DDDD (rows 6 through 8) is used in place of the otherwise applicable compliance options, operating requirements, and work practice requirements (in Table 3 of 40 CFR 63, Subpart DDDD rows 1 through 5). If a startup/shutdown work practice in Table 3 of 40 CFR 63, Subpart DDDD (rows 6 through 8) is used for more than a total of 100 hours during the semiannual reporting period, the Permittee must report the date, time, and duration of each instance when that startup/shutdown work practice was used.

[e. – no change]

f. DELETED

[g. and h. – no change]

Permit Condition 6.2.13 was modified to incorporate the updated language of 40 CFR 63 Subpart DDDD. The condition now reads as:

6.2.13 The Permittee must ensure that for each deviation from a compliance option, operating requirement or work practice requirement in Conditions Nos. 3.3.4 and 3.3.5 that occurs at an affected source where the Permittee is not using a CMS to comply with the compliance options, operating requirements, or work practice requirements in the PCWP MACT, the compliance report must contain the information in Condition No. 6.2.14.a through f and in Paragraphs a and b below. This includes periods of startup, shutdown, and malfunction.

[Subpart DDDD, 40 CFR 63.2281(d)]

- a. The total operating time of each affected source during the reporting period.
- b. Information on the date, time, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

Permit Condition 6.2.14 was modified to incorporate the updated language of 40 CFR 63 Subpart DDDD. The condition now reads as:

6.2.14 The Permittee must ensure that for each deviation from a compliance option, operating requirement, or work practice requirement occurring at an affected source where the Permittee is using a CMS to comply with the compliance options and operating requirements in the PCWP MACT, the Permittee must include the information in paragraphs a through e under Condition 6.2.12 and paragraphs a through m below. This includes periods of startup, shutdown, and malfunction and routine control device maintenance.

[Subpart DDDD, 40 CFR 63.2281(e)]

a. DELETED

- b. The date, time, and duration that each CMS was inoperative, except for zero (low level) and high-level checks.

[c. through k. – no change]

- l. For any failure to meet a compliance option in 40 CFR 63.63.2240, including the compliance options in Table 1A or 1B to 40 CFR 63 Subpart DDDD or the emissions averaging compliance option, provide an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions.

- m. The total operating time of each affected source during the reporting period.

Permit Condition 6.2.16 was modified to incorporate the updated language of 40 CFR 63 Subpart DDDD. The condition now reads as:

6.2.16 The Permittee shall keep the following records:  
[Subpart DDDD, 40 CFR 63.2282(a) and Item No. 2, Table 5]

[a. – no change]

- b. The records related to startup and shutdown, failures to meet the standard, and actions taken to minimize emissions, specified in paragraphs (i) through (iv) below.
  - i. Record the date, time, and duration of each startup and/or shutdown period, including the periods when the affected source was subject to the standard applicable to startup and shutdown.
  - ii. In the event that an affected unit fails to meet an applicable standard, record the number of failures; for each failure, record the date, time, cause and duration of each failure.
  - iii. For each failure to meet an applicable standard, record and retain a list of the affected sources or equipment, and the following information:
    - a. For any failure to meet a compliance option in 40 CFR 63.2240, including the compliance options in Table 1A or 1B or the emissions averaging compliance option, record an estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions.
    - b. For each failure to meet an operating requirement in Table 2 to this subpart or work practice requirement in Table 3, maintain sufficient information to estimate the quantity of each regulated pollutant emitted over the emission limit. This information must be sufficient to provide a reliable emissions estimate if requested by the Division.

- iv. Record actions taken to minimize emissions in accordance with 40 CFR 63.2250(g), and any corrective actions taken to return the affected unit to its normal or usual manner of operation.
- c. Records of performance test and performance evaluation as required in 40 CFR 63.10(b)(2)(viii).

Permit Condition 6.2.20 was modified to incorporate the updated language of 40 CFR 63 Subpart DDDD. The condition now reads as:

6.2.20 Records required by Condition No. 6.2.16 shall be maintained for five years after the date of occurrence, measurement, maintenance, corrective action, report or record according to 40 CFR 63.10(b)(1). For the first two years the records must be maintained on site at the facility, for the remaining 3 years, these records can be maintained offsite.

Any records required to be maintained by 40 CFR 63 Subpart DDDD that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.

[Subpart DDDD, 40 CFR 63.2283]

### **VIII. Specific Requirements**

- A. Operational Flexibility - None applicable.
- B. Alternative Requirements - None applicable.
- C. Insignificant Activities - None applicable.
- D. Temporary Sources - None applicable.
- E. Short-Term Activities - None applicable.
- F. Compliance Schedule/Progress Reports - None applicable.
- G. Emissions Trading - None applicable.
- H. Acid Rain Requirements/CAIR/CSPAR - None applicable.
- I. Prevention of Accidental Releases - None applicable.
- J. Stratospheric Ozone Protection Requirements - None applicable.
- K. Pollution Prevention - None applicable.
- L. Specific Conditions - None applicable.

**Addendum to Narrative**

The 45-day EPA review started on month day, year and ended on month day, year. Comments were/were not received by the Division.

//If comments were received, state the commenter, the date the comments were received in the above paragraph. All explanations of any changes should be addressed below.//