**INFORMATION RELATIVE TO**

**THE TITLE V OPERATING PERMIT**

**September 11, 2020**

GENERAL FACILITY INFORMATION

**Facility Name:** Biewer Sawmill Newton, LLC

**Facility Address:** 331 Coliseum Drive; Newton, MS 39345

**County:** Newton

**SIC Code(s):** 2421

**NAICS Code(s):** 321113

APPLICATION SUMMARY

|  |  |
| --- | --- |
| **Permit No.:** 1980-00044 | **NSPS (Part 60):** N/A |
| **Permit Action:** Initial Issuance | **NESHAP (Part 61):** N/A |
| **Permit Folder:** PER20170001 | **NESHAP (Part 63):** DDDD |
| **Application Receipt Date:** 12/13/2017 (initial) 08/05/2020 (revised) | **112(r) / RMP:** N/A |
| **Application Deemed Complete:** N/A | **Other:** N/A |
| **CBI Submitted?:** No |  |

FACILITY DESCRIPTION

Biewer Sawmill Newton, LLC (“Biewer”) is an existing industrial facility that manufactures dried dimensional lumber from harvested southern yellow pine timber. The operational path involves debarking pine timber and then creating green dimensional timber in the sawmill area. The green lumber is then stacked and placed in four (4) continuous direct-fired lumber drying kilns (each fueled by natural gas). The dried rough lumber is then finished (i.e. shaped to the requisite thickness, width, and length) in the planer mill.

TITLE V SOURCE APPLICABILITY

Biewer’s potential-to-emit (PTE) exceeds the Title V major source threshold of 100 tons per year (tpy) for volatile organic compounds (VOCs). Additionally, the facility’s PTE for hazardous air pollutants (HAPs) exceeds the Title V major source threshold of 25.0 tpy for all HAPs in total and 10.0 tpy for an individual HAP (specifically methanol).

**Facility-Wide Potential-to-Emit Summary1**

| **Pollutant** | **PTE Emissions****(tons/yr)** |
| --- | --- |
| Particulate Matter (TSP) | 26.56 |
| PM10 | 15.49 |
| PM2.5 | 10.47 |
| Sulfur Dioxide (SO2) | 0.40 |
| Nitrogen Oxides (NOX) | 34.14 |
| Carbon Monoxide (CO) | 56.04 |
| Volatile Organic Compounds (VOCs) | 830.91 |
| Total Reduced Sulfur (TRS) | 0.00 |
| Lead | 0.00 |
| CFC/HCFC | 0.00 |
| Total HAPs | 51.46 |

1 The PTE emissions reflect any emission limits or enforceable restrictions included in the proposed permit.

PREVENTION OF SIGNIFICANT DETERIORATION (PSD) APPLICABILITY

Given that the facility is not one (1) of the twenty-eight (28) categorical stationary sources listed in 40 CFR 52.21(b)(1)(i)(c)(iii), the applicable threshold is 250 tpy. As Biewer has the potential to emit volatile organic compounds (VOCs) in excess of the noted threshold, the facility is considered a PSD major stationary source. However, this permitting action will not change the current PSD status of the facility.

FACILITY MODIFICATIONS AND/OR PERMIT CHANGES

This permitting action is for the initial issuance of a Title V Operating Permit (TVOP). An initial application was received on December 13, 2017 after the facility certified construction as complete for the project authorized under the PSD Construction Permit issued on March 28, 2016.

While the MDEQ was processing the initial application, Biewer submitted another application on April 27, 2018 requesting a modification of the initial PSD Construction Permit (which was eventually modified on November 7, 2018). Upon completing construction of the modification, Biewer submitted a revised application for the initial TVOP on August 5, 2020.

As a part of this initial issuance, the following action have been incorporated into the TVOP:

* *PSD Construction Permit (issued on March 28, 2016; modified on November 7, 2018)* – As a result of both the initial permit issuance and the subsequent permit modification, limitations and standards were established as either Best Available Control Technology (BACT) or PSD avoidance.

Additionally, the following requests made by the facility have been incorporated into the TVOP:

* *Inclusion of a fourth (4th) continuous direct-fired lumber drying kiln* – In an effort to address the demand for dried lumber of various dimensions (e.g. 2 feet × 6 feet; 2 feet × 8 feet; etc.), Biewer requested within the revised application for approval to install / operate one (1) new continuous direct-fired lumber drying kiln (CDK) with the same design specifications as the three (3) existing CDKs. Additionally, Biewer requested that the new CDK [i.e. Emission Point AA-015] be encompassed under the BACT limitations established for the three (3) original CDKs in the modified PSD Construction Permit. With the inclusion of the new CDK under the noted limitations, there will not be an increase in dried lumber production nor an increase in VOC emissions.
* *Inclusion of applicable Compliance Assurance Monitoring (CAM) language* – While not technically required until the first renewal of the TVOP, Biewer opted to incorporate CAM-related monitoring and reporting requirements within the initial TVOP for the control device attributed to the planer mill area [i.e. Emission Point AA-009].
* *Removal of emission sources* – The modified PSD Construction Permit issued on November 7, 2018 authorized the construction of two (2) bark hogs [i.e. Emission Point AA-005] and two (2) wood chippers [i.e. Emission Point AA-008]. However, through the revised TVOP application, Biewer clarified that one (1) debarker and one (1) wood chipper were not constructed within the permitted construction window (construction was certified as complete on October 17, 2019).

COMPLIANCE ASSURANCE MONITORING (CAM) APPLICABILITY

40 CFR Part 64 specifies the requirements for CAM. The general applicability of this rule can be found in 40 CFR 64.2 and requires a Title V source to comply with the CAM requirements if all three of the following criteria are met for a pollutant-specific emission unit (PSEU):

1. The unit is subject to an emission limitation or standard for a regulated air pollutant other than exemptions under 40 CFR 64.2(b)(1);
2. The unit uses a control device to comply with the standard; and
3. The unit has pre-control emissions exceeding Title V major source threshold.

Based on the outlined criteria, the planer mill area (Emission Point AA-009) is subject to CAM. Moreover, as the usage of a control device at the planer mill area (i.e. a cyclofilter) reduces particulate matter (PM10; PM2.5) emissions below the Title V threshold, the emission source is classified as an “*Other*” type. As such, Biewer is required to monitor and record the differential pressure drop daily.

**CAM Applicability Table for Sources with Control Devices**

| **Emission Point ID** | **Control Device** **(not including inherent controls)** | **Applicable Limit / Standard** | **Is standard exempt? (Yes/No)** | **Pre-Control > 100 tpy (Yes/No)** | **CAM Applies? (Yes/No)** | **Type of CAM PSEU****(Large/Other)** |
| --- | --- | --- | --- | --- | --- | --- |
| AA-009 | Cyclofilter | 20.93 tons / hour70,000 tpy (12-Month Rolling Total) | No | Yes | Yes | Other |

NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP) APPLICABILITY

**40 CFR Part 63, Subpart DDDD – National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products**

Biewer is subject to this subpart because it meets all of the following qualifying criteria:

(1) Lumber kilns are operated on-site (i.e. Emission Points AA-001 through AA-003 and AA-015);

(2) The facility produces kiln-dried lumber, which is considered a “*composite wood product*”; and

(3) The facility is a major source of HAP emissions.

While technically subject to the subpart, the applicable emission sources are not specifically subject to any promulgated compliance options, operating requirements and work practice requirements. The facility is only required to comply with an initial notification requirement promulgated by 40 CFR 63.9(b); Subpart A via Subpart DDDD, which the facility has already fulfilled. Therefore, the denoted emission points are only subject to Subpart DDDD for applicability purposes.

**40 CFR Part 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines**

Biewer operates one (1) natural gas-fired, spark-ignition reciprocating internal combustion engine [i.e. Emission Point AA-014] that is subject to this subpart. However, each engine was manufactured after June 12, 2006 and is also subject to 40 CFR Part 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (see “*40 CFR Part 60 – Subpart JJJJ*” applicability section)..

NEW SOURCE PERFORMANCE STANDARDS (NSPS) APPLICABILITY

**40 CFR Part 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines**

As previously stated, Biewer operates one (1) natural gas-fired stationary spark-ignition internal combustion emergency engine that was constructed after the applicable date of June 12, 2006 [i.e. Emission Point AA-014]. Therefore, the denoted engine is subject to applicable requirements found in Subpart JJJJ. More specifically, these engines must comply with certain emission standards for nitrogen oxides + hydrocarbons (NOX + HC) and carbon monoxide (CO).

By complying with the applicable requirements of this subpart, Biewer is also demonstrating compliance with 40 CFR Part 63, Subpart ZZZZ.

SPECIFIC APPLICABLE REQUIREMENTS

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| --- | --- | --- | --- | --- |
| **Emission** **Point(s)** | **Pollutant(s) /****Parameter(s)** | **Applicable Requirement(s)** | **Limitation(s) / Standard(s)** | **Monitoring Requirement(s)** |
| AA-100 | Opacity | 11 Miss. Admin. Code Pt. 2, R. 1.3.A.11 Miss. Admin. Code Pt. 2, R. 1.3.B. | ≤ 40% | The facility shall demonstrate compliance with the opacity standard by performing and recording routine visible emission observations from the emission sources that can significantly impact opacity. |
| AA-001AA-002AA-003AA-015 | PM(filterable only) | 11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b). | $$E=0.8808 (I^{-0.1667})$$ | Given that these units combust pipeline-grade natural gas, the margin of compliance for this standard should be significant. |
| Lumber Throughput | 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued March 28, 2016 and modified on November 7, 2018**(PSD BACT Limits)** | 350.0 MMBF / Year (for Combined Kilns; 12-Month Rolling Total) | The facility will monitor and record the dried lumber throughput of the kiln both monthly and on a rolling 12-month total basis to demonstrate compliance. |
| Final Moisture Content | 10% or Greater | The facility will monitor the moisture content of dried lumber processed through the planer mill area. And will maintain monthly moisture content trending data. |
| Maximum Operating Temperature | 275 ºF | The facility will record monthly operating temperature trending data. |
| AA-004 | PM(filterable only) PM10 / PM2.5(filterable + condensable) | 11 Miss. Admin. Code Pt. 2, Ch. 5., as established in the PSD Permit to Construct issued March 28, 2016 and modified on November 7, 2018**(PSD Avoidance Standard)** | Operational Requirement (Total Enclosure) | The facility will perform monthly visible emission observations on the ambient air outside each building. |
| AA-007 | Operational Requirement (Full Enclosure) |
| AA-009 | 11 Miss. Admin. Code Pt. 2, Ch. 5., as established in the PSD Permit to Construct issued March 28, 2016 and modified on November 7, 2018**(PSD Avoidance Limit)** | 20.93 Tons / Hour70,000 tpy (12-Month Rolling Total) | The facility will monitor the total throughput of dried lumber shavings / trim to the cyclofilter monthly and calculate an average hourly throughput (based on actual hours of operation). |

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| --- | --- | --- | --- | --- |
| **Emission** **Point(s)** | **Pollutant(s) /****Parameter(s)** | **Applicable Requirement(s)** | **Limitation(s) / Standard(s)** | **Monitoring Requirement(s)** |
| AA-009 | Differential Pressure Range | 11 Miss. Admin. Code Pt. 2, Ch. 5., as established in the PSD Permit to Construct issued March 28, 2016 and modified on November 7, 2018 | 0.2 ≤ ∆P ≤ 6.0(inches H2O) | The facility will monitor the differential pressure drop daily. |
| AA-012 | VOCs | 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued March 28, 2016 and modified on November 7, 2018**(PSD BACT Limit)** | Apply Coating Described as “*Light*” or “*White*” | The facility will maintain documentation that indicates the surface coating color used. |
| AA-014 | PM(filterable only) | 11 Miss. Admin. Code Pt. 2, R. 1.3.D.1(a). | 0.6 Pounds Per MMBTU / Hour Heat Input | Given that this combusts pipeline-grade natural gas, the margin of compliance for this standard should be significant. |
| NOX + HCCO | 40 CFR 60.4233(d) and 60.4234; Subpart JJJJ – Table 1 | Applicable Emission Standards | The facility will maintain documentation that certifies each engine complies with applicable emission standards. |
| Propane Gas Usage | 40 CFR 60.4243(e); Subpart JJJJ | 100 Hours / Calendar Year (for Each Engine) | The facility will monitor and record the hours in which an engine combusts propane as the primary fuel source. |
| Non-Emergency Operation | 40 CFR 60.4243(d)(1 – 3); Subpart JJJJ | 100 Hours / Calendar Year | The facility shall record hours of operation (denoting emergency and non-emergency situations). |