**INFORMATION RELATIVE TO**

**THE DRAFT TITLE V OPERATING PERMIT**

**January 10, 2019**

FOR:

**Hood Industries, Inc.**

**Wiggins Mill**

**1945 South First Street**

**Wiggins, MS 39577**

**FACILITY DESCRIPTION**

Hood Industries, Inc. operates a plywood mill in Wiggins (Stone County), Mississippi. It produces plywood and by-products from southern yellow pine logs or a mixed variety of hardwood logs. The facility operates three woodwaste boilers, three veneer dryers, thirteen woodwaste handling point sources, and two plywood presses.

The facility submitted an updated TV renewal application on July 6, 2017. The proposed draft operating permit incorporates several changes in the facility. In a Prevention of Significant Deterioration (PSD) Permit to Construct issued June 9, 2017, the particulate matter emission limits for the Sander Dust Quad-Pak Cyclone (AA-005) and the High Pressure Relay Cyclone (AA-006) were revised. Specific applicable requirements from 40 CFR Part 63, Subpart DDDDD have been added for the three woodwaste boilers (AA-001, AA-002 and AA-003). Applicable requirements from 40 CFR, Part 63, Subpart ZZZZ and 40 CFR Part 60, Subpart IIII have been added for the two emergency engines at the facility (AA-028 and AA-031). The boilers’ ratings outlined in the permit have been revised to reflect the actual capacities of these units.

**TITLE V PROGRAM APPLICABILITY BASIS**

Hood Industries, Inc. Wiggins is a major source as defined by Title V of the Federal Clean Air Act due to its potential to emit the following criteria pollutants in excess of the Title V threshold limits of 100 tons/year: particulate matter less than 10 micron (PM10), nitrogen oxide (NOx), carbon monoxide (CO), and volatile organic compounds (VOC’s); and its potential to emit more than 10 tons per year of a one hazardous air pollutant (HAP) (methanol); and more than 25 tons per year of total hazardous air pollutants (HAPs).

**LEGAL AND FACTUAL BASIS FOR DRAFT PERMIT CONDITIONS**

The State and Federally-enforceable conditions of Title V Operating Permits are based upon the requirements of the State of Mississippi Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act (11 Miss. Admin. Code Pt. 2, Ch. 6.), and applicable requirements effective upon the date of permit issuance. Applicable requirement means all of the following as they apply to emissions units in a Title V source:

1. any standard or other requirement set forth in the State Implementation Plan (SIP) approved or promulgated by EPA through rulemaking under Title I of the Federal Clean Air Act (Federal Act) including the following:

a. most of the State of Mississippi Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants (11 Miss. Admin. Code Pt. 2, Ch. 1.)

b. the State of Mississippi Regulations for the Prevention of Air Pollution Emergency Episodes (11 Miss. Admin. Code Pt. 2, Ch. 3.),

c. the State of Mississippi Regulations for the Prevention of Significant Deterioration of Air Quality (11 Miss. Admin. Code Pt. 2, Ch. 5.), and 40 CFR Part 52.21 by reference, and

d. the provisions of the State of Mississippi Permit Regulations for the Construction and/or Operation of Air Emissions Equipment (11 Miss. Admin. Code Pt. 2, Ch. 2.), relating to construction permits and synthetic minor operating permits;

2. any term or condition of any construction permits issued pursuant to Mississippi regulations approved or promulgated through rulemaking under Title I;

3. any standard or other requirement under Section 111 of the Federal Act, including Section 111(d) which includes Title 40, Part 60 of the Code of Federal Regulations (40 CFR Part 60) and relevant sections of 11 Miss. Admin. Code Pt. 2, Ch. 1.;

4. any standard or other requirement under Section 112 of the Federal Act, including relevant sections of 11 Miss. Admin. Code Pt. 2, Ch. 1.and 40 CFR Parts 61, 63, and 68;

5. any standard or other requirement of the acid rain program under Title IV of the Federal Act or the regulations promulgated thereunder, including the State of Mississippi Acid Rain Program Permit Regulations for Purposes of Title IV of the Federal Clean Air Act (11 Miss. Admin. Code Pt. 2, Ch. 7.) adopted November 17, 1994, and 40 CFR Parts 72, 73, 75, 77, and 78;

6. any requirements established pursuant to Section 504(b) or Section 114(a)(3) of the Federal Act;

7. any standard or other requirement governing solid waste incineration under Section 129 of the Federal Act;

8. any standard or other requirement for consumer and commercial products under Section 183(e) of the Federal Act;

9. any standard or other requirement for tank vessels under Section 183(f) of the Federal Act;

10. any standard or other requirement of the program to control air pollution from outer continental shelf sources under Section 328 of the Federal Act;

11. any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the Federal Act;

12. any national ambient air quality standard or increment or visibility requirement under part C of Title I of the Federal Act.

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 11 Miss. Admin. Code Pt. 2, Ch. 6.or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

**SPECIFIC APPLICABLE REQUIRMENTS OR APPLICABILITY DETERMINATIONS**

The first significant modification to the mill came in a Permit to Construct issued on March 24, 1997. The Permit to Construct addressed primarily the installation of a new veneer dryer, but within the permit several emission limitations and/or restrictions were established to limit air emissions to certain levels. This permit was referenced in previously issued Title V permits, but during this review it was decided a PSD Permit to Construct issued on August 16, 2000, superseded all requirements in the previous Permit to Construct and even enhanced many of those requirements. The PSD Permit to Construct was modified June 9, 2017 to address the revision of Particulate Matter emission limits onAA-005 (Plywood sanders equipped with cyclone) and AA-006 (Sander dust relay cyclone).

**MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (MACT) and NEW SOURCE PERFORMANCE STANDARDS (NSPS) APPLICABILITY**

The facility is subject to 40 CFR Part 63, Subpart DDDD- National Emission Standards for Hazardous Air Pollutants for Plywood and Composite Wood Products and 40 CFR Part 63, Subpart A- General Provisions. Specific applicable monitoring, recordkeeping and reporting requirements have been added for AA-025 (Regenerative thermal oxidizer No.1) and AA-027 (Regenerative thermal oxidizer No.2).

The mill submitted a Routine Control Device Maintenance Exemption (RCDME), allowed under the provisions of the Plywood and Composite Wood Products MACT, for both Thermal Oxidizers (AA-025, and AA-027). However, in the Permit to Construct, issued August 16, 2000, there was a condition requiring the Thermal Oxidizer (AA-025) to operate always when the dryer operates. After further review, it was determined the intent of the condition was to ensure compliance with a volatile organic compound (VOC) permit limit for the unit. Since the MACT requirements are in place to ensure compliance with hazardous air pollutants (HAPs), said condition was more stringent and would remain in the permit. Only Emission Point AA-027 would be addressed under the RCDME.

The facility is subject to 40 CFR Part 63, Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. Specific applicable monitoring, recordkeeping and reporting requirements have been added for AA-001, AA-002 and AA-003 (Three hybrid suspension grate wood-fired boilers equipped with multiclone collectors)

The facility is subject to 40 CFR Part 63, Subpart ZZZZ- National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines and 40 CFR Part 60, Subpart IIII -Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines (ICE). Specific applicable monitoring, recordkeeping and reporting requirements have been added for AA-028 (Emergency fire pump engine) and AA-031 (Emergency generator).

**CAM APPLICABILITY**

40 CFR Part 64, Compliance Assurance Monitoring, does not apply to any source in this facility. Emission Points AA-005 and AA-006 (sanders with cyclones) have PM emission limits, but do not use a control device to achieve compliance with it. The cyclones at the facility, including AA-008, AA-009, AA-010, AA-013 and AA-014, are operated primarily for material recovery so these units are not subject to CAM. Emission Points AA-001, AA-002 and AA-003 (boilers with multicyclones) have PM emission limits but the multicyclones do not meet the definition of a control device used to achieve compliance with a limitation under Part 64. Therefore, these units are not subject to CAM. Emission Points AA-025 and AA-027 (veneer dryers with RTOs) have the potential to emit over 100 ton/yr of VOC. Since these units are subject to 40 CFR 63, Subpart DDDD, they are exempt from CAM under 40 CFR 64.2(b)(1)(i).

**SPECIFIC APPLICABLE REQUIREMETS**

Relative to the development of Title V monitoring and compliance testing requirements addressed within the permit, consideration was given to available site-specific emission data, control devices, current monitoring being conducted including any continuous monitors, and margin of compliance. Attached to this document is a table addressing the monitoring and testing conditions in the permit including some considerations given for each determination. The table addresses the monitoring associated with the emission points that were subject to the monitoring, recordkeeping, and reporting provisions of the Plywood and Composite Wood MACT Subpart DDDD, the RICE MACT Subpart ZZZZ, the Boiler MACT Subpart DDDDD and CI ICE NSPS Subpart IIII.

The “insignificant activities” identified by the source, and listed in Section C of the Title V application, are subject to the requirements identified in Section 3.C. The source will not be required to perform any Title V monitoring for these activities. This determination is based on the fact these emission units are low emitting units and during normal operations there should be a significant margin of compliance with each applicable requirements.

| **EMISSION LIMITS** | | | |
| --- | --- | --- | --- |
| Emission Point No. | Pollutant | Draft Permit Emission Limits | Monitoring Requirements |
| (AA-000) Facility Wide | HAPs | General Applicability | MACT Continuous Compliance |
| AA-001 (No. 1 Boiler),  AA-002 (No. 2 Boiler),  and AA-003 (No,3 Boiler) | PM | 0.3 grains per standard dry cubic foot  0.44 lb/MMBTU of heat input or 0.55 lb/MMBTU of steam output | Fuel Monitoring and Heat Input monitoring; Weekly Visible Observations which may result in EPA Method 9 VEE |
| SO2 | 4.8 lbs/MMBTU | Fuel Monitoring and Heat Input monitoring |
| HAPs |  | Complete an energy assessment;  Initial and subsequent tune-ups |
| Opacity | 40% | Opacity |
| AA-004 through AA-017, AA-019, AA-025, AA-026, AA-027 | PM | E = 4.1p0.67 | Emission point AA-004, AA-007, and AA-026, are cooling zones for the dryers and by their nature should only emit minimal PM. AA-017 is the emission point that addresses the gluing of the veneer and should generate only minimal PM. The margin of compliance for these emission points is considered significant. |
| Opacity | 40% | Weekly Visible Observations which may result in EPA Method 9 VEE |
| AA-005, AA-006, AA-008, AA-009, AA-010, AA-013, AA-014 | Operational Restriction | The process(s) associated with a cyclone cannot operate in the event the cyclone fails. | Weekly maintenance, inspections to ensure proper operation of the cyclones |
| AA-004 (23-Section Plywood Veneer Dryer No. 2 cooling zone) and AA-007 (17-Section Plywood veneer Dryer No. 1 cooling zone) and AA-027 (RTO2) | Operational Limitation | The two dryers associated with these emission points are limited to a total maximum production of 191 MM sf/year (3/8” basis) | Monitoring, Recordkeeping and Reporting |
| AA-005 (4-Head Plywood Sander) and AA-006 (Fuel House) | Annual Hourly Restriction | 5,616 hours per year in any consecutive 365-day period | Monitoring, Recordkeeping, and Reporting |
| Operational Limitation | The control device (cyclone) must be operative when operating the Kimwood Wide Belt, 4-head plywood sander or the existing plywood sander associated with these emission points. | Monthly Inspections of control device, and Monitoring, Recordkeeping and Reporting |
| AA-005 (4-Head Plywood Sander) | PM (filterable only) | 7.32 lbs/hr and 20.55 TPY | Monthly Inspections of control device, and Monitoring, Recordkeeping and Reporting and Weekly Visible Observations which may result in EPA Method 9 VEE |
| PM10 (filterable and condensable) | 6.31 lbs/hr and 17.73 TPY |
| AA-006 (Fuel House) | PM (filterable only) | 1.80 lbs/hr and 5.05 TPY | Monthly Inspections of control device, and Monitoring, Recordkeeping and Reporting and Weekly Visible Observations which may result in EPA Method 9 VEE |
| PM10 (filterable and condensable) | 1.53 lbs/hr and 4.30 TPY |
| AA-017 (Lay-up and Gluing of Veneer) | Operational Limitation | The presses are limited to a total maximum production of 274 MM sf/year (3/8” basis) | Monitoring, Recordkeeping and Reporting |
| AA-025 (22-Section Plywood Dryer No.3 and RTO1) | Operational Limitation | The emission point shall not be operated without the control device (Regenerative Thermal Oxidizer) | Daily recording of hours of operation of the dryer and RTO including monitoring, reporting and recordkeeping and Monthly Inspections of control device, and monitoring, recordkeeping and reporting |
| PM (filterable only) | 0.7 lbs/hr and 3.1 TPY | This unit emitted less than 50% of the allowable rate for PM/PM10 during the initial performance test.  The source submitted information that justified a correlation between the fire box temperature of the RTO and the destruction of PM/PM10. Particulates emitted from this unit are expected to be organic and therefore efficiently controlled by the RTO.  Due to the large margin of compliance during the performance test and the organic nature of PM, temperature monitoring required by the MACT Subpart DDDD, will be sufficient for demonstrating compliance. |
| PM10 (filterable and condensable) | 0.56 lbs/hr and 2.5 TPY |
| VOC | Reduce VOC emission by 90% or greater | No monitoring specifically for VOC’s will be done. However, since this emission point is subject to the MACT Subpart DDDD, we will assume all VOC’s will be controlled or destructed by the RTO. |
| AA-026 (22-Section Plywood Dryer No. 3 cooling zone-3 stacks) | Opacity | 40% | Weekly Visible Observations which may result in EPA Method 9 VEE |
| AA-025 (22-Section Plywood Dryer No. 3 equipped with RTO1)  and  AA-027 ( 17-Section Plywood Veneer Dryer No. 1 and 23-Section Plywood Dryer No. 2 equipped with RTO2) | HAPs | Reduce emission of total HAPs measured as THC, by 90% | MACT Initial compliance Continuous Parameter Monitoring System (CPMS) |
| Temperature | 3-hour block average of firebox temperature shall be greater than or equal to the minimum temperature established during the most recent performance test  1458.9 oF for AA-025 1395 oF for AA-027 | Continuous Temperature monitoring and continuous Fire Box Temperature |
|  | General Operations Requirement | MACT Continuous Compliance; Record Retention; Submission of Compliance Report; Monitoring Recordkeeping, and Reporting of deviations |
| AA-027 (17-Section Plywood Veneer Dryer No. 1 and 23-Section Plywood Dryer No. 2 equipped with RTO) | HAP’s | Routine Control Device Maintenance Exemption (RCDME) | Monitoring, Reporting, and Recordkeeping |
| AA-028 (Emergency Fire Pump) | PM | 0.6 lbs./MMBTU | Change oil and filter every 500 hours of operation or annually, whichever comes first.  (b)Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace when necessary.  (c)Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first and replace as necessary. |
| SO2 | 4.8 lbs/MMBTU |
| HAP | General Applicability |
| AA-029 (Fugitive Emissions from paved and unpaved Access Roads ) | Opacity | 40% |  |
| AA-030 (Group 1 Coating Operations) | Opacity | 40% |  |
| HAPs | Only use Non-HAP containing coatings | Monitoring, Reporting, and Recordkeeping |
| AA-031 (217 hp Diesel Fired Emergency Generator) | PM | 0.6 lbs./MMBTU |  |
| SO2 | 4.8 lbs/MMBTU |
| Opacity | 40% |
| NMHC+NOX  CO  PM  Opacity | Comply with the emission limits for new nonroad CI engines in 40 CFR 89.112 and 40 CFR 89.113 as follows:  4.0 g/kW-hr  3.5 g/kW-hr  0.20 g/kW-hr  20% during acceleration mode  15% during lugging mode  50% during the peaks in either the acceleration mode or lugging modes | Installation of a non-resettable hour meter;  approved purchasing and operating of the engine;  proper operation of engine and how to proceed if the engine operation procedures are revised from those recommended by the engine manufacturer approved guidelines. |
| Fuel Limitation |  | Purchase diesel fuel that meets the following requirements, as outlined in 40 CFR 80.510(b) for nonroad diesel fuel:  Maximum of 15 ppm sulfur content, and either a minimum cetane index of 40 or maximum aromatic content of 35% by volume |