Facility Name: **Hood Industries, Inc.**
City: Metcalf
County: Thomas
AIRS #: 04-13-275-00008

Application #: TV-553896
Date Application Received: March 15, 2021
Permit No: 2421-275-0008-V-05-0

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Introduction

This narrative is being provided to assist the reader in understanding the content of referenced operating permit. Complex issues and unusual items are explained here in simpler terms and/or greater detail than is sometimes possible in the actual permit. The permit is being issued pursuant to: (1) Georgia Air Quality Act, O.C.G.A § 12-9-1, et seq. and (2) Georgia Rules for Air Quality Control, Chapter 391-3-1, and (3) Title V of the Clean Air Act. Section 391-3-1-.03(10) of the Georgia Rules for Air Quality Control incorporates requirements of Part 70 of Title 40 of the Code of Federal Regulations promulgated pursuant to the Federal Clean Air Act. The narrative is intended as an adjunct for the reviewer and to provide information only. It has no legal standing. Any revisions made to the permit in response to comments received during the public participation and EPA review process will be described in an addendum to this narrative.

I. Facility Description

A. Facility Identification

1. Facility Name: Hood Industries, Inc. – Metcalf Lumber Mill

2. Parent/Holding Company Name

   Hood Industries, Inc.

3. Previous and/or Other Name(s)

   Metcalf Lumber Company, Inc. till December 2005.

4. Facility Location

   1033 South Reynolds Street
   Metcalf, Georgia 31792
   Thomas County

5. Attainment, Non-attainment Area Location, or Contributing Area

   The Metcalf Lumber Mill is located in an attainment area with respect to National Ambient Air Quality Standards (NAAQS) for all pollutants.

B. Site Determination

There are no other facilities which could possibly be contiguous or adjacent and under common control.

C. Existing Permits

Table 1 below lists all current Title V permits, all amendments, 502(b)(10) changes, and off-permit changes, issued to the facility, based on a comparative review of form A.6, Current Permits, of the Title V application and the "Permit" file(s) on the facility found in the Air Branch office.

Table 1: List of Current Permits, Amendments, and Off-Permit Changes

Permit Number and/or Off-Permit Change	Date of Issuance/ Effectiveness	Purpose of Issuance
2421-275-0008-V-04-0	October 6, 2016	Renewal Title V Permit
OPC	February 23, 2017	Replacement of the cyclone and ductwork destroyed in the planer mill.
OPC	December 13, 2018	Installation of SIP exempted emergency generator for powering the firewater pump.

D. Process Description

1. SIC Codes(s)

   2421 – Sawmills and Planing Mills

   The SIC Code(s) identified above were assigned by EPD's Air Protection Branch for purposes pursuant to the Georgia Air Quality Act and related administrative purposes only and are not intended to be used for any other purpose. Assignment of SIC Codes by EPD's Air Protection Branch for these purposes does not prohibit the facility from using these or different SIC Codes for other regulatory and non-regulatory purposes.

   Should the reference(s) to SIC Code(s) in any narratives or narrative addendum previously issued for the Title V permit for this facility conflict with the revised language herein, the language herein shall control; provided, however, language in previously issued narratives that does not expressly reference SIC Code(s) shall not be affected.

2. Description of Product(s)

   Metcalf Lumber Mill produces dimensional lumber out of southern yellow pine. By products from the lumber mill are tree bark, sawdust, wood chips and planer mill shavings.

3. Overall Facility Process Description

   Log Preparation:
   Southern yellow pine logs of tree length are received by trucks. The logs are stored on concrete log pads. The logs are sawn to desired length, debarked and scanned for metal. Bark from the debarker is dropped into a chain conveyor and conveyed to a bark holding bin to be sold off site as fuel. Poor quality log parts are chipped and sold as a paper mill fiber source. The emissions from this operation are not controlled.

   Sawmill:
   Sawmills cut the logs into dimensional lumber or timbers. The sawmill equipment includes sets of twin bandsaws, a saw edger, and a saw trimmer. Lumber is trimmed, sorted by length and dimension, and stacked on sticks. Trim blocks and edger strips are chipped and sold to paper mill as a fiber source. The emissions from this operation are not controlled.

   Lumber Drying Kilns:
   The lumber and timbers are dried in one of the three indirect-fired kilns from 50 percent moisture to approximately 15 percent moisture content. Each kiln has an estimated production capacity of 47,800 MMBF/year.

   Planer Mill:
   The dried lumber and timbers are sent to the planer mill building to be planed, cut to size, sorted by length, size and grade, and transported by truck or rail for delivery to the customer. Two pneumatic conveyance systems, designated PMC1 and PMC2 are used to transport wood residues generated during the planing, trimming, and hogging of cut-off materials to truck bin for by-product loading and shipment. These two systems use cyclones as material separation equipment to remove the wood from the pneumatic airflow and deposit the materials into the loading bin.

Boilers:
The facility has three boilers that burn wood waste and provides steam to the three drying kilns. Boiler No. 3 was installed in March 1997 with a 29.6-MMBtu/hr heat input capacity.

Boiler No. 2 was installed in April 1993 with a 28.8-MMBtu/hr heat input capacity. Boiler No. 4 was installed in 2004 and has a 28.8 MMBtu/hr heat input capacity.

4. Overall Process Flow Diagram

The facility provided a process flow diagram in their Title V permit application.

E. Regulatory Status

1. PSD/NSR

Metcalf Lumber Mill is a major source under PSD regulations.

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	✓	✓		
PM_{10}	✓	✓		
$PM_{2.5}$	✓	✓		
SO_2	✓			✓
VOC	✓	✓		
NO_x	✓			✓
CO	✓	✓		
Individual HAP Methanol	✓	✓		
Total HAPs	✓	✓		

3. MACT Standards

The facility is a major source with respect to hazardous air pollutants (HAPS). Using NCASI emission factors, potential methanol emissions are approximately 15 tons per year at the updated production capacity of 144,000 MBF/year. The facility is subject to Plywood and Composite Wood Product MACT (PCWP) 40 CFR 63 Subpart DDDD and the major source boiler MACT 40 CFR 63 Subpart DDDDD.

Therefore, 40 CFR 63 Subpart DDDD, "NESHAP for Plywood and Composite Wood Products," and 40 CFR 63 Subpart DDDDD, "NESHAP for Industrial-Commercial-Institutional Boilers and

Process Heaters," are applicable. The facility was granted an extension by EPD on December 11, 2015 (Permit Amendment No. 2421-275-0008-V-03-1). This permit amendment required that boilers B2, B3 and B4 comply with all applicable boiler MACT requirements by January 31, 2017.

4. Program Applicability (AIRS Program Codes)

Program Code	Applicable (y/n)
Program Code 6 - PSD	Yes
Program Code 8 – Part 61 NESHAP	No
Program Code 9 - NSPS	Yes
Program Code M – Part 63 NESHAP	Yes
Program Code V – Title V	Yes

Regulatory Analysis

II. Facility Wide Requirements

Not applicable.

III. Regulated Equipment Requirements

A. Equipment List for the Process

Emission Units		Specific Limitations/Requirements	Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	ID No.	Description
B2	Boiler 2	391-3-1-.02(2)(d) 391-3-1-.02(2)(g) 40 CFR 60 Subparts A and Dc 40 CFR 63 Subparts A & DDDDD	N/A	None.
B3	Boiler 3	391-3-1-.02(2)(d) 391-3-1-.02(2)(g) 40 CFR 60 Subpart A and Dc 40 CFR 63 Subparts A & DDDDD	N/A	None.
B4	Boiler 4	391-3-1-.02(2)(d) 391-3-1-.02(2)(g) 40 CFR 60 Subpart A and Dc 40 CFR 63 Subparts A & DDDDD	N/A	None.
DK1	Drying Kiln 1	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 63 Subparts A & DDDD	N/A	None.
DK2	Drying Kiln 2	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 63 Subparts A & DDDD	N/A	None.
DK3	Drying Kiln 3	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 63 Subparts A & DDDD	N/A	None.
PMC1	Planer mill Pneumatic conveying system connected to Planer and trim saw with cyclone (PMC1)	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	-	-
PMC2	Hog Pneumatic conveying system connected to trim saw hog with cyclone (PMC2)	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	-	-

B. Equipment & Rule Applicability

The boilers at the facility are subject to the boiler NSPS (40 CFR 60 Subpart Dc) and to the Boiler MACT (40 CFR 63 Subpart 5D) since the facility is a HAPs major facility.

Emission and Operating Caps:

The boilers at the facility are subject to the boiler MACT emission limits for CO, PM or Total Selected Metals, Hydrochloric Acid (HCl) and Mercury (Hg). The boilers are also subject to Georgia Rule (d) for opacity and PM emissions and Georgia Rule (g) for sulfur-dioxide emissions. The drying kilns

and the planer mill pneumatic conveyance systems are subject to Georgia Rule (b) for opacity and Georgia Rule (e) for Particulate matter emissions.

C. Permit Conditions

Condition 3.3.1 subjects Boilers B2, B3, and B4 to NSPS 40 CFR 60 Subpart Dc, "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units".

Condition 3.3.3 states that the facility is subject to the PCWP MACT (40 CFR 63 Subparts A and DDDD).

Condition 3.3.2 subject the boilers to all applicable requirements of the boiler MACT (40 CFR 63 Subpart 5D) effective January 31, 2017. Any new or reconstructed boilers will be subject to the boiler MACT upon startup.

Condition 3.3.4 is the boiler MACT emission limit for CO.

Condition 3.3.5 is the boiler MACT emission limit for PM or Total Selected Metals (TSM).

Condition 3.3.6 is the boiler MACT Hydrochloric acid (HCl) emission limit.

Condition 3.3.7 is the boiler MACT mercury (Hg) emission limit for boilers B2, B3 and B4 per item 1b of Table 2 of the boiler MACT.

Condition 3.3.8 states that for existing boilers compliance with the PM and TSM boiler MACT limit can be demonstrated using emissions averaging among the boiler provided the averaged PM or TSM emission is less than 90% of the boiler MACT emission limit for PM and or TSM.

Condition 3.3.9 states that for a group of two or more existing boilers in the same subcategory that each vent to a separate stack, the Permittee may average PM (or TSM) emissions among existing units to demonstrate compliance with the boiler MACT limits in Table 2 of the boiler MACT as per 40 CFR 63.7522(b((1) through (b)(3).

Condition 3.3.10 requires a one-time energy assessment for boilers B2, B3 and B4 per item 4. of Table 3 of the boiler MACT.

Conditions 3.3.11 and 3.3.12 requires the Permittee to follow the startup and shutdown work practice requirements per items 5 and 6 of Table 3 of the boiler MACT.

Condition 3.3.13 states that boiler MACT emission limits do not apply during startup and shutdown periods. Permittee shall collect monitoring data during these periods and maintain records of startup and shutdown and activities during these periods.

Condition 3.3.14 requires the Permittee to set the oxygen level no lower than the lowest hourly average oxygen concentration measured during the most recent CO performance test as the operating limit for oxygen as per item 8 of Table 4 of the boiler MACT.

Condition 3.3.15 requires the Permittee to maintain the operating load of each boiler such that it is less than 110% of the highest hourly average operating load recorded during the most recent performance test per item 7 of Table 4 of the boiler MACT.

Condition 3.4.1 limits the PM emissions from the pneumatic conveyance systems and the kilns (Emission Unit ID Nos.PMC1, PMC2, DK1, DK2, and DK3) based on Georgia Rule (e).

Condition 3.4.2 limits the visible emissions from the pneumatic conveyance systems and the kilns (Emission Unit ID Nos. PMC1, PMC2, DK1, DK2, and DK3) based on Georgia Rule (b) to 40 percent opacity.

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Condition 3.4.3 limits the PM emissions from the boilers (Emission Unit ID Nos. B2, B3, and B4) based on Georgia Rule (d).

Condition 3.4.4 limits the visible emissions from the boilers (Emission Unit ID Nos. B2, B3, and B4) based on Georgia Rule (d) to 20 percent opacity.

Condition 3.4.5 limits the sulfur fuel content to the boilers (Emission Unit ID Nos. B2, B3, and B4) based on Georgia Rule (g).

IV. Testing Requirements (with Associated Record Keeping and Reporting)

A. General Testing Requirements

The permit includes a requirement that the Permittee conduct performance testing on any specified emission unit when directed by the Division. Additionally, a written notification of any performance test(s) is required 30 days (or sixty (60) days for tests required by 40 CFR Part 63) prior to the date of the test(s) and a test plan is required to be submitted with the test notification.

Test methods and procedures for determining compliance with applicable emission limitations are listed and test results are required to be submitted to the Division within 60 days of completion of the testing.

B. Specific Testing Requirements

Condition 4.2.1 requires the Permittee to perform source test for CO, PM or (TSM), HCl and Hg emissions from the boilers using test methods specified in Table 5 and Condition 4.1.3 by July 31, 2017. Thereafter, these tests shall be conducted annually.

Condition 4.2.2 requires the Permittee perform a boiler tune up once every 60 months (5 years) per Table 3 of the boiler MACT for boilers B2, B3 and B4.

Condition 4.2.3 allows the stack tests to be performed once every three years by pollutant basis if the tested emissions are less than 75% of the boiler MACT emission limit for two consecutive years. Testing frequency reverts to annual for a pollutant if emissions exceed 75% of the boiler MACT emission limit until emissions are less than 75% for two consecutive years.

Condition 4.2.4 states that if compliance with the HCl, Hg and TSM boiler MACT emissions limit will be demonstrated by fuel analysis, the fuel analysis shall be conducted monthly for 12 consecutive months. The test may be conducted quarterly if fuel analysis shows compliance with the boiler MACT emission limit for 12 consecutive months. If any of the quarterly fuel analysis exceeds the boiler MACT limit for a HAP, the testing frequency for that HAP shall revert back to monthly fuel analysis.

V. Monitoring Requirements

A. General Monitoring Requirements

Condition 5.1.1 requires that all continuous monitoring systems required by the Division be operated continuously except during monitoring system breakdowns and repairs. Monitoring system response during quality assurance activities is required to be measured and recorded. Maintenance or repair is required to be conducted in an expeditious manner.

B. Specific Monitoring Requirements

Condition 5.2.1 requires the Permittee to inspect the pneumatic conveyance systems cyclones each week and keep records of the results of the inspections, any repairs made to the cyclones.

Condition 5.2.2 requires the Permittee to monitor the opacities of boiler emissions daily.

Condition 5.2.3 requires the Permittee to develop a site-specific monitoring plan per the boiler MACT if compliance will be demonstrated via performance testing.

Condition 5.2.4 requires the Permittee to either continuously monitor and record the oxygen content in the boiler exhaust using an oxygen analyzer system or continuously monitor and record the CO concentration in the boiler exhaust per the boiler MACT.

C. Compliance Assurance Monitoring (CAM)

Not Applicable. The boilers, drying kilns or the planer is not subject to CAM since these sources do not have a control device to comply with applicable emission limits.

VI. Record Keeping and Reporting Requirements

A. General Record Keeping and Reporting Requirements

The Permit contains general requirements for the maintenance of all records for a period of five years following the date of entry and requires the prompt reporting of all information related to deviations from the applicable requirements. Records, including identification of any excess emissions, exceedances, or excursions from the applicable monitoring triggers, the cause of such occurrence, and the corrective action taken, are required to be kept by the Permittee and reporting is required on a semiannual basis.

B. Specific Record Keeping and Reporting Requirements

Condition 6.2.1 requires the Permittee to maintain monthly records of wood-waste and other fuels fired in the boilers pre the requirements of NSPS Subpart Dc.

Condition 6.2.2 requires the Permittee to keep records of all actions taken to minimize fugitive dust from the facility operation.

Condition 6.2.3 requires the Permittee to maintain records of the cyclone inspections carried out per Condition 5.2.1.

Condition 6.2.4 requires the Permittee to maintain records of any excess visible emissions as borne out by the results of the daily VE checks of Condition 5.2.2.

Condition 6.2.5 lists the notifications required by the boiler MACT.

Condition 6.2.6 lists the semi-annual reports of deviations required by the boiler MACT.

Condition 6.2.7 requires the Permittee to reports all actions inconsistent with the Startup, shutdown and malfunction during the reporting period as required by the boiler MACT.

Condition 6.2.8 requires the Permittee to submit all applicable reports listed in Table 9 of the boiler MACT.

Condition 6.2.9 requires the Permittee to maintain all applicable records required by the boiler MACT specified in Table 8 of the Boiler MACT.

Condition 6.2.10 requires the Permittee to keep all records required by the boiler MACT on site for 2 years and off-site for the following three years per the boiler MACT.

VII. Specific Requirements

A. Operational Flexibility

Not applicable.

B. Alternative Requirements

Not applicable.

C. Insignificant Activities

See Permit Application on GEOS website.
See Attachment B of the permit

D. Temporary Sources

Not applicable.

E. Short-Term Activities

Not applicable.

F. Compliance Schedule/Progress Reports

Not applicable.

G. Emissions Trading

Emissions trading is not applicable to Metcalf lumber mill.

H. Acid Rain Requirements

Not applicable.

I. Stratospheric Ozone Protection Requirements

Not applicable.

J. Pollution Prevention

Not applicable.

K. Specific Conditions

Not applicable.

VIII. General Provisions

Generic provisions have been included in this permit to address the requirements in 40 CFR Part 70 that apply to all Title V sources, and the requirements in Chapter 391-3-1 of the Georgia Rules for Air Quality Control that apply to all stationary sources of air pollution.

Template Condition 8.14.1 was updated in September 2011 to change the default submittal deadline for Annual Compliance Certifications to February 28.

Template Condition Section 8.27 was updated in August 2014 to include more detailed, clear requirements for emergency generator engines currently exempt from SIP permitting and considered insignificant sources in the Title V permit.

Template Condition Section 8.28 was updated in August 2014 to more clearly define the applicability of the Boiler MACT or GACT for major or minor sources of HAP.

Addendum to Narrative

The 30-day public 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.//