Final Determination of Approval for Hood Industries, Inc. Waynesboro, Wayne County, Mississippi "Mill Modernization Project" Facility No. 2840-00004

Technical Review
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SECTION 1: FINAL DETERMINATION

I. General Information

Hood Industries, Inc. ("Hood") owns and operates an existing lumber mill at 915 Industrial Park Road in Waynesboro, Wayne County, Mississippi. The approximate Universal Transverse Mercator (UTM) coordinates for the lumber mill are 345.573 km East and 3,503.197 km North in UTM Zone 16 (88°37'43" West and 31°39'12" North). Hood currently operates a sawmill and planer mill for producing dimensional lumber on an approximately 85-acre site. Prior to planing, three kilns dry the lumber, including one indirect steam-heated batch lumber kiln, one direct-fired batch lumber kiln, and one continuous direct-fired lumber kiln. The three kilns are permitted to produce a total of 215 million board-feet per year (MMBF/yr). The boiler and heaters supporting the kilns primarily combust wood residue, or byproduct, generated on-site. As further described below, Hood is proposing to modernize the mill by replacing most of the existing mill equipment with more current technology.

Project Description

With the "Mill Modernization Project," Hood is proposing to modernize the lumber mill as follows:

- Replace equipment at the existing sawmill and planer mill;
- Remove the wood-fired boiler and associated steam-heated lumber kiln (Emission Points AA-001 and AA-011, respectively);
- Remove the batch direct-fired lumber kiln and associated feed system (Emission Points AA-013 and AA-009, respectively);
- Remove the pneumatic conveyance systems (including Emission Points AA-016 and AA-018);
- Modify the existing continuous lumber kiln from wood-fired to gas-fired and remove the fuel silo (Emission Points AA-014 and AA-015, respectively);
- Construct three new continuous direct gas-fired lumber kilns (Emission Points AA-019, AA-020, and AA-021); and
- Construct a new pneumatic conveyance system (Emission Point AA-022).

Modernization of the facility will transition away from using steam and combusting wood to combusting natural gas for purposes of drying the lumber and will provide a more efficient pneumatic conveyance system; therefore, potential emissions of all regulated NSR pollutants are expected to decrease with the exception of volatile organic compounds (VOC). The total lumber production from the four kilns will be 400 MMBF/yr, which reflects an increase from the current permitted production rate. Therefore, potential emissions of VOC associated with drying will increase.

Because the project encompasses both the construction of new emissions units and modification to existing emissions units, the hybrid test for projects that involve multiple types of emissions units found in 40 CFR 52.21(a)(2)(iv)(F) applies. For existing emissions units, project emissions were calculated using actual emissions from a consecutive 24-month baseline period within the

past ten years (i.e., calendar years 2017 and 2018), and projected actual emissions for the five-year period following completion of the project. For purposes of determining projected actual emissions from existing sources, Hood took a conservative approach and used the potential to emit, as allowed in 40 CFR 52.21(b)(41)(ii)(D). For new emissions units, the baseline actual emissions are zero and the potential emissions of the units were used.

The following table presents the project-related emissions changes. Since the project involved the shutdown and replacement of numerous sources, the actual decreases from these shutdowns are accounted for in Step 1. For purposes of the Step 2 netting analysis, there have been no modifications undertaken by the facility during the contemporaneous period that impacted VOC emissions.

Table 1. PSD Applicability

| Pollutant | Project- Related Emissions (TPY) | Significant Emission Rate (TPY) | Netting Analysis Required? (Yes/No) | Contemporaneous Emissions (TPY) | Total Net Emissions (TPY) | PSD Review Required? (Yes/No) |
|--|---|---------------------------------------|---|---------------------------------------|---------------------------------|-------------------------------------|
| PM (filterable) | -27.63 | 25 | No | | | No |
| PM ₁₀ (filterable + condensable) | -52.31 | 15 | No | | | No |
| PM _{2.5} (filterable + condensable) ¹ | -41.30 | 10 | No | | | No |
| NO _X ^{1,2} | 12.61 | 40 | No | | | No |
| SO ₂ ¹ | -3.77 | 40 | No | | | No |
| VOC ² | 529.76 | 40 | Yes | 0 | 529.76 | Yes |
| СО | -123.10 | 100 | No | | | No |
| H ₂ SO ₄ | | 7 | No | | | No |
| GHG (as CO ₂ e) ³ | 6,854 | 75,000 | No | | | No |

¹ NO_x and SO₂ are precursors for PM_{2.5}. Therefore, if NO_x or SO₂ exceed 40 TPY, the project is considered major for PM_{2.5}.

II. Best Available Control Technology (BACT) Analysis

The "Mill Modernization Project" results in a significant net emissions increase of VOC. Under 40 CFR 52.21(j), a BACT review is required for those new or modified emissions units emitting any regulated NSR pollutant for which there is a significant net emissions increase. A modified emissions unit is one undergoing a physical change or change in the method of operation. With this project, the modified and new sources of VOC are the four continuous direct gas-fired kilns (Emission Points AA-014, AA-019, AA-020, and AA-021).

For purposes of conducting the BACT Analysis, the five-step "top-down" BACT analysis was used by Hood as summarized below:

² Both NO_x and VOC are considered precursors for ozone with a significant emission rate of 40 TPY each.

³ Greenhouse gases (GHGs) are subject to regulation if the net emissions increase of one or more regulated NSR pollutants equals or exceeds the respective significant emission rate <u>and</u> the net emissions increase of GHGs is 75,000 tpy or more (determined as CO₂ equivalents).

Step 1: Identify all control technologies

Step 2: Eliminate technically infeasible control technologies

Step 3: Rank remaining control technologies by control effectiveness

Step 4: Evaluate the most effective controls

Step 5: Select BACT

VOC BACT Analysis for the Continuous Direct-Fired Kilns

VOC emissions in the kilns result from drying lumber, which drives off (or volatilizes) organic compounds in the wood. A much smaller portion of VOC emissions result from the combustion of natural gas; however, the burners emit the products of combustion directly to the kilns which are subsequently emitted with the VOCs from the drying process. Six control technologies were identified as potential options for controlling VOCs – incineration, adsorption, absorption, condensation, biological treatment, and proper operation and maintenance. The first five "add-on" control technologies were deemed technically infeasible.

One reason add-on control technologies are technically infeasible for continuous kilns is due to the ineffectiveness of capturing the exhaust from the kilns. Continuous kilns are open on both ends, with incoming air and exhaust flowing through both ends of the kiln. As noted in the technology review the U.S. EPA recently conducted for lumber kilns under 40 CFR Part 63, Subpart DDDD (88 FR 31856, May 18, 2023), only 40% to 80% of exhaust could be reasonably captured, rendering collection and control infeasible. In addition to the technical infeasibility of collecting the exhaust, further challenges to controlling the exhaust once collected are described below for each of the add-on control technologies.

• Incineration:

Incineration involves the heating of the exhaust gas to temperatures exceeding the autoignition temperature of the VOCs present in the gas stream, which is typically between 1400°F and 1600°F for a regenerative thermal oxidizer (RTO). In a recuperative catalytic oxidizer (RCO), a catalyst is used to oxidize the VOCs at lower temperatures of 500°F and 800°F. RTOs and RCOs can achieve destruction removal efficiencies in excess of 95%. However, incineration (or oxidation) is deemed technically infeasible for use on the kilns because of the low exhaust temperature of ~140°F and resinous nature and high moisture content of the gas stream. The low exhaust temperature results in condensation of the VOC and water, fouling the ductwork and other components of an RTO or RCO, including the catalyst media.

• Adsorption:

Activated carbon is often used in various industries to remove VOC by adsorbing the VOCs onto the highly porous surface of the activated carbon media, which can remove upwards of 95% of the VOCs. Once the activated carbon media is saturated, it can be replaced or regenerated for reuse. Although activated carbon works well on low temperature exhaust, it is not suitable for exhaust with a high moisture content because the water vapor will also adsorb to the carbon, significantly reducing the efficiency of adsorption. For this reason, adsorption is not technically feasible for control VOCs from the kilns.

• Absorption:

Absorption works by bringing the VOC-laden exhaust in contact with an absorbing liquid, typically water, which dissolves the VOCs, shifting them from the gas phase to the liquid phase. Absorption is typically achieved using a wet scrubber, such as a packed tower scrubber. Wet scrubbing can be anywhere from 70% to 99% efficient in removing VOCs that are highly water soluble. However, the efficiency decreases as the solubility of the VOCs in water decreases. Using scrubbing on the kiln exhaust is technically infeasible due to the low solubility of many of the VOC constituents, such as pinenes which are not water soluble. Additionally, scrubbing produces process wastewater which must be disposed of. The federal NPDES regulation governing wastewater from sawmills and planing mills prohibits the direct discharge of process wastewater.

• Condensation:

Condensation technologies work by cooling the VOC-laden exhaust below the dew point of the VOCs, such that they condense from gas to liquid form and can be collected. The effectiveness of condensation varies greatly depending on the nature of the gas stream and cooling temperature of the condenser but can be designed to achieve 50% to 90% VOC removal. Because of the low concentration of VOCs in the kiln exhaust, the exhaust would need to be supercooled to well below the normal condensation temperatures to remove any meaningful portion of the VOCs from the exhaust. Additionally, the high moisture content in the kiln exhaust would result in the water vapor condensing first, which could flood the condenser. As with absorption, there is a significant amount of process wastewater created which cannot be directly discharged per the federal NPDES regulations. Therefore, condensation is not technically feasible for controlling VOCs from lumber kilns.

• Biological Treatment:

Biological treatment, typically referred to as biofiltration, may be used to remove VOCs by exposing the VOC-laden exhaust to a biomedia bed where microorganisms break down the VOCs to carbon dioxide, water, and biomass. Biological treatment is generally 50% to 80% efficient for the removal of

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hydrophobic VOCs, such as the terpenes present in kiln exhaust. However, this technology is deemed technically infeasible for application to the kilns because the temperature of the kiln exhaust is higher than the ideal temperature for survival of the microorganisms. Additionally, process wastewater is generated from this treatment process, creating issues with disposal as noted above for absorption and condensation.

Upon evaluating numerous BACT determinations in EPA's RACT/BACT/LAER Clearinghouse (RBLC) for lumber kilns from the prior 10 years, no determinations resulted in the use of add-on control technology and most indicated that BACT is the use of good design and work practice standards. This was also the conclusion of the technology review recently conducted for lumber kilns under 40 CFR Part 63, Subpart DDDD with regards to organic hazardous air pollutants, which are also VOCs. Therefore, MDEQ deems BACT for the four kilns to be proper design and operation, including establishing a minimum moisture content of 10% and developing and implementing an Operations and Maintenance Plan.

Although VOC emission factors were provided in the RBLC, many appeared to be expressed as VOC on a carbon basis. An emission factor expressed on a carbon basis may underestimate actual VOC emissions for purposes of evaluating the impacts to air quality; therefore, the BACT limit in the proposed permit is 4.43 lb/MBF as determined using the "Wood Products Protocol 1" (WPP1), which better accounts for organic compounds such as formaldehyde and methanol, which have carbon-oxygen bonds.

III. Source Impact Analysis

The owner or operator of a proposed source or modification is required to demonstrate that allowable emission increases from the proposed source or modification, in conjunction with all other applicable emissions increases or reductions (including secondary emissions), will not cause or contribute to air pollution in violation of: 1) any national ambient air quality standard in any air quality control region; or 2) any applicable maximum allowable increase over the baseline concentration in any area.

The modeled concentrations used to determine compliance with any NAAQS and PSD increment depend on 1) the type of standard, i.e., deterministic or statistical, 2) the available length of record of meteorological data, and 3) the averaging time of the standard being analyzed. When the analysis is based on 5 years of National Weather Service meteorological data, the following estimates are used:

- For deterministically based standards (e.g., SO₂), the highest, second-highest short term estimate and the highest annual estimate; and
- For statistically based standards (e.g., PM₁₀), the highest, sixth-highest estimate and highest 5-year average estimate.

A. Existing Air Quality

Any application for a permit under the Prevention of Significant Deterioration program is required to contain an analysis of ambient air quality in the area that the major stationary source or major modification would affect for each of the following pollutants: a) for the source, each pollutant that it would have the potential to emit in a significant amount; b) for the modification, each pollutant for which it would result in a significant net emissions increase.

The land on which the facility is located is reasonably flat with no terrain irregularities, which could have an obvious effect on pollution dispersion. The area surrounding the Waynesboro, Mississippi facility is in attainment for all regulated pollutants. The pollutant under consideration in the analysis is volatile organic compounds (VOC). VOCs and nitrogen oxides (NOx) combine in the atmosphere to form ozone and, therefore, are called precursor emissions. Any significant emissions increase from an emission unit or net emissions increase at a major stationary source that is significant for VOC or NOx, which are precursor pollutants for ozone shall be considered significant for ozone (O₃). Under current guidance if one precursor for a pollutant exceeds the threshold, then all precursors for that pollutant must be taken into consideration and used in calculations.

The project emission changes are summarized below.

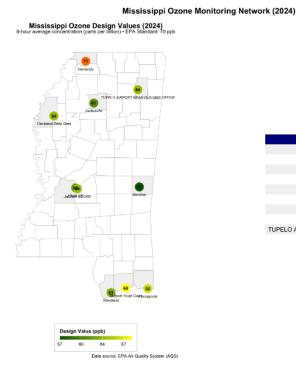
| | PROJECT CHANGE IN EMISSIONS, TONS | | | | | | | | | |
|--------|-----------------------------------|----------------------------------|--------|-------|---------|-------|--------|--------|--|--|
| | PM | PM PM10 PM2.5 SO2 CO NOX VOC GHG | | | | | | | | |
| CHANGE | -27.63 | -52.31 | -41.30 | -3.77 | -123.10 | 12.61 | 529.76 | 6,854 | | |
| SER | 25 | 15 | 10 | 40 | 100 | 40 | 40 | 75,000 | | |
| PSD? | NO | NO | NO | NO | NO | NO | PSD | NO | | |

MDEQ operates an ambient air quality network throughout the state of Mississippi and report their findings in the "Mississippi Department of Environmental Quality Air Quality Data Summary." This report looks at the reported levels of the criteria pollutants at various monitoring sites located across the State and compares these levels to the NAAQS to determine how the state is doing in meeting these standards. There is one primary and secondary ozone standard of 70 ppb, expressed as an 8-hour average. MDEQ monitors ozone continuously from March 1 through October 31 each year at the monitoring sites with the exception for the MDEQ NCORE site located in Jackson, MS which monitors ozone year-round.

Primary and Secondary 8-Hour Standard-

70 ppb

The 8-hour standard is met when the 3-year average of the annual fourth highest daily maximum 8-hour average concentration (also known as the design value) is less than or equal to 0.070 parts per million (ppm) or 70 parts per billion (ppb).



| Site | County | Design Value (ppb) |
|------------------------------------|------------|--------------------|
| Cleveland Delta State | Bolivar | 64 |
| Hernando | DeSoto | 71 |
| Waveland | Hancock | 63 |
| Gulfport Youth Court | Harrison | 68 |
| Hinds CC | Hinds | 62 |
| Jackson NCORE | Hinds | 64 |
| Pascagoula | Jackson | 66 |
| Meridian | Lauderdale | 57 |
| TUPELO AIRPORT NEAR OLD NWS OFFICE | Lee | 64 |
| 0. // | M-1-1 | 0.4 |

B. Modeling Procedure

All estimates of ambient concentrations are to be based upon applicable air quality models, data bases and other requirements specified in appendix W of 40 CFR Part 51 (Guideline on Air Quality Models).

The EPA Memorandums, "Guidance on the Development of Modeled Emission Rates for Precursors (MERPs) as a Tier I Demonstration Tool for Ozone and PM_{2.5} under the PSD Permitting Program," dated April 30, 2019, and "Guidance for Ozone and Fine Particulate Matter Permit Modeling" dated July 29, 2022 reflect EPA's recommendation for how agencies conduct air quality modeling and related technical analyses to satisfy compliance demonstration requirements for ozone and PM_{2.5} under the PSD Permitting Program. In accordance with the above-mentioned Guidance and the Revisions to the Guideline on Air Quality Models (40 CFR Part 51, Appendix), EPA recommends that an applicant use a "two-tiered" demonstration approach to address single-source impacts on ozone and secondary PM_{2.5}. The first tier involves the

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use of existing technical information to evaluate the relationships between precursor emissions and a source's impacts. The second tier involves the application of more sophisticated case-specific chemical transport models (CTMs) (e.g., photochemical grid models).

Using the Tier I Demonstration approach for PSD compliance, the emissions of the individual precursor pollutants are not added together to determine if there is an exceedance but looked at individually. If an exceedance occurs for one individual precursor, the precursor pollutants are compared to the hypothetical source's modeled emission rate and impacts (MERPs). The EPA provides access to its MERPs values on its MERPs VIEW Qlik website (https://www.epa.gov/scram/merps-view-qlik). If there is an exceedance of an individual precursor, then upon calculating the potential impacts, all precursors of either ozone or PM_{2.5} are taken into consideration when calculated.

Should the Tier I Demonstration find the critical air quality threshold, or significant impact level (SIL), would not be exceeded when considering the impact of the ozone precursor emissions of VOC and NOx, the proposed project will not cause ozone concentrations exceeding the ozone SIL. No further analysis or modeling will be required.

Ozone

This project has a significant net emissions increase of VOC of greater than 100 tons. As a result, an ambient air impact analysis for Ozone is required. Because of VOC increases are above 40 tons, the project falls under Case 2 of Table III-1 of the EPA's July 2022 Guidance of Ozone and Fine Particulate Matter Permit Modeling. As such, Hood has conducted a Tier 1 Approach demonstration, following final guidance in EPA's 2019 Memo "Guidance on the Development of Modeled Emission Rates for Precursors (MERPs) as a Tier 1 Demonstration Tool for Ozone and PM2.5 under the PSD Permitting Program." In that memo, EPA modeled hypothetical sources in various states to determine source level maximum predicted downwind impacts on 8-hr ozone.

Hood Industries calculated ozone impacts from the project emissions using EPA's MERPs values using the Actual – to – Potential test.

C. Air Quality Monitoring Requirements

Ambient air quality analysis is required to contain continuous air quality monitoring data. This data is gathered for purposes of determining whether emissions of any pollutant would cause or contribute to a violation of the standard or any maximum allowable increase. The facility must establish existing air quality in the area and air monitoring is required for each criteria pollutant that is proposed to be emitted at or above the de minimis. This requirement can be satisfied by either: 1) establishing a site-specific ambient monitoring network, or 2) using existing ambient monitoring data. If either the predicted modeled impact from an emission increase or the existing ambient concentration is less than the monitoring de minimis concentration, MDEQ has the

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discretionary authority to exempt an applicant from preconstruction ambient monitoring.

No de minimis air quality level is provided for ozone. However, any net emissions increase of 100-tpy or more of VOC or NO_x (the precursors for ozone formation) make the proposed PSD project required to perform an ambient impact analysis, including the gathering of ambient air quality data. The proposed project has a proposed emissions increase of 529.76 tpy VOC. Since the proposed project VOC emissions exceed 100 tpy, Hood Industries must establish existing air quality in the facility project area. To meet this requirement, Hood Industries proposes to use an existing air quality monitor as opposed to establishing their own site-specific ambient monitoring network.

Monitor Selection and Justification

Hood Industries proposed to use the existing air quality monitors in Meridian, MS to determine the background air quality. The MDEQ Air Quality Data Summary for 2024 indicates that the design ozone values for monitoring from central to south Mississippi range from 54 to 58 ppb, well below the ozone standard of 70 ppb. Although the area surrounding the Waynesboro sawmill is industrial, it is much less industrialized than the area covered by the Meridian monitor. As a result, the Meridian monitor is a conservative representation of ozone levels in the area of the project.

D. PSD Preliminary Analysis Modeling Impacts

In the preliminary analysis, only the significant increase in potential emissions of a pollutant from a proposed new source, or the significant net emission increase of a pollutant from a proposed modification is modeled. A full impact analysis for a particular pollutant is not required when emissions of that pollutant from a proposed source or modification would not increase ambient concentrations by more than prescribed significant ambient impact levels.

In accordance with the Revisions to the Guideline on Air Quality Models (40 CFR Part 51, Appendix W) EPA recommends that an applicant use a "two-tiered" demonstration approach to address single-source impacts on ozone and secondary PM_{2.5}. The first tier involves the use of existing technical information to evaluate the relationships between precursor emissions and a source's impacts. The second tier involves the application of more sophisticated case-specific chemical transport models (CTMs) (e.g., photochemical grid models). The April 30, 2019, Memorandum, "Guidance on the Development of Modeled Emission Rates for Precursors (MERPs) as a Tier 1 Demonstration Tool for Ozone and PM_{2.5} under the PSD Permitting Program", reflected EPA's recommendations on how to conduct an air quality modeling and related technical analyses to satisfy compliance demonstration requirements for Ozone and Secondary PM_{2.5} for permit related assessment under the PSD Program.

For ozone, the modeled air quality impact of an increase in precursor emissions from the hypothetical source is expressed in units of ppb or ppm. Consistent with the modeled emissions rates that are input to the air quality model to predict a change in pollutant concentration, MERPs are expressed as an annual emissions rate in tons per year (tpy).

Hood Industries performed a semi-quantitative assessment using the <u>Guidance on the Development of Modeled Emission Rates for Precursors (MERPs) as a Tier 1 Demonstration Tool for Ozone and PM2.5 under the PSD Permitting Program.</u> The approach in the document involves a screening technique whereby photochemical modeling of hypothetical sources were used to quantify potential individual sources impacts on ozone.

Tier 1 Demonstration for Ozone

The <u>US EPA MERPs View Qlik application</u> available on the EPA SCRAM website was used to derive the most conservative MERP for ozone for comparison in this analysis. Being that the Waynesboro facility is located in the South Climate Zone, all hypothetical source data from that Zone was downloaded and evaluated to select the most conservative MERPs for both VOC and NO_X. The lowest values were 2307 and 190, respectively.

NOx MERP Calculation:

$$1.00ppb \left(\frac{Selected\ Hyopthetical\ MERP)}{MaxConc} \right)$$

$$1.00ppb \left(\frac{500\ tpy}{2.629175663\ ug/m^3} \right)$$

$$= 190.174\ tpy$$

VOC MERP Calculation:

$$1.00ppb \left(\frac{Selected\ Hyopthetical\ MERP)}{MaxConc} \right)$$

$$1.00ppb \left(\frac{3,000\ tpy}{1.30062031575\ ug/m^3} \right)$$

$$= 2,306.592\ tpy$$

The recommended ozone SIL of 1-ppb was chosen to represent the critical air quality threshold. The SIL represents a de-minimis impact level, that is, if the maximum concentration of ozone due to a single source is less than the SIL, then it can be concluded that the source has an insignificant contribution to ozone formation. The hypothetical source's modeled emission rate and impacts along with the ozone SIL were used to calculate the MERPs values below:

$$\textit{Modeled Air Quality Impact} = (\textit{Critical Air Quality Threshold}) \left(\frac{\textit{Project Emissions}}{\textit{MERP}}\right)$$

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$$Modeled\ Air\ Quality\ Impact = (1ppb\ ozone)\left[\left(\frac{NOx\ Increase\ (tpy)}{NOx\ MERP\ (tpy)}\right) + \left(\frac{VOC\ Increase\ (tpy)}{VOC\ MERP\ (tpy)}\right)\right]$$

$$Modeled \ Air \ Quality \ Impact = (1ppb \ ozone) \left[\left(\frac{12.61 \ TPY \ NOx}{190.174 \ TPY \ NOx} \right) + \left(\frac{529.76 \ TPY \ VOC}{2,306.592 \ TPY \ VOC} \right) \right]$$

Modeled Air Quality Impact = 0.296 ppb ozone

The modeled Air Quality Impact is below the Ozone significant impact level. The proposed project will not cause ozone concentrations exceeding the recommended significant impact level of 1ppb for ozone. Further analysis is not required.

E. PSD Full Impact Analysis Modeling Impacts

A full impact analysis is required for any pollutant for which the proposed source's estimated ambient pollutant concentrations exceed prescribed significant ambient impact levels. This analysis expands the preliminary analysis in that it considers emissions from: the proposed source; existing sources; residential, commercial, and industrial growth that accompanies the new activity and the new source or modification. For SO₂, PM₁₀, PM_{2.5} and NO₂, the full impact analysis consists of separate analyses for the NAAQS and PSD increments.

The impact area is a circular area with a radius extending from the source to (1) the most distant point where approved dispersion modeling predicts a significant ambient impact will occur, or (2) a modeling receptor distance of 50 km, whichever is less.

The preliminary analysis results, presented in the section above, demonstrate the combined impacts of the ozone precursors, VOC and NOx, will not have a significant impact on the 8-hr daily maximum ozone. The proposed project will not cause ozone concentration exceeding the recommended significant impact level for ozone. No further analysis is required.

F. Vegetation and Soils Impact

VOCs are regulated as precursors to tropospheric ozone. Elevated ground-level ozone concentrations can damage plant life and crop production. VOCs interfere with the ability of plants to produce and store food, making them more susceptible to disease, insects, or other pollutants and harsh weather. Ozone is formed by the interaction of NOx, VOCs, and sunlight in the atmosphere. The effect of a proposed project's emissions on local soils and vegetation is often addressed through comparison of modeled impacts to the secondary NAAQS. The secondary NAAQS were established to protect general public welfare and the environment. Impacts below the secondary NAAQS are assumed to indicate a lack of adverse impacts on soils and vegetation.

The property is located within the Waynesboro Industrial Park. Other areas around the facility include some undeveloped land. Aside from the placement of a new log truck

entrance road through the adjacent property purchased by Hood for this project, there is no expected significant impact on soils and vegetation.

As the project potential for ozone formation due to emissions from the facility is insignificant. No adverse impacts on soil and vegetation are anticipated.

G. Associated Growth Impact

The owner or operator is required to provide an analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial and other growth associated with the source or modification.

As this mill modernization project will occur primarily on the site that the existing operations are located upon, there will be limited to no impact on the residential, commercial, or government infrastructure as a result of this project.

H. Class I Impact and Visibility

The Federal Land Managers' Air Quality Related Values Work Group (FLAG), Phase I Report – Revised (2010), provides recommendations, specific procedures, and interpretation of results for assessing visibility impacts of new or modified sources on Class I Area resources. Section 3.2., Initial Screening Criteria (New), presents a screening tool, Q/D, (where Q is the total SO₂, NO_x, PM₁₀, and H₂SO₄ annual emissions divided by D, the distance from the Class I Area) to screen out from Air Quality Related Values (AQRV) review for those sources with relatively small amounts of emissions located a large distance from a Class I Area. If this value is less than or equal to 10, the source will be considered to have negligible impacts with respect to Class I AQRV. The Federal Land Manager (FLM) (and the Federal official with direct responsibility for management of the Federal Class I parks as wilderness areas) will not request any further Class I AQRV impact analysis. As a minimum, the permitting authority should notify the FLM of all sources that exceed the Q/D criteria.

$$Q/D = \frac{(SO_2 + NO_x + PM_{10} + H_2SO_4)}{Distance\ from\ Class\ I\ Area}$$

| Class I Area | Class I Area Distance (km) | Q/D Value | Agency |
|------------------------------------|-------------------------------|-----------|-------------------------------|
| Breton National Wildlife Refuge | 210.18 | 0.515 | Fish & Wildlife Service (FWS) |
| Caney Creek Wilderness Area | 592.40 | - | Forest Service (FS) |
| Mingo Wilderness Area | 609.03 | - | Fish & Wildlife Service (FWS) |
| Sipsey Wilderness Area | 317.95 | - | Forest Service (FS) |
| Upper Buffalo Wilderness Area | 646.17 | - | Forest Service (FS) |

As seen in the table above, all 5 Class I areas that Mississippi affect are shown, but only the Breton Wildlife Refuge Q/D value was calculated, since it the only Class I

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area within 300km of the facility. Hood Industries is located approximately 210 km from the Breton National Wildlife Refuge. The increases of visibility impairing pollutants were below the PSD significant levels; therefore, no Class I impact is necessary.

IV. Other Requirements

A. Operation and Maintenance Plan

Consistent with other permits issued by MDEQ for new continuous direct-fired lumber kilns, the proposed permit requires the facility develop, implement, and maintain an Operation and Maintenance (O&M) Plan. The O&M Plan shall address preventative maintenance, parametric monitoring, work practices, and manufacturer's recommendations to ensure proper operation of the kilns. The permit also contains a minimum moisture content of 10% that the wood should not be dried beyond to ensure excessive VOC emissions are not released because of over-drying the wood.

B. 40 CFR Part 63, Subpart DDDD

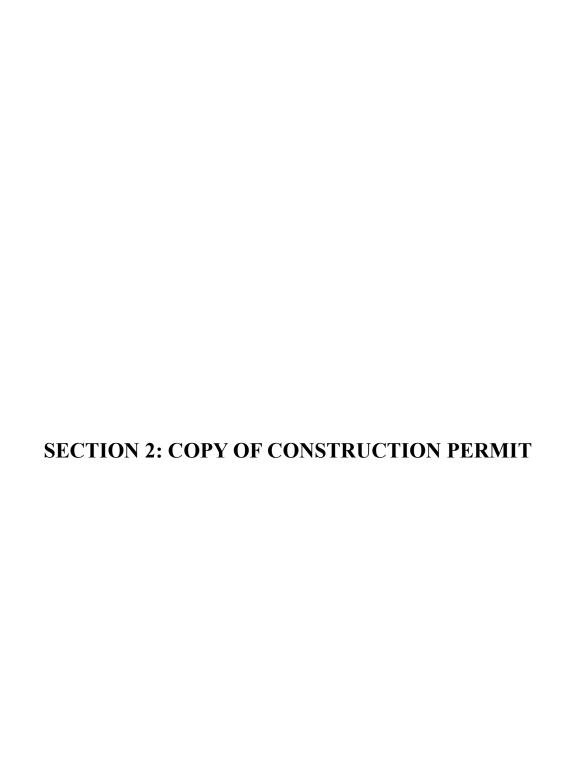
40 CFR Part 63, Subpart DDDD is the *National Emissions Standard for Hazardous Air Pollutants for Plywood and Composite Wood Products*. The existing lumber kilns at Hood are already subject to Subpart DDDD. To this date, no emission standards or work practices have been promulgated for lumber kilns under Subpart DDDD.

C. State Standards

State standards from 11 Miss. Admin. Code Pt. 2, Ch. 1 are included in the permit for opacity, particulate matter, and sulfur dioxide. Because the kilns will fire natural gas, potential emissions of opacity, particulate matter, and sulfur dioxide should be well below the State standards, such that no monitoring is required. The Pneumatic Conveyance System vents through a high-efficiency quad cyclone to separate the planer shavings from the conveying air. The cyclone is considered inherent to the process and should have minimal to no visible emissions. However, the permit requires routine inspections and monitoring of the pressure drop across the cyclone to ensure the cyclone is not overloaded and there are no leaks that lead to loss of shavings or poor performance.

V. Recommendation

The impact of the emission of air contaminants from the proposed modifications has been evaluated and the staff believes that, with proper constraints and limitations, this project will operate within all State and Federal air pollution control laws and standards and will protect public health and welfare. Therefore, the staff of the Board has decided, based on available information, to recommend to the Board that the permit be modified to reflect the requested changes.



STATE OF MISSISSIPPI **AIR POLLUTION CONTROL PERMIT**

AND PREVENTION OF SIGNIFICANT **DETERIORATION (PSD) AUTHORITY**

TO CONSTRUCT AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Hood Industries Inc, Waynesboro 915 Industrial Park Road Waynesboro, Wayne County, Mississippi

"Mill Modernization Project"

has been granted permission to construct air emissions equipment to comply with the emission limitations, monitoring requirements and other conditions set forth herein. This permit is issued in accordance with the provisions of the Mississippi Air and Water Pollution Control Law (Section 49-17-1 et. seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder and under authority granted by the Environmental Protection Agency under 40 CFR 52.01 and 52.21.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

Becky Simonson

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit No.: 2840-00004 Issued: October 16, 2025

SECTION 1. GENERAL CONDITIONS

1.1 This permit is for air pollution control purposes only.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D.)
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1.2 Any activities not identified in the application are not authorized by this permit.

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(Ref.: Miss. Code Ann. 49-17-29(1)(b))
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1.3 The knowing submittal of a permit application with false information may serve as the basis for the Permit Board to void the permit issued pursuant thereto or subject the applicant to penalties for operating without a valid permit pursuant to State Law.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(5).)
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1.4 It is the responsibility of the applicant/permittee to obtain all other approvals, permits, clearances, easements, agreements, etc., which may be required including, but not limited to, all required local government zoning approvals or permits.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D(6).)
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1.5 The issuance of a permit does not release the permittee from liability for constructing or operating air emissions equipment in violation of any applicable statute, rule, or regulation of state or federal environmental authorities.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(7).)
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1.6 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit, unless halting or reducing activity would create an imminent and substantial endangerment threatening the public health and safety of the lives and property of the people of this state.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(a).)
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1.7 The permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. Sufficient cause for a permit to be reopened shall exist when an air emissions stationary source becomes subject to Title V. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(b).)
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1.8 The permit does not convey any property rights of any sort, or any exclusive privilege.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(c).)
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1.9 The permittee shall furnish to the Department of Environmental Quality (DEQ) within a reasonable time any information the DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to

determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee shall furnish such records to the DEQ along with a claim of confidentiality. The permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(d).)

1.10 Design and Construction Requirements: The stationary source shall be designed and constructed so as to operate without causing a violation of an Applicable Rules and Regulations, without interfering with the attainment and maintenance of State and National Ambient Air Quality Standards, and such that the emission of air toxics does not result in an ambient concentration sufficient to adversely affect human health and well-being or unreasonably and adversely affect plant or animal life beyond the stationary source boundaries.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.A(1)-(3).)

1.11 The necessary facilities shall be constructed to prevent any wastes or other products or substances to be placed in a location where they are likely to cause pollution of the air or waters of the State without the proper environmental permits.

(Ref.: Miss. Code Ann. 49-17-29(1) and (2))

1.12 Fugitive Dust Emissions from Construction Activities: The construction of the stationary source shall be performed in such a manner so as to reduce fugitive dust emissions from construction activities to a minimum.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.A(4).)

- 1.13 *General Nuisances:* The permittee shall not cause, permit, or allow the emission of particles or any contaminants in sufficient amounts or of such duration from any process as to be injurious to humans, animals, plants, or property, or to be a public nuisance, or create a condition of air pollution.
 - (a) The permittee shall not cause or permit the handling, transporting, or storage of any material in a manner which allows or may allow unnecessary amounts of particulate matter to become airborne.
 - (b) When dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance to property other than that from which it originated or to violate any other provision of 11 Miss. Admin. Code Pt. 2, Ch. 1, the Commission may order such corrected in a way that all air and gases or air and gasborne material leaving the building or equipment are controlled or removed prior to discharge to the open air.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.C.)

- 1.14 Right of Entry: The permittee shall allow the Mississippi Department of Environmental Quality Office of Pollution Control and the Mississippi Environmental Quality Permit Board and/or their representatives upon presentation of credentials:
 - (a) To enter at reasonable times upon the permittee's premises where an air emission source is located or in which any records are required to be kept under the terms and conditions of this permit; and
 - (b) To have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit; and to sample any air contaminants or waste waters, fuel, process material, or other material which affects or may affect emission of air contaminants from any source.

(Ref.: Miss. Code Ann. 49-17-21)

- 1.15 *Permit Modification or Revocation:* After notice and opportunity for a hearing, the Permit Board may modify the permit or revoke it in whole or in part for good cause shown including, but not limited to:
 - (a) Persistent violation of any of the terms or conditions of this permit;
 - (b) Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
 - (c) A change in federal, state, or local laws or regulations that require either a temporary or permanent reduction or elimination of previously authorized air emission.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.C.)

1.16 Public Record and Confidential Information: Except for data determined to be confidential under the Mississippi Air & Water Pollution Control Law, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Mississippi Department of Environmental Quality, Office of Pollution Control.

(Ref.: Miss. Code Ann. 49-17-39)

1.17 *Permit Transfer:* This permit shall not be transferred except upon approval of the Permit Board.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.16.B.)

1.18 Severability: The provisions of this permit are severable. If any provision of the permit, or the application of any provision of the permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D(7).)

1.19 *Permit Expiration:* The permit to construct will expire if construction does not begin within eighteen (18) months from the date of issuance, if construction is suspended for eighteen (18) months or more, or if construction is not completed within a reasonable time. The DEQ may extend the 18-month period upon a satisfactory showing that an extension is justified.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.C(1)., R. 2.5.C(4)., and R. 5.2.)

1.20 *Certification of Construction:* A new stationary source issued a Permit to Construct cannot begin operation until certification of construction by the permittee.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(3).)

1.21 Beginning Operation: After certification of construction by the permittee, the Permit to Construct shall be deemed to satisfy the requirement for a permit to operate until the date the application for issuance or modification of the Title V Permit or the application for issuance or modification of the State Permit to Operate, whichever is applicable, is due. This provision is not applicable to a source excluded from the requirement for a permit to operate as provided by 11 Miss. Admin. Code Pt. 2, R. 2.13.G.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(4).)

1.22 Application for a Permit to Operate: The application for issuance or modification of the State Permit to Operate or the Title V Permit, whichever is applicable, is due twelve (12) months after beginning operation or such earlier date or time as specified in the Permit to Construct. The Permit Board may specify an earlier date or time for submittal of the application. Beginning operation will be assumed to occur upon certification of construction, unless the permittee specifies differently in writing.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(5).)

1.23 Operating Under a Permit to Construct: Upon submittal of a timely and complete application for issuance or modification of a State Permit to Operate or a Title V Permit, whichever is applicable, the applicant may continue to operate under the terms and conditions of the Permit to Construct and in compliance with the submitted application until the Permit Board issues, modifies, or denies the Permit to Operate.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(6).)

- 1.24 Except as otherwise specified herein, the permittee shall be subject to the following provisions with respect to upsets, startups, and shutdowns.
 - (a) Upsets (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.)
 - (1) For an upset, the Commission may pursue an enforcement action for noncompliance with an emission standard or other requirement of an applicable rule, regulation, or permit. In determining whether to pursue enforcement action, and/or the appropriate enforcement action to take, the Commission may consider whether the source has demonstrated through

properly signed contemporaneous operating logs or other relevant evidence the following:

- (i) An upset occurred and that the source can identify the cause(s) of the upset;
- (ii) The source was at the time being properly operated;
- (iii) During the upset the source took all reasonable steps to minimize levels of emissions that exceeded the emission standard or other requirement of an applicable rule, regulation, or permit;
- (iv) That within five (5) working days of the time the upset began, the source submitted a written report to the Department describing the upset, the steps taken to mitigate excess emissions or any other noncompliance, and the corrective actions taken and;
- (v) That as soon as practicable but no later than 24 hours of becoming aware of an upset that caused an immediate adverse impact to human health or the environment beyond the source boundary or caused a general nuisance to the public, the source provided notification to the Department.
- (2) In any enforcement proceeding by the Commission, the source seeking to establish the occurrence of an upset has the burden of proof.
- (3) This provision is in addition to any upset provision contained in any applicable requirement.
- (4) These upset provisions apply only to enforcement actions by the Commission and are not intended to prohibit EPA or third party enforcement actions.
- (b) Startups and Shutdowns (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.)
 - (1) Startups and shutdowns are part of normal source operation. Emission limitations apply during startups and shutdowns unless source specific emission limitations or work practice standards for startups and shutdowns are defined by an applicable rule, regulation, or permit.
 - Where the source is unable to comply with existing emission limitations established under the State Implementation Plan (SIP) and defined in 11 Mississippi Administrative Code, Part 2, Chapter 1, the Department will consider establishing source specific emission limitations or work practice standards for startups and shutdowns. Source specific emission limitations or work practice standards established for startups and shutdowns are subject to the requirements prescribed in 11 Miss. Admin. Code Pt. 2, R. 1.10.B(2)(a) through (e).

(3) Where an upset, as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.,occurs during startup or shutdown, see the upset requirements above.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.10.)

1.25 *General Duty:* All air emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

- 1.26 *Compliance Testing:* Regarding compliance testing:
 - (a) The results of any emissions sampling and analysis shall be expressed both in units consistent with the standards set forth in any Applicable Rules and Regulations or this permit and in units of mass per time.
 - (b) Compliance testing will be performed at the expense of the permittee.
 - (c) Each emission sampling and analysis report shall include but not be limited to the following:
 - (1) detailed description of testing procedures;
 - (2) sample calculation(s);
 - (3) results; and
 - (4) comparison of results to all Applicable Rules and Regulations and to emission limitations in the permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.6.B(3), (4), and (6).)

SECTION 2. EMISSION POINT DESCRIPTION

The permittee is authorized to construct and/or modify and operate, upon certification of construction, air emissions equipment, as described in the following table.

| Emission Point | Facility ID ¹ | Description |
|-------------------|--------------------------|---|
| AA-000 | | Facility-Wide [Hood Industries, Inc. – Waynesboro] |
| AA-014 | CDK1 | Continuous Direct-Fired Lumber Kiln No. 1 [equipped with a 45 MMBtu/hr natural gas-fired burner] |
| AA-019 | CDK2 | Continuous Direct-Fired Lumber Kiln No. 2 [equipped with a 45 MMBtu/hr natural gas-fired burner] |
| AA-020 | CDK3 | Continuous Direct-Fired Lumber Kiln No. 3 [equipped with a 45 MMBtu/hr natural gas-fired burner] |
| AA-021 | CDK4 | Continuous Direct-Fired Lumber Kiln No. 4 [equipped with a 45 MMBtu/hr natural gas-fired burner] |
| AA-022 | PCS | Planer Mill Operations using a Pneumatic Conveyance System for transferring shavings to the Dry Shavings Bin [equipped with a quad high efficiency cyclone to collect dry shavings, considered inherent to the process] |
| AA-023 | FUG - LOG PREP | Fugitive emissions from Sawmill Operations [including debarking, sawing, chipping, and material storage and handling] |
| AA-024 | FUG - ROADS | Fugitive emissions from Paved Truck Haul Roads |

¹ CDK = Continuous direct-fired kiln; FUG = Fugitives

SECTION 3. EMISSION LIMITATIONS AND STANDARDS

| Emission Point | Applicable Requirement | Condition Number(s) | Pollutant/ Parameter | Limitation/Standard |
|----------------------------|---|------------------------|-------------------------------|---|
| AA-000 | 11 Miss. Admin. Code Pt. 2, R. 1.3.F(1). | 3.1 | PM (filterable) | $E = 4.1(p^{0.67})$ |
| | 11 Miss. Admin. Code Pt. 2, R. 1.3.B. | 3.2 | Opacity | 40% |
| | 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). | 3.3 | Shutdown of batch kilns | Cease operation of existing batch kilns prior to startup of any new CDK |
| AA-014 AA-019 AA-020 | 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j) | 3.4 | VOCs (as WPP1) | 4.43 lb/MBF |
| AA-020 AA-021 | (PSD BACT Limits) | 3.5 | Dried Lumber Throughput | 100 MMBF/yr (Rolling 12-month total for each kiln) |
| | | 3.6 | Final Moisture Content | ≥ 10.0% (Monthly average) |
| | 40 CFR Part 63, Subpart DDDD NESHAP: Plywood and Composite Wood Products 40 CFR 63.2231 and 63.2252, Subpart DDDD | 3.7 | HAPs | General Applicability |
| | 11 Miss. Admin. Code Pt. 2, R. 1.3.A. | 3.8 | Opacity | 40% |
| | 11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b). | 3.9 | PM (filterable) | $E = 0.8808*I^{-0.1667}$ |

3.1 For Emission Point AA-000 (Facility-Wide), except as otherwise specified herein, the permittee shall not cause or allow the emission of particulate matter (PM) in total quantities in any one (1) hour from any manufacturing process (which includes any associated stacks, vents, outlets, or combination thereof) to exceed the amount determined by the following relationship: $E = 4.1(p^{0.67})$; where "E" is the emission rate in pounds per hour and "p" is the process weight input rate in tons per hour. Conveyor discharge of coarse solid matter may be allowed if no nuisance is created beyond the property boundary where the discharge occurs.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.F(1).)

3.2 For Emission Point AA-000 (Facility-Wide), the permittee shall not discharge into the ambient air from a point source any contaminant of such opacity as to obscure an observer's view to a degree in excess of forty percent (40%) opacity. This shall not apply to vision obscuration caused by uncombined water droplets.

- (Ref.: 11 Miss. Admin. Code Pt. 2. R. 1.3.B.)
- 3.3 For Emission Point AA-000 (Facility-Wide), the permittee shall cease operation of the batch kilns (i.e., Emission Points AA-011 and AA-013 see Title V Operating Permit issued April 15, 2024), prior to startup of one or more of the new continuous kilns (i.e., Emission Points AA-019, AA-020, or AA-021).
 - (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)
- 3.4 For Emission Points AA-014, AA-019, AA-020, and AA-021, the permittee shall limit the emissions of volatile organic compounds from each kiln to no more than 4.43 pounds per thousand board feet (lb/MBF), as determined by the "Wood Products Protocol 1" (VOCs as WPP1).
 - (Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j) PSD BACT Limit)
- 3.5 For Emission Points AA-014, AA-019, AA-020, and AA-021, the permittee shall limit the total throughput of dried lumber produced from each kiln to no more than 100 million board feet per year (MMBF/yr) based on a consecutive 12-month rolling total.
 - (Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j) PSD BACT Limit)
- 3.6 For Emission Points AA-014, AA-019, AA-020, and AA-021, the permittee shall limit the final moisture content of lumber dried to ten percent (10%) or greater as measured at the Planer Mill and determined on a monthly average basis.
 - (Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j) PSD BACT Limit)
- 3.7 For Emission Points AA-014, AA-019, AA-020, and AA-021, the permittee is subject to and shall comply with all applicable requirements found in 40 CFR Part 63, Subpart DDDD National Emission Standards for Hazardous Air Pollutants (NESHAP): Plywood and Composite Wood Products.
 - For the purpose of this permit, the Initial Notification required by Subpart DDDD has already been satisfied; therefore, no further requirements in Subpart DDDD apply.
 - (Ref.: 40 CFR 63.2231 and 63.2252, Subpart DDDD)
- 3.8 For Emission Points AA-014, AA-019, AA-020, and AA-021, the permittee shall not cause, permit, or allow the emission of smoke which exceeds forty (40) percent opacity. Startup operations may produce emissions which exceed 40% opacity for up to fifteen (15) minutes per startup in any one hour and not to exceed three (3) startups per stack in any twenty-four (24) hour period.
 - (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.A.)
- For Emission Points AA-014, AA-019, AA-020, and AA-021, emissions of particulate matter shall not exceed an emission rate determined by the relationship: $E = 0.8808*I^{-0.1667}$;

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where "E" is the emission rate in pounds per million BTU per hour heat input and "I" is the heat input in millions of BTU per hour.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).)

SECTION 4. WORK PRACTICES

| Emission Point(s) | Applicable Requirement | Condition Number | Work Practice Standard |
|----------------------|---|---------------------|------------------------|
| AA-024 | 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). | 4.1 | Pave truck haul roads |

4.1 For Emission Point AA-024, to minimize fugitive dust, the permittee shall ensure all truck haul roads are paved. For the purpose of this permit, "paved" shall be defined as the application of a durable surface material that can adequately sustain vehicular traffic.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

SECTION 5. MONITORING AND RECORDKEEPING REQUIREMENTS

| Emission Point | Applicable Requirement | Condition Number(s) | Pollutant/ Parameter | Monitoring/Recordkeeping Requirement |
|----------------------------|---|------------------------|----------------------------|--|
| Facility- Wide | 11 Miss. Admin. Code Pt. 2, R. 2.9. | 5.1 | Recordkeeping | Maintain records for a minimum of 5 years. |
| AA-014 AA-019 AA-020 | 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11). | 5.2 | VOCs | Develop, implement, and maintain an O&M Plan |
| AA-020 AA-021 | | 5.3 | Dried Lumber Throughput | Monitor the monthly throughput of lumber dried in each kiln and calculate the 12-month rolling total |
| | | 5.4 | Final Moisture Content | Monitor the moisture content of dried lumber daily and calculate the monthly average |
| AA-022 | 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11). | 5.5 | Inspections | Conduct monthly inspections of the pneumatic conveyance system |
| | | 5.6 | Pressure Drop | Monitor and record the pressure drop across the cyclone daily |

5.1 The permittee shall retain all required records, monitoring data, supporting information and reports for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes, but is not limited to, all calibration and maintenance records, all original strip-chart recordings or other data for continuous monitoring instrumentation, and copies of all reports required by this permit. Copies of such records shall be submitted to DEQ as required by Applicable Rules and Regulations or this permit upon request.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.9.)

5.2 For Emission Points AA-014, AA-019, AA-020, and AA-021, the permittee shall develop, implement, and maintain an Operation and Maintenance (O&M) Plan that details the operating practices used to minimize VOC emissions from each kiln. As deemed necessary, the permittee shall revise the O&M Plan to address any changes to applicable operations and/or to incorporate additional best management practices.

The O&M Plan shall address all preventative maintenance, parametric monitoring, work practices, and manufacturer's recommendations for the proper operation of the kilns. The plan shall specify the proper operating ranges and conditions, frequency of monitoring, and maintenance schedules. Additionally, the practices to be detailed in the O&M Plan shall include, but are not limited to, visual inspections, proper wet bulb operation, entrance/exit baffle inspection, greasing of kiln cartwheels and fan shafts, hydraulic oil levels, moisture content equipment calibration, and temperature probe calibration.

(Ref: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

5.3 For Emission Points AA-014, AA-019, AA-020, and AA-021, the permittee shall monitor and record the total monthly throughput of dried lumber produced by each kiln and shall calculate the consecutive 12-month rolling total of lumber dried for each kiln in MMBF/yr.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)
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5.4 For Emission Points AA-014, AA-019, AA-020, and AA-021, the permittee shall monitor and record the moisture content of dried lumber at the Planer Mill daily. This monitoring data shall be used to calculate the monthly average moisture content on a calendar month basis to demonstrate compliance with the moisture content standard in Condition 3.6.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)
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- 5.5 For Emission Point AA-022, the permittee shall perform a monthly inspection on the Pneumatic Conveyance System, including the cyclone, to ensure that it is operating as originally designed. An inspection shall evaluate (at a minimum) the following components:
 - (a) Blowers;
 - (b) Air lock valves;
 - (c) Fans; and
 - (d) Any ductwork associated with the cyclone.

The permittee shall maintain a log of the inspection, including the date, time, and components inspected. If any problem is noted during an inspection, the permittee shall take corrective measures to ensure operation of the Pneumatic Conveyance System and cyclone as originally designed. Any corrective measures taken and the date they were completed shall be noted in the log.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)
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5.6 For Emission Point AA-022, the permittee shall monitor and record the pressure drop (in inches of water) across the quad cyclone on a daily basis. If a monitored pressure drop is outside the manufacturer's recommended range for the cyclone, the permittee shall take corrective measures taken to return the cyclone to within the recommended pressure drop range. The permittee shall maintain a log of the date, time, and pressure drop, including the manufacturer's recommended range, and shall note any corrective measures taken and the date they were completed.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)
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SECTION 6. REPORTING REQUIREMENTS

| Emission Point | Applicable Requirement | Condition Number(s) | Reporting Requirement |
|----------------------------|--|------------------------|--|
| Facility- Wide | 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11). | 6.1(a) | Report deviations within five (5) working days |
| Wide | 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11). | 6.1(b) | Semiannual reporting |
| | 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11). | 6.1(c) | Certification by responsible official |
| | 11 Miss. Admin. Code Pt. 2, R. 2.5.C(2). | 6.1(d) | Notification of beginning actual construction within 15 days |
| | 11 Miss. Admin. Code Pt. 2, R. 2.5.C(3). | 6.1(e) | Notification when construction does not being or is suspended |
| | 11 Miss. Admin. Code Pt. 2, R. 2.5.D(1) and (3). | 6.1(f) | Certification of completion of construction prior to operation |
| | 11 Miss. Admin. Code Pt. 2, R. 2.5.D(2). | 6.1(g) | Notification of changes in construction |
| AA-014 AA-019 | 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11). | 6.2 | Submit a Semi-Annual Monitoring Report |
| AA-020 AA-021 | | 6.3 | Submit the O&M Plan |
| AA-019 AA-020 AA-021 | 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11). | 6.4 | Certification that batch kilns were removed from service |
| AA-022 | 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11). | 6.5 | Submit copies of inspection logs and pressure drop logs |

6.1 General Reporting Requirements:

(a) The permittee shall report all deviations from permit requirements, including those attributable to upsets, the probable cause of such deviations, and any corrective actions or preventive measures taken. Said report shall be made within five (5) working days of the time the deviation began.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

(b) Beginning upon issuance of this permit and lasting until issuance or modification of the applicable operating permit, the permittee shall submit reports of any required monitoring by July 31st and January 31st for the preceding six-month period. All instances of deviations from permit requirements must be clearly identified in such reports and all required reports must be certified by a responsible official consistent with 11 Miss. Admin. Code Pt. 2, R. 2.1.C. Where no monitoring data is required to be reported and/or there are no deviations to report, the report shall contain the appropriate negative declaration. For any air emissions equipment not yet constructed and/or operating the report shall so note and include an

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estimated date of commencement of construction and/or startup, whichever is applicable.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)
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(c) Any document required by this permit to be submitted to the DEQ shall contain a certification signed by a responsible official stating that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)
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(d) Within fifteen (15) days of beginning actual construction, the permittee must notify DEQ in writing that construction has begun.

```
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.C(2).)
```

(e) The permittee must notify DEQ in writing when construction does not begin within eighteen (18) months of issuance or if construction is suspended for eighteen (18) months or more.

```
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.C(3).)
```

(f) Upon the completion of construction or installation of an approved stationary source or modification, and prior to commencing operation, the applicant shall notify the Permit Board that construction or installation was performed in accordance with the approved plans and specifications on file with the Permit Board. If construction is completed on one or more new continuous kilns, the permittee shall include the date(s) the existing kilns were decommissioned, removed, or otherwise rendered inoperable.

```
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(1) and (3).)
```

(g) The Permit Board shall be promptly notified in writing of any change in construction from the previously approved plans and specifications or permit. If the Permit Board determines the changes are substantial, it may require the submission of a new application to construct with "as built" plans and specifications. Notwithstanding any provision herein to the contrary, the acceptance of an "as built" application shall not constitute a waiver of the right to seek compliance penalties pursuant to State Law.

```
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(2).)
```

- 6.2 For Emission Points AA-014, AA-019, AA-020, and AA-021, the permittee shall submit a semiannual report in accordance with Condition 6.1(b) that details the following information:
 - (a) Any revision(s) made to the O&M Plan for the kilns;

- (b) The total dried lumber throughput produced from each kiln in MMBF/yr, on a 12-month rolling total basis calculated for each month of the semiannual period; and
- (c) The daily moisture content and monthly average moisture content of the dried lumber measured at the Planer Mill.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

6.3 For Emission Points AA-014, AA-019, AA-020, and AA-021, the permittee shall submit the initial O&M Plan required by Condition 5.2 to the DEQ for review no later than sixty (60) days after the initial start-up of one or more kilns.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

6.4 For Emission Points AA-019, AA-020, and AA-021, in conjunction with the notification of completion of construction required by Condition 6.1(f), the permittee shall include a certification that the existing batch kilns (i.e., Emission Points AA-011 and AA-013) were removed from service and the date each was taken out of service.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

6.5 For Emission Point AA-022, in accordance with Condition 6.1(b), the permittee shall submit a copy of the inspection logs required by Condition 5.5 and pressure drop logs required by Condition 5.6.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

SECTION 3: PUBLIC NOTICE AND PROOF OF PUBLICATION

Public Notice Mississippi Environmental Quality Permit Board P. O. Box 2261 | Jackson, MS 39225 515 East Amite St. | Jackson, MS 39201 Telephone No. (601) 961-5171

Public Notice Start Date: September 10, 2025 MDEQ Contact: Jeffrey Bland

Hood Industries Inc., Waynesboro ("Hood"), located at 915 Industrial Park Road, in Waynesboro, MS, (601) 735-5038, has applied to the Mississippi Department of Environmental Quality (MDEQ) for the following permitting action: Issuance of a Prevention of Significant Deterioration (PSD) Permit to Construct, Air Ref. No. 2840-00004. The applicant's operations fall within SIC Code 2421 (Sawmills and Planing Mills). A Preliminary Determination has been prepared that contains a discussion of the decision-making that went into the development of the permit and provides the permitting authority, the public, and other government bodies a record of the technical issues surrounding issuance of the permit. The Preliminary Determination also addresses the changes to emissions resulting from modification of the facility.

Hood currently operates a sawmill, three kilns, and a planer mill for producing dimensional lumber on an approximately 85-acre site. Hood is proposing to modernize the mill by replacing most of the existing mill equipment with more current technology, including replacing the sawmill, planer mill, and pneumatic conveyance system. Hood will also construct three new continuous direct-fired kilns and remove two older kilns. The three new kilns and one remaining kiln will burn only natural gas, rather than wood byproduct. The modernization project is considered a major modification for volatile organic compounds (VOCs) under the PSD regulations of 11 Miss. Admin. Code Pt. 2, Ch. 5 because the net emissions increase of VOCs exceeded the PSD significant emission rate of 40 tons per year. No other pollutants exceeded their respective PSD significant emission rates. The PSD regulations require a Best Available Control Technology (BACT) analysis for VOCs emitted from the kilns. Additionally, an Air Quality Analysis for VOCs, which are a precursor for ozone, is required to ensure they do not contribute to a significant impact to ozone concentrations in the ambient air.

The staff of the Permit Board has developed this draft permit based on information submitted to the Permit Board by the applicant, appropriate State and Federal agencies and other interested parties. The staff of the Permit Board is soliciting all relative information pertaining to the proposed activity, including public comment, to ensure that the final staff recommendation on the draft permit complies with all State and Federal regulations. Public review and comment on the draft permit and supporting documentation is an important element in the staff evaluation and resulting recommendation to the Permit Board. The draft permit conditions have been developed to ensure compliance with all State and Federal regulations but are subject to change based on information received as a result of public participation.

Persons wishing to comment upon or object to the proposed determinations are invited to submit comments in writing to Jeffrey Bland at https://www.mdeq.ms.gov/bland-jeffrey or to the Permit Board address shown above, no later than the end of the thirty (30) day public notice. All comments received by this date will be considered in the formulation of final determinations regarding the application(s). A public hearing will be held if the Permit Board finds a significant degree of public interest in the proposed permit(s). Persons wishing to request a public hearing may do so by submitting that request in writing to Jeffrey Bland at https://www.mdeq.ms.gov/bland-jeffrey or to the Permit Board address shown above. The Permit Board is limited in the scope of its analysis to environmental impact. Any comments relative to zoning or economic and social impacts are within the jurisdiction of local zoning and planning authorities and should be addressed to them.

Additional details about the application, including a copy of the draft permit, are available by writing or calling the Public Records Request Officer at the above Permit Board address and telephone number or by completing the form at the following website: https://www.mdeq.ms.gov/about-mdeq/public-records-request/public-records-request-form/. Additionally, a copy of the draft permit and statement of basis may be found on the MDEQ's website at: https://opc.deq.state.ms.us/publicnotice.aspx. The PSD application for this permitting action is available at https://www.mdeq.ms.gov/permits/environmental-permits-division/additional-information-for-permits-at-public-notice/. This information is also available for review at the office of the MDEQ at the Permit Board address shown above during normal business hours. Please bring the foregoing to the attention of persons whom you know will be interested.

| Hollandale POTW | Water NPDES Minor Municipal Renewal | Hollandale | Washington | 11/07/2025 | 慳 | 慳 |
|---|--|-----------------|------------|------------|----------|----------|
| Hood Industries Inc, Waynesbor | Air Air- Constructio o PSD | Waynesbord n | o Wayne | 10/10/2025 | 慳 | 慳 |
| Internation Paper Company, Vicksburg Mill | alWater NPDES Major Industrial Renewal | Redwood | Warren | 11/13/2025 | 慳 | 慳 |
| Kimberly Clark Corporation Corinth Mill | Water า,Pretreatme Renewal | ntCorinth | Alcorn | 11/03/2025 | © | © |
| Meridian POTW | Water NPDES Major Municipal Renewal | Meridian | Lauderdale | 10/29/2025 | 慳 | 慳 |





MDEQ > Permits > Environmental Permits Division > Additional Information for Permits at Public Notice

Additional Information for EPD Permits at **Public Notice**

To better support the public notice process, we have listed supporting documents for permits at notice on this page.

Please note – Public notice, Draft Permit, and Statement of Basis can be found on enSearch Online - Permits at Public Notice. If you have additional questions regarding the permit or notice, please contact staff listed in the public notice. To request additional documents, please contact our Public Records Request Officer.

Hood Industries Inc., Waynesboro Issuance of a PSD Permit to Construct Public Notice Period: 9/10/2025 - 10/10/2025 **Application**

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Careers & Opportunities

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SECTION 4: EMAILS TO EPA AND JURISDICTIONAL BODIES



Public Notice for Hood Industries, Inc., Waynesboro Mill

From Carla Brown <carla.brown@controlconceptsms.com>

Date Tue 9/9/2025 9:28 AM

To mdavis@waynecountyms.gov < mdavis@waynecountyms.gov >

Cc Jeffrey Bland <jbland@mdeq.ms.gov>

1 attachment (67 KB)

Hood Industries Waynesboro Public Notice.pdf;

Ms. Davis:

Would you please distribute this email to the Wayne County Board of Supervisors?

Attached please find a copy of the public notice for the above referenced facility located in Waynesboro, Wayne County, Mississippi. Additional information regarding the proposed permitting action may be obtained from the Mississippi Department of Environmental Quality (MDEQ) office or at the following website: https://opcgis.deq.state.ms.us/ensearchonline/epd-permits-at-public-notice.aspx.

If you have any comments concerning the proposed permitting action, please notify MDEQ in writing no later than October 10, 2025. If you would like to contact me to discuss any of these concerns, please email me or call me at 601-529-2312.

Thank you,

Carla Brown
MDEQ Contractor



Public Notice for Hood Industries, Inc., Waynesboro Mill

From Carla Brown <carla.brown@controlconceptsms.com>

Date Tue 9/9/2025 9:30 AM

To cityofwaynesboro@gmail.com <cityofwaynesboro@gmail.com>

Cc Jeffrey Bland <jbland@mdeq.ms.gov>

1 attachment (67 KB)

Hood Industries Waynesboro Public Notice.pdf;

Honorable Mayor:

Attached please find a copy of the public notice for the above referenced facility located in Waynesboro, Wayne County, Mississippi. Additional information regarding the proposed permitting action may be obtained from the Mississippi Department of Environmental Quality (MDEQ) office or at the following website: https://opcgis.deg.state.ms.us/ensearchonline/epd-permits-at-public-notice.aspx.

If you have any comments concerning the proposed permitting action, please notify MDEQ in writing no later than October 10, 2025. If you would like to contact me to discuss any of these concerns, please email me or call me at 601-529-2312.

Thank you,

Carla Brown
MDEQ Contractor

EPD - enReview Email

PSD Notice

The Mississippi Department of Environmental Quality has prepared a draft PSD permit for the facility identified below. A copy of this draft permit and other relevant documents can be viewed using the following link.

Permit No. 2840-00004.

Additional facility information can be viewed at: Hood Industries Inc, Waynesboro.

A summary of all PSD applications under review in Mississippi can be viewed at: MDEQ PSD enReview.

Facility Name: Hood Industries Inc, Waynesboro

City: Waynesboro County: Wayne

Please contact the permit writer, Carla Brown ((601) 961-5673 / cbrown@mdeq.ms.gov), or the branch manager, Audra Sandifer ((601) 961-5673 / asandifer@mdeq.ms.gov), for additional information or if any of the associated documents are not available.

Recipients: , NSRsubmittals@epa.gov, PBRADLEY@MDEQ.MS.GOV, Shepherd.Lorinda@epa.gov, adams.yolanda@epa.gov, asandifer@mdeq.ms.gov, asmith@mdeq.ms.gov, gillam.rick@epa.gov, howard.chris@epa.gov, ipilgrim@mdeq.ms.gov, kmertes@mdeq.ms.gov, rcuevas@mdeq.ms.gov.

This email was electronically generated on Tue 09-Sep-2025 21:30:01 and is intended to complete the notification requirements under 40 CFR 51.166(q)(2)(iv) adopted by reference in Mississippi Commission on Environmental Quality Regulation 11, Mississippi Administrative Code, Part 2, Chapter 5.

EPD - enReview Email

PSD Notice

The Mississippi Department of Environmental Quality has received a PSD application for the facility listed below. If the project is within 300 km of a Class 1 area and has significant emissions of one or more visibility impairing pollutants, a Project Summary will be completed and available for review shortly.

Permit No. 2840-00004.

Additional information concerning the facility can be viewed through the following link:

Hood Industries Inc, Waynesboro.

A summary of all of the PSD applications under review in the State of Mississippi can be viewed at:

MDEQ PSD enReview.

Facility Name: Hood Industries Inc, Waynesboro

City: Waynesboro County: Wayne

Permit Number: 2840-00004

Receipt Date: 05/28/2025

Please contact the permit writer, Carla Brown ((601) 961-5673 / cbrown@mdeq.ms.gov), or the branch manager, Audra Sandifer ((601) 961-5673 / asandifer@mdeq.ms.gov), for additional information or if any of the associated documents are not available.

Recipients: NSRsubmittals@epa.gov, PBRADLEY@MDEQ.MS.GOV, Shepherd.Lorinda@epa.gov, adams.yolanda@epa.gov, asandifer@mdeq.ms.gov, asmith@mdeq.ms.gov, gillam.rick@epa.gov, howard.chris@epa.gov, ipilgrim@mdeq.ms.gov, kmertes@mdeq.ms.gov, rcuevas@mdeq.ms.gov, .

This email was electronically generated on Tue 09-Sep-2025 21:30:01 and is intended, in part, to meet the notification of application received requirements under 11 Miss. Admin. Code Pt. 2, R. 5.5. and 40 CFR 52.21(p)(1) adopted by reference in 11 Miss. Admin. Code Pt. 2, Ch. 5. A copy of the permit application and other relevant documentation submitted to the MDEQ will be forwarded to EPA and to the FLM, if within 100 km of a Class 1 area or upon request by the FLM.

SECTION 5: COMMENTS RECEIVED

(No comments were received during the public notice period.)